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# A CRITICAL ANALYSIS OF THE POLITICAL ECONOMY OF ENVIRONMENT AND DEVELOPMENT: TRACING ECOLOGICAL MODERNIZATION IN EU ENVIRONMENTAL POLICY AND PROSPECTS FOR TURKEY

**DOKTORA TEZİ**

**Zeynep SEZGİN**

**Danışman: Doç. Dr. Sevim BUDAK**

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T.C.
**MARMARA ÜNİVERSİTESİ**
**Avrupa Birliği Enstitüsü**

## ONAY SAYFASI

Enstitümüz AB Siyaseti ve Uluslararası İlişkiler Anabilim Dalı Doktora öğrencisi Zeynep SEZGİN'in "***A CRITICAL ANALYSIS OF THE POLITICAL ECONOMY OF ENVIRONMENT AND DEVELOPMENT: TRACING ECOLOGICAL MODERNIZATION IN EU ENVIRONMENTAL POLICY AND PROSPECTS FOR TURKEY***" konulu tez çalışması ile ilgili ...3.../6.../2011..... tarihinde yapılan tez savunma sınavında aşağıda isimleri yazılı jüri üyeleri tarafından oybirliği/ ~~oyçokluğu~~ ile başarılı bulunmuştur.

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| | | |
|---|---|---|
| Doç. Dr. Sevim BUDAK | Danışman | ..... |
| Yrd.Doç. Dr. M. Sait AKMAN | Jüri Üyesi | ..... |
| Yrd.Doç. Dr. Rana İZCİ | Jüri Üyesi | ..... |
| Doç. Dr. Ayten ALKAN | Jüri Üyesi | ..... |
| Doç. Dr. Semra CERİT MAZLUM | Jüri Üyesi | ..... |

Onay Tarihi

Prof. Dr. Müzaffer DARTAN
Müdür

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*This thesis is dedicated to the memory of my beloved aunt...*

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# ÖZET

Çevre politikası 1960'lardan itibaren modern toplumların temel politika alanlarından birisi haline gelmiştir. Bu süreçte, çevre-kalkınma ilişkisi ile ilgili sıfır toplamlı oyun algısı yerini kazan-kazan ilişkisine dair bir inanca bırakmıştır. Bu değişimde rol oynayan en temel unsur, uluslararası alanda kabul gören ve çevre korumasını sosyal ve ekonomik amaçlarla eşit önemde konumlandıran sürdürülebilir kalkınma kavramının çevre literatürüne girmesi olmuştur. Sürdürülebilir kalkınma tanımının çok net olmaması nedeniyle kavramın çeşitli yorumları ortaya çıkmıştır. Sürdürülebilir kalkınmanın zayıf bir yorumu olan ve temel olarak çevre korumasının daha fazla ekonomik kalkınma için gerekli olduğunu savunan ekolojik modernleşme, egemen yorum haline gelmiştir.

Bu çalışma küresel, AB ve Türkiye çevre politikalarının analizi yoluyla yukarıdaki argümanlara kanıt sunmayı amaçlamaktadır. Bu bağlamda küresel çevresel yönetişim analiz edilmiş ve ekolojik modernleşmenin temel unsurlarının, özellikle 1990'lardan itibaren, uluslararası çevre politikasını nasıl şekillendirdiği ortaya konmuştur. Bunun yanı sıra, çevre politikası alanında önemli bir uluslararası lider olan ve aynı zamanda üye ve aday ülkelere politika tercihlerini ihraç eden AB'nin çevre politikası ve ekolojik modernleşme arasındaki ilişki saptanmıştır. Son olarak, ekolojik modernleşmenin ulusal düzeyde çevre politikalarının belirlenmesindeki rolünü ve bu süreçte AB'nin etkisini ortaya koyabilmek amacıyla, Türkiye çevre politikası incelenmiştir. Bu tahliller sonucunda bu çalışma, ekolojik modernleşmenin, sürdürülebilir kalkınmanın gerçekleştirilebilmesi için egemen politika stratejisi haline geldiğini ileri sürmektedir.

# ABSTRACT

Environmental policy has become one of the central policy fields of modern societies from the 1960s onwards. The perception regarding a zero-sum relationship between environment and development has been transformed into a win-win case throughout this period. The main factor behind this change was the arrival of the universally embraced concept of sustainable development that placed environmental protection on an equal footing with social and economic goals. Different interpretations of sustainable development emerged due to the vague nature of the concept. Ecological modernization, as a weak form of sustainable development and with the core argument that environmental protection is necessary for further economic development, has become the dominant interpretation.

This study aims to provide evidence to the above arguments through an analysis of global, EU and Turkish environmental policies. Accordingly, global environmental governance is analyzed in order to demonstrate how the main premises of ecological modernization have shaped international environmental policy, particularly from the 1990s onwards. Furthermore, the links between EU environmental policy and ecological modernization is established as the EU is an important international environmental leader and exports its policy preferences to its member and candidate countries. Finally, Turkish environmental policy is analyzed in order to draw conclusions regarding the role of ecological modernization in the design of national environmental policies as well as the extent of the EU's impact on this process. As a result of these analyses, this study asserts that ecological modernization has become the dominant policy strategy to achieve sustainable development.

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| | |
|---|---|
| Acquis | Acquis Communautaire |
| BCSD | Business Council for Sustainable Development |
| Commission | European Commission |
| CBA | Cost-Benefit Analysis |
| CBD | Convention on Biological Diversity |
| CEC | Commission of the European Communities |
| CEECs | Central and Eastern European Countries |
| CM | Common Market |
| CoM | Council of Ministers |
| CoP | Conference of Parties |
| CSD | Commission on Sustainable Development |
| CU | Customs Union |
| DG | Directorate General |
| DP | Development Plan |
| DNEPP | Dutch National Environmental Policy Plan |
| EAP | Environmental Action Programme |
| EC | European Community |
| ECPS | Environment and Consumer Protection Service |
| EEA | European Environment Agency |
| EEC | European Economic Community |
| EIA | Environmental Impact Assessment |
| EKC | Environmental Kuznets Curve |
| EMAS | Eco-Management and Audit Scheme |
| EP | European Parliament |
| EPI | Environmental Policy Integration |
| ETAP | Environmental Technology Action Plan |
| EU | European Union |
| EU ETS | European Union Emissions Trading Scheme |

| | |
|---|---|
| EU SCPAP | European Union Sustainable Consumption and Production Action Plan |
| EU SDS | European Union Sustainable Development Strategy |
| FYDP | Five Year Development Plan |
| FoE | Friends of the Earth |
| GATT | General Agreement on Tariffs and Trade |
| GEF | Global Environment Facility |
| GhG | Greenhouse Gas |
| GNP | Gross National Product |
| IA | Impact Assessment |
| ICC | International Chamber of Commerce |
| IMF | International Monetary Fund |
| IPCC | International Panel on Climate Change |
| IPPC | Integrated Pollution Prevention and Control |
| IUCN | International Union for Conservation of Nature and Natural Resources |
| MBIs | Market-Based Instruments |
| MEF | Ministry of Environment and Forestry |
| MFA | Ministry of Foreign Affairs |
| MNCs | Multinational Corporations |
| NEAP | National Environmental Action Plan |
| NEPIs | New Environmental Policy Instruments |
| NGOs | Non-Governmental Organizations |
| NTBs | Non-Tariff Barriers |
| ODA | Official Development Assistance |
| OECD | Organisation for Economic Co-operation and Development |
| para. | Paragraph |
| QMV | Qualified Majority Voting |
| SEA | Single European Act |
| SPO | State Planning Organization |
| TÇV | Türkiye Çevre Vakfı |
| TEU | Treaty on European Union |

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|---|---|
| UCES | Integrated Environmental Approximation Strategy |
| UK | United Kingdom |
| UN | United Nations |
| UNCED | United Nations Conference on Environment and Development |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |
| UNGASS | United Nations General Assembly Special Session |
| US | United States |
| VAs | Voluntary Agreements |
| WB | World Bank |
| WBCSD | World Business Council for Sustainable Development |
| WCS | World Conservation Strategy |
| WCED | World Commission on Environment and Development |
| WSSD | World Summit on Sustainable Development |
| WTO | World Trade Organization |
| WWII | World War II |
| WWF | World Wildlife Fund |

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# INTRODUCTION

Environment has become one of the most prominent topics of political debate for the last 50 years. Even though environmental problems started to be observed and affect people's lives from the Industrial Revolution onwards, it constituted a problematique for only a limited number of people back then, such as the Romantic[1] critics of the Age of Enlightenment[2], Preservationists and Conservationists[3]. This situation changed with the 1960s. In the post – World War II (WWII) era, economic growth and development became the overarching goals adopted by all the countries in the world. As a result, excessive industrialization and technological developments followed. This process left its mark on the environment. During this period, the world witnessed incidents of environmental hazards such as pollution, fogs, chemical poisoning and oil spills. Developments in the intellectual field pointing at the worsening physical environmental predicament due to industrial activities and technology created an attentive public. As a result, the 1960s became a period that is characterized by the questioning of the belief in economic growth and the concern as to the consequences of uncontrolled economic activities on the environment. Accordingly, from the 1960s onwards, environment became to be conceptualized as an issue of great prominence for the well-being of people and of society in general.

This conceptualization and the way to tackle the issue of environment have also changed significantly from the 1960s onwards. Initial responses by the governments and the international community to the worsening environmental conditions rested on a perception of a zero-sum game between environmental protection

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[1] 'Romanticism' was a movement that started in the 19th century as a reaction to the rationalism of the age of Enlightenment. Romantics regarded "intuition, emotion and feelings better guides to truth – and to human happiness – than reason and logic" (Coffin *et al*. 2002, p.779).

[2] 'Enlightenment' is an 18th century intellectual movement characterized mainly "by a confidence in the powers of human reason" (Coffin *et al*. 2002, p.650). Among prominent Enlightenment thinkers were Kant, Voltaire, Montesquieu and Diderot.

[3] Preservationism and Conservationism are two different perspectives regarding nature. The former is associated with John Muir (Sierra Club) and the latter with Gifford Pinchot (US Forest Service). These two environmental movements argued for the special treatment of nature however for different reasons. According to Eckersley (1997, p.39), "whereas Pinchot was concerned to *conserve* nature *for* development, Muir's concern was to *preserve* nature *from* development".

and economic growth. The publication of the influential study, *The Limits to Growth* (1972), projected a catastrophic future for the world and argued that if economic growth is not stopped, natural resources would be exhausted in the upcoming hundred years. Policy responses therefore targeted the achievement of a balance between environmental protection and economic growth.

International environmental policy also developed as environmental problems were mostly trans-boundary and global in nature. Therefore, concerted efforts were necessary to tackle them. Soon however, it became clear that neither the developed nor the developing world were eager to limit their economic growth to the extent deemed necessary by the environmentalism of the period. In addition, the catastrophic scenarios were criticized as to their pessimism regarding the human potential to reverse such a downfall. 'Sustainable development' was introduced under these circumstances as a formula to continue with economic growth, bound however with environmental considerations. It was proposed by the World Commission on Environment and Development (WCED) created under the auspices of the United Nations (UN) and chaired by the then Norwegian Prime Minister, Geo Harlem Brundtland. WCED introduced the concept of sustainable development with the publication of *Our Common Future*, which is also referred to as the Brundtland Report.

The arrival of the concept of sustainable development brought about a change in the conceptualization of environmental problems as well as the policy prescriptions aimed at solving them. The Brundtland Commission defined sustainable development as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p.43). The vague formulation of the concept led to two consequences. First the concept was embraced by almost every country, environmental group and business society in the world. Second, ample interpretations of the concept flourished, aimed at translating sustainable development into concrete policy objectives. Among the many different interpretations of sustainable development, one has established discursive and political hegemony. Due to its emphasis on the economic potential of environmental protection, ecological modernization became the dominant policy strategy to implement sustainable

development. Ecological modernization emerged and developed as a theory within the genre of environmental sociology (Spaargaren *et al.* 2000). It has never become as institutionalized as sustainable development, nor has it been the basis of a particular international regime. Nevertheless, it served as the dominant discourse and filled in the policy prescriptions of the institutionalized international sustainable development regime.

Sustainable development and ecological modernization denote different things, though they are interrelated. They both rest on the rejection of a zero-sum game between environmental protection and economic development. However, ecological modernization does not comprise some of the crucial elements and emphases of sustainable development such as the necessity to limit growth or the normative aspects such as intergenerational and intragenerational equity. In addition, sustainable development emphasizes the role of participation in bringing about social change whereas ecological modernization mainly stresses the role of technology, eco-efficiency and consumers-producers in creating a more ecologically-aware society. Even though ecological modernization possesses the potential to contribute to the consolidation of the normative principles proposed by sustainable development, this is not an explicit endeavor of the policy strategy. Therefore, this study avoids a direct association of these two concepts and aims to highlight their differences instead. As such, this study stresses that ecological modernization is one way of interpreting sustainable development, placed in the middle ground of weak and strong interpretations of the concept.

Ecological modernization is a social theory, a discourse and a policy strategy at the same time. These categories are not mutually exclusive, even though each has different emphases and priorities. A brief overview of the differences between these dimensions is necessary for conceptual clarity. As a social theory, ecological modernization has been developed from the mid-1980s onwards, with the initial works of Huber (1982) and Jänicke (1985). The early contributions in the field attempted at understanding and giving a new direction to the transformation of modern society from the 1980s onwards. It argued for the emergence of an ecological rationality and an ecological sphere, in addition to economic, political and social spheres. The structural

change brought about by the acknowledgement of the fact that continuing with the existing modes of production and policies of economic growth were not ecologically sustainable, was what the ecological modernization as a theory of social change took as its object of inquiry. In that sense, parallels were also drawn between ecological modernization theory and reflexive modernization theory.

Ecological modernization theory developed to a great extent since the initial contributions and acquired emphases as regards the role of the market forces, government regulation and changing consumption patterns in creating an ecologically sustainable society. In addition, the potential of ecological modernization as a policy strategy to bring about economic growth and the explanatory power of the theory in different social contexts other than the West European countries where it originated were themes that were incorporated into the theory during its development.

In terms of a discourse, ecological modernization denotes the new understanding that has become dominant in environmental policy from the 1980s onwards. It rests on the compatibility between environmental protection and economic growth, generally known as the 'win-win' scenario. The emphasis on decoupling, implying the possibility that economic growth can be achieved without environmental damage, the 'double dividend' argument, implying the achievement of environmental protection and employment at the same time and the efficiency gains to be achieved by technological improvements are the core elements of this discourse. In that sense, the discourse focuses on the positive economic and social benefits to be created via environmental protection. As such, it has entered into the vocabulary of environmental policy, almost globally.

The analysis of ecological modernization as a policy strategy on the other hand, focuses on the developments in the environmental policies from the 1980s onwards particularly of some of the European countries such as Germany and the Netherlands. Ecological modernization has become the dominant strategy of industrialized countries in their design of environmental policies as well as the dominant interpretation of sustainable development. The switch to a preventive

environmental policy approach, environmental policy integration (EPI), the polluter-pays principle, the increased use of new environmental policy instruments (NEPIs) and the emphasis on the role of science and technology in bringing about environmental protection and economic growth are the key components of this policy strategy.

Ecological modernization has been more successful as a discourse and a policy strategy rather than a theory of social change. This is mainly due the deficiencies of the ecological modernization theory in terms of explaining the structural change taking place globally. Main criticisms concern the geographical breadth of the theory, the unkept promises of the decoupling argument and the risk ecological modernization theory generates as regards the continuance with environmental destruction under the political arguments for 'greening' capitalism. Ecological modernization discourse and policy strategy have also received criticisms, yet, they have been adopted by all the industrialized and recently developing countries as an orientation of environmental policy. Therefore, despite criticisms in the theoretical realm, ecological modernization is seized upon as a discourse and a policy strategy by most of the countries in the world.

Hence, it is important to analyze the extent to which ecological modernization has shaped the discourses and environmental policies in an age of ecological rationality, focusing on the role of ideas in the design of particular policies and long-term strategies. The European experience is chosen to be the focus of this analysis as ecological modernization originated in the environmental leaders in Europe, namely Germany and the Netherlands. It was afterwards adopted by the European Union (EU) as an implicit frame of reference in the design of EU environmental policy. The EU is a leader in environmental policy both regionally and globally. In that sense, it serves as a model not only for its member and candidate states but also for the rest of the world. Therefore, the analysis of EU environmental policy and establishing the links between EU environmental policy and ecological modernization is of crucial importance for the abovementioned argument that ecological modernization has become the dominant strategy to implement sustainable development. The Europeanization of ecological modernization in the member and candidate states also lends evidence to this argument. Similarly, the analysis of Turkish environmental policy with respect to ecological

modernization discourse is important in order to assess as to whether the process of Europeanization has aligned the ideational orientations of Turkish environmental policy with that of the EU's, and in what ways.

**Significance:**

Ideas shape policies. They inform policies in terms of content and orientation. Similarly, the content and orientation of environmental policies are not only informed by the state of the environment in the physical sense, but also by the ideas that shape the ways of thinking about the state of the environment. Therefore, it is important to assess which policy ideas became dominant in thinking about the environment and why. Both sustainable development and ecological modernization are accounted among the new environmental policy ideas that have strongly impacted upon environmental policies all over the world (Orhan, 1999). The latter has been particularly influential in interpreting the former. In that sense, this study is an attempt to disclose the role of ecological modernization discourse and policy strategy in shaping environmental policies in the global sense.

The EU is a regional and global environmental leader. It has a well-developed *acquis communautaire (acquis)* in the field of environment and it is an important actor in shaping the environmental policies of its member and candidate states. Therefore, EU environmental policy serves as an appropriate research field for analyzing the extent to which ecological modernization ideas have become dominant in contemporary environmental policy. Turkey is selected as a case study to elaborate on the impact of the EU in shaping the environmental policies of its candidate countries. As such, another contribution of this analysis is the assessment of Turkish environmental policy with respect to ecological modernization ideas.

**Scope and Limitations:**

This study does not aim to present any detailed account of environmental problems in the scientists' fashion. It also does not intend to present an account of

ecologism. Neither does it intend to analyze specific environmental policies. The aim of this study is to account for the role of changing ideas regarding the relationship between environment and development in shaping environmental policy. Particular emphasis is placed on the impact of ecological modernization. This study will not make use of one single theoretical framework as no single theory is capable of accounting for all the content of this study. Each part and section will make use of theories and arguments that are related to their respective analyses. Nevertheless, ecological modernization theory would provide the basic theoretical framework of this study, whereas the role of ideas and discourses in environmental policy would be the main theoretical orientation.

**Main Arguments and Hypotheses:**

Ecological modernization has become the dominant way of interpreting and implementing sustainable development, which is a universally embraced environmental policy goal. As such, weak sustainable development has been opted for rather than strong sustainable development in the global sense. This argument is informed by an analysis of the policy strategies to implement sustainable development at the global and the EU level, as well as in Turkey. Related arguments that support this main argument also need to be presented.

Environmental policy became an important policy issue after the 1960s. Initial responses to environmental problems rested on the underlying logic that environmental protection and economic growth were contradictory goals in nature and hence mutually exclusive. The introduction of sustainable development policy in 1987 helped overcome this dichotomy. It reflected the aim to continue with the process of economic growth but in a modernized and environmentally friendly way. Global environmental governance was a crucial component of this endeavor as the cooperation of every country in the world was necessary to achieve most of the environmental policy goals. Main areas of international environmental policy hence were constituted by environmental issues that were global in nature and economically important.

Ecological modernization, as an interpretation of sustainable development added to this compatibility the argument that environmental protection is actually the prerequisite for further economic growth. It appealed to governments with its optimistic projections regarding the potential of technology and eco-efficiency in bringing about an ecologically sustainable and economically well-performing and competitive society. Ecological modernization is generally categorized as a weak interpretation of sustainable development. Due to its political feasibility, optimism and the prospects for a future where no economic limits need to be the case, ecological modernization became the main interpretation of sustainable development particularly in the industrialized world. It has also become the dominant policy strategy to implement sustainable development within the EU.

The EU has developed an extensive environmental policy from the 1970s onwards. It has a considerable *environmental acquis* and represents one of the leading regions in the world in terms of environmental protection. However, economic goals are never discarded in the formulation of EU policies. In that sense, the development of EU environmental policy has been mainly fed by need to take into account the environment while pursuing economic growth. Therefore, even though the EU has committed itself to the goal of achieving sustainable development, economic concerns prevail and determine the ideas behind EU environmental policies. As such, ecological modernization has become the main idea and orientation behind the design of EU environmental policy particularly after the 1990s onwards.

Turkish environmental policy has also developed to a great extent from the 1970s onwards. Turkey has mainly been a taker of environmental policy and has not become an actor in the development of international environmental policy. Furthermore, Turkey is a country that aims to become a full-member to the EU at least for the last three decades. In that sense, it harmonizes its law with EU law, environmental policy being an example. Turkey has committed itself to the principle of sustainable development and has adopted most pieces of EU environmental policy through time. In transforming its environmental policy, Turkey imitates the EU in terms of policy ideas

and ways of doing things. In that sense, Turkish environmental policy is increasingly rested on the ecological modernization discourse and ideas.

Depending on the arguments presented above, the hypotheses to be tested throughout this study are as follows:

- The arrival of sustainable development eliminated the environment-economy dichotomy.
- Ecological modernization has become the dominant interpretation of sustainable development.
- EU environmental policy comprises the core elements of ecological modernization discourse and policy strategy.
- EU diffuses its environmental policy ideas to its member and candidate states.
- Turkish environmental policy has been aligned with EU environmental policy in terms of policy principles and ideas.

The following research question guides this analysis:

- What is the explanatory power of ecological modernization discourse and policy strategy in analyzing the development of global, EU and Turkish environmental policies?

**Design:**

To answer the research question asked above and to test the related hypotheses, this study is designed as two main parts. Both parts consist of three main sections. First Part Section 1 will focus on the emergence of environmental problems, the arrival of modern environmentalism in the 1960s and the developments in terms of international environmental policy until the introduction of the concept of sustainable development. The 1960s represent the period when modern environmentalism arrived and conceptualized the environment (Dryzek, 1997). Therefore, the arrival of modern environmentalism in the 1960s, the intellectual contributions to rising public awareness

during this period, the catastrophic scenarios provided by works such as *The Limits to Growth* (1972) and *A Blueprint for Survival* (1972) and the first policy responses of the industrialized countries towards rising environmentalism will be presented. The section will proceed with an analysis of the deficiencies of the ways governments dealt with environmental issues initially. Furthermore, the criticisms against the development paradigm that started to be heightened in the 1970s will be presented. This analysis will provide the background to the process that led to the establishment of WCED and the introduction of the concept of sustainable development into the environmental debate.

Part 1 Section 2 is devoted to the analysis of sustainable development and global environmental governance that started to take root with the arrival of the concept. It will present both the official definition of the concept provided by the WCED and the different interpretations and policy strategies associated with sustainable development, resting on "the ladder of sustainable development" provided by Baker (2006) and the analysis of Söderbaum (2008) regarding differing positions towards the relationship between environment and development. The 1980s is the period when international environmental cooperation has intensified due to the efforts of the UN and other international institutions such as the World Trade Organization (WTO), the World Bank (WB) and the International Monetary Fund (IMF). Accordingly, this section will focus on the emergence of international environmental policy and global environmental governance, mainly with respect to the international environmental conferences and the conventions and agreements adopted in these conferences. In terms of the successes and failures of global environmental governance, this section will address the question as to whether international activism in terms of environmental policy can be called global environmental governance, and if yes, how to assess its actual and potential success.

Part 1 Section 3 will analyze the theory, discourse and policy strategy of ecological modernization. Building on Hajer's (1995) analysis on the developments that led to the emergence of ecological modernization ideas, this section will start with an account of the political and economic factors that brought about such a development. Afterwards, it will focus on ecological modernization as a theory of social change. It will dwell upon the basic theoretical premises of and the different genres within

ecological modernization theory. It will also establish the links between ecological modernization theory and the theory of reflexive modernization. After presenting the key characteristics of ecological modernization, the section will proceed with the analysis of ecological modernization as a discourse and policy strategy. The aim is to assess the extent to which ecological modernization ideas have shaped the discursive and policy components in the environmental field in general. In terms of policy strategy, ecological modernization will be examined as to the roles assigned to the governments, markets, public and private actors, technological improvements and NEPIs. The section will also present the criticisms against ecological modernization theory and policy strategy. Finally, it will dwell upon the similarities and differences between sustainable development and ecological modernization. The win-win discourse, the importance attached to EPI, the use of NEPIs and the emphasis on the role of technological innovations will be determined as the four test tools to assess the presence and taking hold of ecological modernization in the environmental field.

Part 1 therefore aims at analyzing the developments in the environmental field in general with a historical view as well as concentrating on the dominant ways of dealing with environmental issues, such as sustainable development and ecological modernization. Part 2 aims to reflect this analysis to EU environmental policy and later to Turkish environmental policy. With such an aim, Part 2 Section 1 will focus on the development and taking hold of ecological modernization discourse in EU environmental policy. It will adopt a historical outlook to the emergence and development of environmental policy in the EU and will analyze the process in phases according to the development of EU policy competences. During this analysis, the Environmental Action Programmes (EAP), Treaties and other strategy documents adopted by the EU will be the main reference points to assess the changing ideas behind environmental policies. In this endeavor, the four test tools mentioned above will be traced at the discursive level in the aforementioned environmental policy documents of the EU. The section will demonstrate the ways through which ecological modernization has become the dominant way of interpreting sustainable development within the EU at the discursive level, namely the process that led the EU to adopt a weak interpretation of sustainable development.

Part 2 Section 2 will focus on the policy component of ecological modernization in EU environmental policy, furthering the analysis conducted in the previous section at the discursive level. It will start with a general discussion of the reasons why the EU has opted for weak sustainable development, namely ecological modernization. In order to answer this question, it will briefly dwell upon the nature of the European integration process and the role of the European Commission (Commission). Afterwards, it will reflect upon the policy success of ecological modernization in EU environmental policy with particular emphasis on EPI, NEPIs, and the importance attached to environmental technology. Following this analysis, the section will assess the extent to which ecological modernization has been Europeanized within the EU member states based on an analysis of the use and diffusion of NEPIs within the EU. For such an analysis, the section will present the main discussions and theoretical standpoints as regards Europeanization theory and policy transfer. Afterwards, the policy transfer of NEPIs within the EU will be investigated.

The final section of this study, Part 2 Section 3 will focus on Turkish environmental policy. Similar to the analysis conducted in the first section of Part 2, this section will trace ecological modernization as an idea that shapes Turkish environmental policy. This analysis will be conducted in a historical fashion with reference to the Five Year Development Plans (FYDP), laws, constitutional commitments and other strategy documents and action plans regarding environmental policy. It will be assessed as to whether ecological modernization has been enshrined in Turkish environmental policy and become the main way of interpreting and implementing sustainable development in Turkey. The role of the EU in this development will also be analyzed. The impact of the EU will be captured by the conditionality analysis that aims to demonstrate the impact of the EU on the policies of its candidate states. This section will conclude with an assessment of the potential policy success of ecological modernization in Turkey.

**Methodology:**

The theoretical orientation of this study is the role of ideas in the design of global, regional and national environmental policy. It focuses on how ecological modernization has shaped environmental policy orientations at these particular levels. In conducting this research, the primary methods used are literature review and content analysis. The history, development and current predicament of environmental policy and the evolution of ideas and norms behind it are analyzed through an extensive and critical literature review. Environmental policies of the institutions such as the UN, the EU and Turkey are examined focusing on the primary sources published by these institutions and Turkey. In all the primary sources, content analysis is conducted in order to disclose the ideas behind the adopted discourses as well as to make inferences about what these ideas denote for the future of environmental policy. In addition, research is conducted at Freie Universität Berlin and expert interviews are made with an aim to capture the role of ecological modernization ideas in shaping current environmental policy.

# PART 1. THE ROAD TO SUSTAINABLE DEVELOPMENT AND ECOLOGICAL MODERNIZATION – A HISTORICAL TRAJECTORY

Environment has been on the agenda of national and world politics for around fifty years now. There is an increased amount of interest in environmental affairs particularly after the 1960s. There are certain focal points in the environmental debate, and changing emphases are placed on different dimensions of the issue by different studies, depending on the main theme of the study and the academic and the ideological orientation of the authors. This part aims to analyze the historical development of the environmental critique by analyzing the reasons attributed to the emergence of environmental problems and the initial responses developed by the governments within the context of the perceived incompatibility between the goals of economic growth and environmental protection.

It then goes forward to the introduction of the concept of sustainable development, a formula devised as a solution to this dichotomy. Sustainable development as devised by the WCED in 1987 not only proposed a solution to the dilemma between the abovementioned goals but also incorporated the concerns of the less developed countries regarding their rights to economic development. Different interpretations of the concept of sustainable development exist. This has led to immense discussions about the meaning and the use of the concept. This part will elaborate on these interpretations and discussions. It will also analyze the emergence of global environmental governance, particularly after the publication of the Brundtland Report. Following this analysis, ecological modernization will be analyzed in detail, as a policy strategy to implement sustainable development. It will be demonstrated that ecological modernization has indeed become the dominant policy strategy to implement sustainable development. Accordingly, the theoretical underpinnings of ecological modernization will be elaborated and the discourse and policy strategy it entails will be analyzed.

## 1.1. THE CONSTRUCTION OF THE ENVIRONMENTAL CRITIQUE

There are many reasons of environmental degradation that became an issue of great concern from the 1960s onwards. Among these, the environmental impact of the economic development that exploded after WWII is of particular prominence. Excessive industrialization and the consequences of uncontrolled technology brought environmental problems more into sight as well as to public attention, particularly after WWII. Nevertheless, industrialization has its roots in the 18th century and has caused immense environmental problems since then. Put simply, it has introduced unprecedented amounts of pollution, environmental degradation, exhaustion of natural resources and stress on the ecosystem's functioning as a whole, naming only a few. This is why studies that point to environment becoming an issue in itself and a hot-debated issue of politics refer generally to the vast economic, social and environmental consequences of the Industrial Revolution.

It is possible to trace back the history of environmental degradation to even earlier times. Comparing hunter-gatherer and agricultural societies, Pointing (1993) argues that the environmental stress posed by the hunting-gathering period was limited due to the ways of obtaining food, mobility, non-existence of the concept of property and limited number of population. However, the introduction of agriculture around 10000 years ago led to the creation of artificial environments for growing specific plants and feeding animals. Hence the transition to agricultural society led to a process where natural ecosystems were disturbed. In addition, the increase in population mainly due to better nutritioning in the agricultural era compounded the stress on the environment.

Moore (2000, p.136) traces back the history of environmental transformations to the 14th century and argues that the economic and social crisis of the 14th century "constituted a world ecological revolution" and this was "central to the emergence of the world capitalist system in the long 16th century". This was according to Moore (2000, p.137) the first "ecological revolution" and in each crisis of capitalism, the

system was restructured along new "institutional and geographical" lines. Borrowing the concept of 'metabolic rift' from Marx[4], Moore (2000, p.146) argues that the new division of labor between the town and the country was "unsustainable" as the country sent produced materials to the town and the town kept the waste in itself. In addition, as the country became overexploited, capital sought new locations to increase its productivity.

> Until the 20th century, the imprisoning contradictions of the accumulation process… could be escaped through geographical expansion. With the possibilities of the spatial fix foreclosed, however, capital turned toward inner expansion… Meanwhile, such inner expansion on a new global scale has been possible because capital has used the planet as a sink for its exponentially growing volume of waste. By locating the origins of modern ecological degradation in the 16th century, I suggest that ecological contradictions of the present are not essentially rooted in industrialization… but are found rather in the logic of capital itself.
>
> (Moore, 2000, p.146)

The importance and the insights provided by such studies notwithstanding, it was the Industrial Revolution that introduced the enormous amounts of production and material expansion, which are the root causes of most of the environmental problems. This sole fact makes it a landmark in environmental history. More precisely, post-WWII period deserves particular attention as the pace of industrialization, economic growth and environmental degradation accelerated in this period.

### 1.1.1. Industrialization and its Discontents

The United Kingdom (UK) was the leading country of industrialization and carried this leadership position to the mid-19th century. From that time on, the so-called Second Industrial Revolution took place and the British industrial dominance began to be challenged by countries such as the United States (US), Germany and France. The colonial expansion of the previous centuries and the increase in population in the 18th

[4] 'Metabolic rift' is a theory devised by Marx concentrating on the antagonistic town-country relations under capitalism. For more on this issue, please see: Foster, John Bellamy (1999). "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology". *The American Journal of Sociology*. Vol.105, No.2, pp.366-405.

century had triggered the introduction and the spread of Industrial Revolution to the Western world. Industrialization meant urbanization as well. Forerunner cities in industrialization were also the ones to populate most rapidly. Among these cities were London, Manchester, Paris and Massachusetts. Populating cities further increased the pace of industrialization signified by the great increase in the amounts of production in urban and industrial centers.

> Cities grew in size and number once the steam engine made it practical to bring together large concentrations of men, women and children to work in factories... General population increases combined with industrialization, forcing cities to expand at what most considered an alarming rate.
>
> (Coffin *et al.* 2002, p.750)

Industrialization can be approached from various and sometimes competing perspectives. For one view, it is the materialization of the overarching belief in human progress and domination over nature, ideas that followed the legacy of the Enlightenment and the Scientific Revolution[5] it rested upon. During the 16th and 17th centuries, science was constituted "as a new form of knowledge" (Coffin *et al.* 2002, p.629) and was seen as the way for humanity to subdue nature to their own ends. Technological improvements were central to this idea.

Romantic critics of this belief in reason and progress criticized the extreme emphasis put by the Enlightenment thinkers on the ability of the human reason to bring about the desired ends. Mary Shelley's *Frankenstein* (1970) is among the prominent examples of such criticism. Mary Shelley (1965) also later warned about an environmental catastrophe on the global scale with *The Last Man*, which according to Dresner (2008, p.17) started to be taken seriously only in the late 20th century. Another prominent romantic, critical of the age of reason and industrialization is Jean Jacques

[5] 'Scientific Revolution' is a term used to refer to the "sweeping changes to European philosophy" brought about by the "new ideas about the physical world" that were put forward during the 16th and 17th centuries by prominent scientists such as Copernicus, Brahe, Kepler, Galileo, Bacon, Descartes and Newton (Coffin *et al*. 2002, p.629). "Thinkers associated with the new 'natural philosophy', as science was called at the time, explained how the earth could, in defiance of common sense, be hurtling around the sun. In so doing, they also vindicated the role of reason, experiment, and observation in understanding the natural world" (Coffin *et al*. 2002, p.629).

Rousseau. Rousseau's Saint-Preux in his *The New Eloise* is a young man that moves to the city and "experiences metropolitan life" (Berman, 1983, p.18). In Berman's words,

> This is a landscape of steam engines, automatic factories, railroads, vast new industrial zones; of teeming cities that have grown overnight, often with dreadful human consequences; of daily newspapers, telegraphs, telephones and other mass media communicating on an ever wider scale; ...; of an ever-expanding world market embracing all, capable of the most spectacular growth, capable of appalling waste and devastation, capable of everything except solidity and stability.
>
> (Berman, 1983, p.18-19)

To some, industrialization and modernization implied living and working under unfavorable conditions. The dreadful experiences of the working classes during the 19th century, the spread of diseases due to underdeveloped city infrastructure, poor availability of public services such as health and sanitation, an increasingly over-exploited environment and pollution in the urban centers were the most prominent ones. The negative impacts of industrialization mobilized some segments of society in Western countries in the 19th century. Their aim was to influence public policy to remedy these undesired consequences. Jansen *et al.* (1998, pp.278-279) argue that during the 19th century, "three traditions" could be identified according to their definition of the problems and the ways they put forward to solve them: "hygiene and public health" (health laws, factory acts, British Alkali Act)[6]; "nature areas, animal and plant species and natural monuments" (protection of wildlife, museums, national parks); and "the cultural heritage of the nation". Only the first tradition found the chance to effectively impact upon public policy. None of them however, could succeed in giving a different direction to the process of economic growth (Jansen *et al.* 1998, p.280). Such impacts would have to wait until the 1960s when the challenge of modern environmentalism would arrive.

[6] French decree of 1810 for the registration and inspection of industrial plants; German Gewerbeordnung of 1869; British Alkali Act of 1863 are among the examples of the first attempts by governments to deal with the negative impacts of industrialization and urbanization. The Alkali Inspectorate was set up in the UK to implement the Alkali Act, which according to Jansen *et al*. (1998, p.279) "was the world's first governmental 'environmental agency'".

### 1.1.2. Economics and the Environment

A more systematized concern about economic growth and its relation to the environment came first from the economists of the industrial era. Classical economists such as Smith, Malthus and Ricardo explored as to whether there might be some limits to economic growth posed by the environmental predicament. Concerns were mainly about the amount of fertile land, particularly in the face of huge population increases. Among these classical economists, Malthus is most often cited in environmental debates. Malthus (1798) argued that the geometric growth in population is higher than the arithmetic growth of food production, which at some time would lead to catastrophic results, if measures were not taken. Limits to economic growth would stem from the fact that "profits for capital would decline relative to wages for labour" (Spash, 1999, p.415). Neo-Malthusian perspectives also flourished in the 1960s and 1970s (de Stelguer, 1996) with works such as *The Population Bomb* by Paul Ehrlich (1970).

In the following period, different perspectives emerged on the environment-economy relationship. The definitions given by the neoclassical economists regarding environmental problems and their proposed solutions differed from that of the classical economists. Mill proposed a 'stationary state economy' arguing that non-renewable resources would pose constraints on economic development. Furthermore, he made clear his reservations concerning the impacts of perpetual and unlimited economic growth on wilderness areas and ecosystems (Spash, 1999, p.415). In his argumentation, there were concerns as to whether perpetual growth is sustainable and desirable:

> If the earth must lose that great portion of its pleasantness which it owes to things that the unlimited increase of wealth and population would extirpate from it, for the mere purpose of enabling it to support a larger, but not a better or a happier population, I sincerely hope, for the sake of posterity, that they will be content to be stationary, long before necessity compels them to it.
>
> (Mill, 1911, p.454)

Jevons is also an important economist who argued that natural resources could bring important limits to economic growth (Jevons, 1865). At the time Jevons put

forward his theses, the Industrial Revolution was in full motion and coal was the most important source of energy. Jevons (1865, pp.154-155) argued that existing coal reserves would soon be exploited and this would halt economic and social growth. He admitted that there was the possibility to find substitutes for coal such as wind and water but dismissed this possibility by arguing that "this would only be on the principle that half a loaf is better than no bread" (Jevons, 1865, p.143). The arrival of oil as a substitute to coal and the technological advances of the period led technological optimism to take root. With the arrival of oil as a substitute, economic growth would continue. Furthermore, technology would be the recipe for limits to natural resources. So the belief that no natural limits were the case started to gain prominence.

Until the 1950s, neither resource depletion, nor environmental issues were taken into consideration by economists (Spash, 1999, p.416). There is a gap of economics literature dealing with environmental issues between the 1860s and the 1960s. In the first half of the 20th century, economics literature on environment-economy relationship was concerned mainly with agriculture, husbandry, mines and their wise use. The emphasis was on conservation and wise use, and not on preservation (Spash, 1999). Environment was discarded and was not on the agenda. This situation changed with the 1960s when environmental problems became more visible such as air and water pollution. Parallel to this, environmental economics started to develop as a sub-discipline. The 1960s also marked the arrival of the environmentalist critique of the direction humanity was heading.

### 1.1.3. The Arrival of Modern Environmentalism – 1960s

The 1960s represent the period when the environment started to be conceptualized and problematized. Dryzek (1997, p.20) argues that prior to the 1960s, the discourse of industrialism was so hegemonic that "'the environment' was hardly conceptualized". The combination of events and the influence of intellectual contributions in the environmental field led to an increase in environmental awareness.

It also led to the initiation of international environmental cooperation in the 1970s, through leading intergovernmental bodies such as the UN.

There are certain landmarks in this process. As mentioned above, the post-WWII period was a crucial landmark in itself, leading to an enormous increase in economic growth on a global scale. After WWII, development became the dominant paradigm. Development paradigm's main theme was to increase the economic well-being and the living standards of people as well as to increase the amount of goods and services to suffice for the ever-growing population. Harris and Goodwin (2001, p.xxx) argue that the reconstruction of postwar Europe, discarding communism as an alternative and leveling the playing field for expanded Western goods via the creation of open markets were "implicit set of goals" next to the abovementioned proclaimed goal. They also stress that the postwar economic reconstruction institutions such as the IMF, WB and General Agreement on Tariffs and Trade (GATT) were all aimed at developing the background above which global scale world development would flourish.

The sustained belief in economic growth and the development paradigm started to be questioned in the 1960s. Baker (2006, p.2) argues that "modern environmentalism has emerged as a critique of this Western-centric development model". During the same period, public became more attentive to the environmental consequences of economic growth and development. A series of developments led to this increased attention. To begin with, pollution, particularly in the US due to excessive industrialization, started to become more visible and thus more disturbing in the industrialized world. 20 people died and 600 people were injured during the smog incident in Donora, Pennsylvania in 1948, the same year 600 people died in the London 'killer fog', 4000 and 1000 people died in the London 'killer fogs' in 1952 and 1956 respectively.[7] Mercury poisoning in 1959 in Japan (Elliott, 1998, p.9) and the notorious sea pollution incident caused in 1967 by the spill of 120000 tons of crude oil to the English Channel by the tanker

[7] For a complete historical pile of environmental events, please see the Environmental History Timeline (http://www.environmentalhistory.org/).

Torrey Canyon are further examples.[8] Another example is the fire in the Cuyahuga River in 1969 due to chemical discharges (Weale, 1992, p.10).

Parallel to these incidents, there were important developments in the intellectual sphere that aimed to point out the dangers and risks posed by extensive industrialism and technology to environmental well-being. These works also put into question the dominant views on the relationship between society and nature (Jansen *et al.* 1998; Dresner, 2008). Rachel Carson's *Silent Spring*[9] is one of the cornerstones of such literature. Carson (1962), described how interfering with natural systems with incomplete information could result in disastrous consequences. She moved to this conclusion after investigating the use of the pesticide DDT, a technology to control insects. What she criticized was not only the simple fact of the use of DDT, but also the unquestioned belief in and use of technology (Jansen *et al.* 1998; Dresner, 2008). Added to Carson's path-breaking work, there were other important landmarks in the construction of the environmental critique such as *Our Synthetic Environment* by Murray Bookchin and the *Greening of America* by Charles Reich (Eckersley, 1997, p.9).[10]

The end of the 1960s also marked the metaphor of 'spaceship earth' gaining currency with the arrival of photographs taken by NASA from the outer space. These photographs "seemed to emphasize the fragility of the earth", positioned in the darkness and infinity of space (Elliott, 1998, p.10). The earth was conceptualized as a spaceship that embraces its natural resources and that has to keep its waste in itself. This has led to a public appreciation that the natural resources used in any kind of human activity was 'limited in nature' and the waste produced thereof was inevitably piling up and did not disappear. The 'spaceship' metaphor was first used by Adlai Stevenson in his campaign for US presidency in 1952, and later became the title of a book written by Barbara Ward

[8] This was the first major oil spill until then, which caused coastal contamination and killing of birds.
[9] Carson's book is accepted by many to have sparked off the environmental movement in the 1960s.
[10] Eckersley (1997) appreciates Carson's *Silent Spring*, Bookchin's *Our Synthetic Environment* and Reich's *The Greening of America* to "represent three important landmarks in the emergence of a new sensibility that celebrated the living world and was deeply critical of dominant Western attitudes toward the nonhuman world" (p.9). She also distinguishes these contributions as exceptions to the dominant political attitude to environmental issues at the time, which she names as the "environmental problematique as a crisis of participation" (p.8).

in 1966 (Dresner, 2008, p.24). However the existing metaphor was visualized and vitalized to the extent that it became a central theme of the environmental movement (Dresner, 2008). Dresner (2008, p.24), argues that there are two connotations to the "metaphor spaceship earth", one about "limits", the other concerning "the need for human management of the environment". Both of them would be the themes of the times to follow.

This metaphor also contributed to the internationalization of the environmental problematique. The first 'Earth Day' celebration was held in 1970 in the US, which was to be globalized in the following decades. The founder of the Earth Day, Senator Gaylord Nelson from the US, explains that his idea was to place the environmental issue on the political agenda.[11] The 1960s also witnessed an increase in membership to environmental non-governmental organizations (NGOs) as well as the establishment of new environmental NGOs, such as Friends of the Earth (FoE)[12] and Greenpeace[13].

#### 1.1.3.1. The Doomsday Literature

The late 1960s and the early 1970s were also the heyday of the 'doomsday literature'. Influential works such as the neo-Malthusian *The Population Bomb* by Paul Ehrlich (1970), *The Tragedy of the Commons* by Garrett Hardin (1968), *The Limits to Growth* by Meadows *et al.* (1972) and *A Blueprint for Survival* (1972) that was published in *The Ecologist* are all examples of this literature. According to Dryzek, the 'survivalist discourse' common to all these studies mainly emphasized the limits to economic growth and population, and "set the apocalyptic horizon of environmentalism, giving the basic reason why care and concern about the environment were not just desirable, but also necessary" (Dryzek, 1997, p.26). One of the recurring themes in such

[11] Fort the purpose and the process leading to the foundation of the Earth Day from the words of its founder Senator Gaylord Nelson, please visit the website of the EnviroLink Network (http://earthday.envirolink.org/history.html).
[12] FoE was established in 1969 in the US and was transformed into an international network in 1971. For more on FoE, please visit their official website (http://www.foe.org/).
[13] Greenpeace was established in 1971 in Canada. For more on Greenpeace, please visit their official website (http://www.greenpeace.org/international/).

literature and the general environmentalism of the period was the perceived zero-sum relationship between ecology and economic growth (Jansen *et al.* 1998, p.281).

In that fashion, Hardin (1968) contributed by arguing that the private benefits obtained from activities in common areas such as the atmosphere and the sea is personal whereas costs are commonly shared, which would lead to the overexploitation of the commons. Ehrlich (1970) argued that there was excessive population on earth and it continued to rise at an increasing pace. That according to him would not only cause hunger and starvation, but also environmental deterioration, disruption of the ecosystems, pollution and disturbance of the carrying capacity of the earth. According to Dryzek (1997, p.37), metaphors such as "overshoot and collapse", "commons", "spaceship earth" and "computers" were among the mostly used ones by the survivalist discourse.

Departing from the metaphor of 'computer', it is important to note that the main push for the survivalist discourse to dominate the environmentalism of the early 1970s came with the publication of *The Limits to Growth* and *A Blueprint for Survival* (Eckersley, 1997). Club of Rome, founded in 1968, was a group of industrialists and academics determined to project that industrialism was unsustainable because of its emphasis on economic growth (Dryzek, 1997, p.26). Club of Rome demanded a study from a team of systems modellers from Massachusetts Institute of Technology to support their abovementioned argument. The team constructed a model to analyze "five major trends of global concern" for a hundred year time-span, being "accelerating industrialization", "rapid population growth", "widespread malnutrition", "depletion of nonrenewable resources", "a deteriorating environment" (Meadows *et al.* 1972, pp.26-27). The team summarized its findings in *The Limits to Growth* and argued that "the limits to growth on this planet will be reached sometime within the next one hundred years" if no change happens in these trends and it is possible to establish an alternative "state of global equilibrium" that would satisfy "the basic material needs" of people (Meadows *et al.* 1972, p.29). Hence Meadows *et al.* (1972) "argued for the imperatives of cutting back on resource-intensive industrial activity based on resource carrying-capacity predictions arising from their global-systems computer modelling" (Elliott,

1998, p.10) and put forward an alternative path, reviving the theme of Mill, "a 'stationary state' economy" (Dryzek, 1997, p.27).

*A Blueprint for Survival* (1972), published by *The Ecologist* was a very influential document as well, which also "provided the impetus for the formation in 1973 of Europe's first Green party, the British People's Party" (Eckersley, 1997, p.12). Eckersley (1997, p.12) argues that the messages of both *The Limits to Growth* and *A Blueprint for Survival* had impacted upon the global media and intensified the expectations for governmental measures, particularly after the Oil Crisis[14] of the early 1970s that portrayed the extent to which the developed world was dependent on oil and hence vulnerable. The survivalist theme also found resonance in The Global 2000 Report to the US Presidency in 1982 and also throughout the 1980s (Dryzek, 1997; Eckersley, 1997; Dresner, 2008).

There were criticisms against the pessimistic scenarios popularized by these two influential documents. John Maddox, in *The Doomsday Syndrome* (1972), argued against the survivalist focus on limits and the carrying capacity and criticized the arguments put forward by *The Ecologist* in *A Blueprint for Survival*. He argued that the actual data did not support the arguments of the environmentalists:

> The growth of the world's population is not nearly as inexorable as the environmentalists say. The threat of famine is receding, not coming closer. Minerals are now more plentiful than ever, whatever the more distant prospects. Lake Eire is not dead, and genetic engineering is neither a threat nor even a practical possibility.
>
> (Maddox, 1972, p.217)

Maddox (1972, p.4) argued that there would always be substitutes for the currently used raw materials in case they become scarce, exhausted or expensive. Thus, Maddox argued that technology and economic instruments would solve the problems pertaining to the limits to growth (Elliott, 1998, p.10). Furthermore, a team of scholars

[14] Oil Crisis is the name given to the economic downturn initiated by the oil embargo of the Organization of Petroleum Exporting Countries in 1973, which led to a quadrupling of the oil prices. The excessive increase in the price of crude oil led to concerns regarding the energy dependency of the industrialized world since crude oil was the main energy supply of industrialized countries.

from the Science Policy Research Unit of Sussex University showed how different results could be achieved if the Meadows' analysis was remade based on different assumptions (Cole *et al.* 1973). In addition, Jahoda (1973, p.212) argues that the approach of the Meadows' team did not take "politics", "social structure" and "human needs and wants" into account.

Apart from the emphasis on physical limits, some works have stressed the social costs and limits of the process of economic growth (Kapp, 1950; Mishan 1967; Mishan, 1977). Kapp analyzed the notion of social costs in *The Social Costs of Private Enterprise* and argued that in case of unregulated competition, activities of private enterprise would cause social costs which are "borne by third persons and the community as a whole" (1950, p.vii). There are various types of social costs such as "damages to human health", "destruction or deterioration of property values" and "premature depletion of natural wealth" (Kapp, 1950, p.13). Ekins (1993, p.273) argues that even though it was Kapp who profoundly analyzed social costs for the first time, Mishan (1967, 1977) brought the issue to public attention.

> I hope to persuade the reader that the chief sources of social welfare are not to be found in economic growth *per se*, but in a far more selective form of development which must include a radical reshaping of our physical environment with the needs of pleasant living, and not the needs of traffic or industry, foremost in mind.
>
> (Mishan, 1967, p.8)

Mishan (1977, pp.29-37) argued that economic growth does not automatically mean an upward shift in social welfare as it brings about many undesired consequences as well. Therefore, measuring progress in terms of statistics and production levels is not the best way to measure a society's well-being as they "contribute only in limited ways to social welfare" (Mishan, 1977, p.36). Daly (1977, p.ix) argued that it should be switched from a "growth economy" to a "steady-state economy". In a steady-state economy, "population of human bodies and population of artifacts" are held constant, whereas "culture", "ethical codes", "technology" and the like are not (Daly, 1977, pp.16-17). Proposing to replace the notion of "more is better" with the notion of

"enough is best", he argued that it is of utmost importance to change the prevalent "growth paradigm" (Daly, 1977, p.2).

> If we use "growth" to mean quantitative change, and "development" to refer to qualitative change, than we may say that a steady-state economy develops but does not grow, just as the planet earth, of which the human economy is a subsystem, develops but does not grow.
>
> (Daly, 1972, p.17)

The emphasis on limits of the influential works produced in the 1960s and the 1970s could not shake the belief in economic growth. At the time the Brundtland formulation of sustainable development was put forward, "the emphasis was placed on a perceived complementarity between growth and environment" (Ekins, 1993, p.275). Still, the impact of the survivalist works was significant for the formation of the environmental perspective of the period.

The survival literature of the early 1970s has been criticized by the doom it described, without taking into account the human potential to solve environmental problems. What it mostly succeeded in however, was bringing forward the notion of environmental crisis not only to the attention of a several concerned audience but to the interest of the world's policy-making elites. *The Limits to Growth* has a central place in this regard.

> In terms of regulation the cybernetic language made *Limits* into an ideal reference for White Papers at a time at when discourse was seen by many as a productive way of thinking about complex issues. In all, *Limits to Growth* was an example of an extremely successful use of discourse as power. … But more important still, the resonance of *Limits to Growth* meant that others came to conceptualize the environmental problem according to a specific set of concepts and categories.
>
> (Hajer, 1995, p.82)

The survivalist discourse of the 1970s that defined the environmental problematique as basically an issue of 'to or not to survive' was not the only discourse of the times. As the first implications of the survivalist works were going to the back, other issues started to be the main elements of discussion. Among these, the most

prominent example is the anti-nuclear movement that carried its criticism not only against the use of nuclear energy but also the way the societal system was constructed. In Hajer's words (1995, p.91), "the nuclear issue… became the metaphor for all that was wrong with society". Most of the action against nuclear energy was handled by more radical versions of environmental movements, which were also the proponents of an "alternative life-style":

> Initiatives like the *Bürgerinitiativen* in Germany and the Dutch *basisgroepen* were attempts to decolonize the life-world and as such expressed the attachment to values such as autonomy, grassroots initiative, direct democracy, and identity formation.
>
> (Hajer, 1995, pp.92-93)

However, the anti-nuclear wave of mass demonstrations and proposals for a totally different and new lifestyle fall to the sidelines with the coming of the 1980s. Hajer (1995, p.93) relates this to the "emblematic" nature of the nuclear issue and to "its own limited life-span". This definitely did not symbolize the end of radical environmentalism. However, it symbolized the marginalization of the radical strand of environmentalism. "The environmentalists of the 1980s were less radical, more practical, and were much more policy-oriented" (Hajer, 1995, p.93). This definitely led them to direct their efforts to be a part of the solution of environmental problems.

#### 1.1.3.2. The Emergence of International Environmental Cooperation

The 1970s also signified the period when international cooperation in the field of environment started to take root. Developments in the environmental sphere led international bodies to handle the issue in a global fashion. 'Committee on the Challenges of Modern Society' was established by the North Atlantic Treaty Organization in 1969 and a special panel for environment was organized by the Organisation for Economic Co-operation and Development (OECD) in 1970 (Weidner, 2002, pp.1340-1341). In 1972, Stockholm hosted the first international environmental conference, United Nations Conference on the Human Environment, also known as the Stockholm Conference.

At the time the Stockholm Conference convened, there was a growing realization that the environmental predicament might pose significant threats to economic development and vice versa. However, the extent of such realization was far greater in the developed world than in the developing countries. According to Elliott (1998), the preparation phase of the Stockholm Conference made it clear that it would not be without its controversies. Eastern Bloc declared that they will not participate and the developing world maintained its reservations that environmental concerns of the developed world would shadow their priority attached to alleviating poverty and underdevelopment. Most of the developing countries perceived environmental concerns as a setback to their overarching goal of economic growth. Indeed, the argument that development was the only way for the developing world to eliminate also environmental problems was generally accepted.

> While in advanced countries economic development might be identified as the cause of environmental degradation, for the developing countries development was the only solution to the linked problems of poverty and degradation.
>
> (Vogler, 2007, p.432)

The arguments of the developing countries were also reflected in the declaration after the Stockholm Conference, namely the Stockholm Declaration[15]:

> In the developing countries most of the environmental problems are caused by under-development. Millions continue to live far below the minimum levels required for a decent human existence, deprived of adequate food and clothing, shelter and education, health and sanitation. Therefore, the developing countries must direct their efforts to development, bearing in mind their priorities and the need to safeguard and improve the environment.
>
> (UN, 1972)

The Stockholm Conference was not attended by most of the countries' heads of state or government (excluding Olof Palme and Indira Gandhi) and produced only a non-binding declaration in the end. "It was a compromise which balanced the *shared*

[15] For the full text of the Stockholm Declaration, please visit the official website of the UNEP (http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97&ArticleID=1503).

interests of states in maintaining the principle of state sovereignty and the *competing* interests of developed and developing countries" (Elliott, 1998, p.12). To count on the success side, one of the most important outcomes of the Stockholm Conference was that it paved the way for the establishment of the United Nations Environment Programme (UNEP) and led many countries to establish environmental ministries (Baker, 2006; Vogler, 2007). UNEP, established in 1973, was a political compromise that aimed to integrate the demands of both the developed and the developing countries:

> …developed countries were reluctant to agree to a new institution that would require further funding commitments for them. Developing countries, concerned that the Stockholm environmental agenda was being defined by the industrialized countries, were reluctant to agree to any new body which they thought could place constraints on their development.
>
> (Elliott, 1998, p.108)

This political compromise was the main reason behind the limited powers allocated to UNEP. Its main activities were concerned with "global environmental assessment, environmental management activities and supporting measures" (Elliott, 1998, p.109). Nevertheless, by its emphasis on the relationship between environment and development, the Stockholm Conference in a way signalled the emerging concept of sustainable development by "initiating the theory and strategy of 'ecodevelopment' as a developmental political alternative" (Glaeser, 1997, p.104). "There was a lot of activity but not much real action" in the aftermath of the Stockholm Conference (Elliott, 1998, p.14). Nevertheless, there were certain achievements:

- 1972 London Damping Convention,
- 1973 MARPOL Agreement on oceans pollution,
- 1973 Convention on International Trade in Endangered Species,
- 1979 Geneva Convention on Long-Range Transboundary Air Pollution,
- 1979 First World Climate Conference,
- 1980 World Conservation Strategy,
- 1985 Vienna Convention for the Protection of the Ozone Layer,
- 1987 Montreal Protocol on Substances that Deplete the Ozone Layer and
- 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

(Elliott, 1998, p.14-15)

Therefore, despite its shortcomings, the Stockholm Declaration set the route for the emerging international environmental cooperation attested by the plenty of international conventions on environmental issues that were signed in the following period. In addition, throughout the 1970s, scientific investigations to the causes of environmental problems increased in number together with an increasing activity on behalf of environmental NGOs (Elliott, 2004, p.14). This led to the questioning of the views on the solvability of every environmental problem within the confines of the present institutional order. However, 'the environment' had to wait until the 1980s to climb to the top of the political agenda. The changing degree of importance attached to the issue and the changing way the problem was conceived of and constructed was most observable in the Stockholm + 10 Conference held in Nairobi in 1982:

> In contrast to the belief in the capacity of scientific and technological knowledge to solve environmental problems which marked the 1972 Stockholm Conference, the Nairobi Conference paid particular attention to the need to address the underlying economic and social causes of environmental problems. This led to the establishment of the World Commission on Environment and Development (WCED), chaired by Gro Harlem Brundtland. One of the concrete proposals made in the Brundtland Report was for the UN to hold an Earth Summit.
>
> (Baker, 2006, p.55)

Therefore, the 1980s witnessed the emergence of global environmental governance, especially when a specific commission to devise roadmaps for future action was set up by the UN in 1983. WCED was thus established and soon provided an overarching scheme for national and international environmental policy and a solution to the long-standing environment-economy dichotomy with the introduction of the concept of sustainable development. But before proceeding with the arrival of such a dominant discourse, the approach of the economics discipline to growing environmental concern and the initial responses of national governments need to be elaborated. This is important as sustainable development was presented as a cure to the ills of all these approaches and practices.

### 1.1.4. Environmental Economics Emerging

The economics discipline was mostly muted in environmental issues during the first half of the 20th century and did not produce extensive literature on the relationship between the economy and the environment. 'Conservation' and 'wise use' were the prevailing approaches. In the 1950s, this tendency continued, albeit with signs of the development of environmental economics as a sub-discipline. The resource economics approach of the 1950s perceived the environment as a materials base, different from manufactured goods, hence necessitating "specialized management" (Spash, 1999, p.417). With the advent of the late 1960s and the early 1970s, environmental economics started to develop as a sub-discipline within the dominant neoclassical economic paradigm and proposed mathematics-based solutions to environmental issues. From that time on, the resource economics of the 1950s turned to issues such as fisheries, forestry and mineral extraction, whereas environmental economics started to develop ways and methods to cope with environmental problems such as pollution control and cost-benefit analysis (CBA) (Spash, 1999, p.419). The main arguments of these two sub-disciplines were the inadequacy of the neoclassical economics to effectively deal with environmental problems and they argued that markets can well be utilized to solve environmental issues.

Environmental economics rested on the belief that all environmental problems were solvable with the existing toolkit of the economics discipline. Due to the dominance of environmental economics[16] in solving environmental issues for a long time, the solutions proposed guided the policies of governments for some time to follow[17]. It should be noted however that these market prescriptions were not on the

[16] Environmental protection was for a long time perceived to be incompatible with economic profitability. However, this dichotomy did not let go the fact that the environment was increasingly degraded and natural resources were exhausted as a result of economic activity. Hence, environmental economics stepped in to incorporate the environment to the play of economics in the most conducive way to the 'dominant' economic paradigm. The optimality approach hence became central to the neoclassical vision of the environment.

[17] In the 1990s, an alternative approach developed, mainly in Europe, challenging the neoclassical perspective on environmental issues. Ecological economics argued for a more integrated approach in environmental affairs, and stressed the need to count for social impacts of economic activities as well.

same page with the survivalist tone of the environmentalism of the late 1960s and the early 1970s.

> While popular environmentalism of the time was arguing in favour of legal restrictions and zero pollution, these economists favoured market-based instruments and optimal pollution levels determined by taking costs and benefits into account.
>
> (Spash, 1999, p.419)

Nevertheless, environmental economics succeeded in influencing the responses of the governments that tried to solve environmental problems and meet the environmental demands of their public on the one hand, and had to please the investors on the other.

### 1.1.5. Policy Responses of the Governments in the post-1970s

The 1970s was a period when extensive public laws and regulations concerning the environment were enacted in most of the developed countries. The urgency of environmental issues, growing public awareness and the start of international environmental cooperation were the main factors behind this development. Furthermore, the rising environmentalism of the period demanded the governments to take action to stop and reverse environmental deterioration. According to Weale:

> ...behind that tide of activism there lay long-term structural changes in patterns of social organization and social relations: rising educational standards that enabled an attentive public to absorb the message of Rachel Carson's Silent Spring; growing international coverage by the media that both focused attention on specific pollution events and enabled the transmission of ideas to take place at rapid speed; the maturing of a generation in which post-materialist values were prevalent; and the effects of the post-war long boom that had provided an unprecedented quantity of commodities for citizens in developed economics but only at the cost of ambiguous effects on the quality of life.
>
> (Weale, 1992, p.10-11)

Initial responses were given through the use of conventional tools such as the enactment of laws and regulations and establishing specialized agencies. Dryzek (1997,

p.61) argues that the "problem solving" approach of the period rested upon the premise that even though environmental problems were existent, they could be solved within the existing apparatus of politics through "bureaucracy", "democracy", and "markets"; corresponding to the discourses of "administrative rationalism", "democratic pragmatism", and "economic rationalism" respectively. It must be noted however that 'administrative rationalism' is precedent to the following two other discourses, leaving the option to analyze both 'democratic pragmatism' and 'economic rationalism' distinct from the bureaucratic responses of the early 1970s. However, the typology given by Dryzek (1997) will be adopted here as all the three discourses share an important characteristic:

> The discourses of environmental problem solving recognize the existence of ecological problems, but treat them as tractable within the basic framework of the political economy of industrial society, as belonging in a well-defined box of their own.
>
> (Dryzek, 1997, p.61)

Weale (1992) argues that the strategies of the 1970s to control pollution, which he calls 'the old politics of pollution', rested on some underlying assumptions:

> ...that environmental problems could be dealt with adequately by a specialist branch of the machinery of government; that the character of environmental problems was well understood, that environmental problems could be handled discretely; the end-of-pipe technologies were typically adequate; and that in the setting of pollution control standards a balance had to be struck between environmental protection and economic growth and development.
>
> (Weale, 1992, p.75)

Even though the timing or the sequence of policy responses might vary between industrialized countries, it is still possible to talk about commonalities that dominated the 1970s. Jansen *et al.* (1998, p.290) argue that the common characteristics of the environmental policies devised by Western governments during the 1970s until the mid-1980s were basically the refusal of "a zero-sum game between economic growth and environmental protection", the inability to reverse the "overall deterioration of the environment", and a lack of "comprehensive and co-ordinated action".

Dryzek argues that the initial policy responses of governments in trying to deal with environmental issues displayed an "administrative rationalism" manifesting itself under "professional resource management bureaucracies" such as US Forest Service; "pollution control agencies" whose main responsibility was to implement the environmental laws; "regulatory policy instruments" such as regulations (mostly end-of-pipe); "environmental impact assessment" (EIA) starting in the US to later expand to countries such as Canada and France; "expert advisory commissions" and "rationalistic policy analysis techniques" such as CBA (Dryzek, 1997, p.64-72). The basic idea behind administrative rationalism was to delegate environmental protection to the experts (Dryzek, 1997). The achievements of this approach in terms of environmental policy notwithstanding, some of the failures of administrative rationalism such as "implementation deficit" [18] (Weale, 1992, p.17) and the difficulty in achieving continuing improvement after the "substantial initial gains" (Dryzek, 1997, p.79) were the main reasons that put this approach into question. Both democratic pragmatism and economic rationalism claimed to solve the problems associated with administrative rationalism.

Democratic pragmatism argued that the failures of administrative rationalism could be solved by more democracy, by "making administration itself more democratic" through "public consultation", "alternative dispute resolution", "policy dialogue", "public inquiries" and "right-to-know legislation" (Dryzek, 1997, p.86-91). This approach has never become as dominant as the former. Democratic pragmatism was largely limited by the fact that in the real political world, not all interests could find equal representation and impact policy. Generally, business is more powerful and advantageous in both shaping policy and determining outcomes (Dryzek, 1997). Still, however, democratic pragmatism's approach to involve more actors in the process of environmental policy-making might perhaps be treated as a station in the process of the development of another discourse that would incorporate the same emphasis, namely sustainable development.

[18] For an account of the reasons of implementation deficit, please see Weale (1992, pp.17-19) and Dryzek (1997, pp.80-82).

The last problem solving approach claimed to solve environmental problems via applying the neoclassical economic logic and methodology to environmental issues. In what Dryzek (1997) categorizes as the 'economic rationalism' approach, neoclassical economic views came to the fore through the environmental economics sub-discipline, emphasizing the goals of optimality and efficiency. Economic rationalism gained prominence in the 1980s, as market-oriented economic policies popularized. There are radical and more moderate forms of economic rationalism. Needless to say, what became much more popularized was the latter.

Neoclassical economics perceives the economic system distinct from the ecosystem. The main units of analysis are firms and households. The ecosystem is considered to be a subsystem of economics, such as fisheries, forestry and mining. No limits are envisaged, resting upon "the 'infinite growth' model" put forward by neoclassical economists like Solow and Stiglitz (Williams and McNeill, 2005, p.9). This model argued for the possibility of perpetual growth of production and consumption based on an assumption that natural capital and human made capital are substitutable:

> The idea that man-made capital will substitute for natural capital because 'well-functioning markets' will signal the impending shortage of natural capital, stimulating technological progress to invent a substitute, is a key postulate of this model.
>
> (Williams and McNeill, 2005, p.9)

Neoclassical economics analyzes environmental pollution and the depreciation of natural resources as market failures.[19] First, the lack of markets for environmental goods (such as the atmosphere, fish, etc.) leads to overexploitation. No markets means no prices on these goods. Reminiscent of the Hardin's *The Tragedy of the Commons*, people overuse environmental goods by overfishing or by emitting more carbon dioxide to the atmosphere. This, according to neoclassical economists, is a market failure that could be overcome by marketizing and pricing these goods. Second, property rights of

[19] Market failure is "a situation where an unregulated market fails to reach a Pareto optimum"; Pareto optimum being "being a situation in which nobody can be made better off without at least one person being made worse off" (McLean, 1994, p.196)

environmental goods are not well defined either. Thus, defining certain property rights through privatization is also seen as a solution.

Externalities[20] can also lead to market failures. Environmental damage created in the process of production and consumption is an example of externalities. What neoclassical economics proposes is to internalize these externalities (for instance through environmental taxes). Through regulations, the benefit obtained from one extra unit of economic activity should be made equal to one extra unit of environmental cost caused by this economic activity. Hence an optimum level of pollution would be attained. Environmental taxes should lead the firms to produce at the optimum pollution level. Zero pollution could not be a target as benefits are obtained from economic activity. Neoclassical economics proposes to base production and consumption decisions on CBA. If CBA results are above zero, economic value is created and the activity is justified even if it causes environmental damage.

The rising into dominance of market values and neoliberal economics in the 1980s made the environmental economists' arguments "consistent with the dominant political discourse of the 1980s" (Dryzek, 1997, p.116). The hard economic rationalist stance argues that everything should be left to the market. This is a radical version of the discourse. However, in reality, real politics (of the environment) in the industrialized countries show that the prescriptions of such economic rationalists have not been implemented to a large extent and "economic rationalism is inadequate as an orientation to environmental affairs" (Dryzek, 1997, p.119). However, a more moderate position of economic rationalism which settles down for using market mechanisms and incentives such as green taxes and tradable quotas has been more successful in influencing policy (Dryzek, 1997, p.108).

All three problem solving approaches have been applied to varying extents in most of the developed countries. Yet, they were all with their limitations. The sustainable development policy that was developed in the 1980s was therefore also an

[20] Externality is "any cost or benefit which an individual imposes on others but does not have to take into account in deciding what to do" (McLean, 1994, p.195).

attempt to cure the diseases of the abovementioned approaches. These problem solving approaches did not vanish with the arrival of sustainable development. Bureaucracies, democratic tools and economic measures are still used. However, the underlying assumption in all the three approaches regarding the irreconcilability of economic and environmental interests was challenged. This caused these problem solving approaches to be somehow assimilated into sustainable development. Before proceeding with sustainable development, it is necessary to have a look at another set of literature that paved the way for the emerging discourse.

### 1.1.6. Development Paradigm under Fire

The development paradigm that prevailed after WWII aimed at increasing living standards as well as the amount of goods in circulation on a global scale, where international organizations such as the IMF, WB and GATT all had the role of providing the infrastructure for such a development. The idea of development however can be traced back to the Enlightenment that started in Western Europe during the 18th century (Ercan, 2003; Purdey, 2010). West ontologically placed itself at the top of the progress ladder and defined the regions or civilizations that did not share its characteristics as the others that needed to be brought to the same level with them. The epistemology to define the process of such progress is to be found in the development discourse. Western philosophy, sociology and economy are behind the development paradigm which took its decisive shape after WWII. It was Henry Truman, the then President of the US, who first declared "development" as a goal (Dresner, 2008, p.74).

The US became the hegemonic power of the Western world after WWII. One of the basic foreign policy orientations of the US in the immediate aftermath of WWII was to contain communism and prevent it from becoming effective especially in the less developed regions of the world. A prominent development scholar Rostow (1960) argued that it was necessary to show the less developed countries that they could reach the level of the democratic countries after taking the necessary steps. Indeed, he stated

that the development of the nonindustrialized countries was a precondition of peace in the presence of the Cold War:

> In this setting the demand of the nonindustrialized nations for help in their programs of economic development is peculiarly urgent. Peoples of the world who do not yet fully share the methods and skills of Western culture now aspire to its standard of life. They cannot begin to earn that level of subsistence, in any sense, without first forming the institutions, finding the capital, and absorbing the techniques and habits which are essential parts of the procedure for using the secret of modern wealth. Those nations which have not yet gained command of Western technology will not stand passively aloof from the Cold War if their standards of living rise very slowly, or even continue to decline. Their demand for progress is therefore a dynamic – indeed, an explosive – reality in the equation of peace and war. If the West does not help them solve these difficulties through regimes of freedom, their demand to gain ground at least as rapidly as the Chinese will push them strongly toward the alternative of Communism.
>
> (Rostow, 1960, p.54)

These considerations led to the emergence of Development Economics as a full-fledged academic discipline.[21] What followed was a certain belief in economic growth in the less developed countries that would be attested by increases in per capita income, capital accumulation, savings and investment (Ercan, 2003, p.86).[22] Along with the dominant Keynesian economic paradigm of the period, government intervention through planning was seen as the main route to follow to achieve these goals and to reach the level of development observed in the West.

The development paradigm entered a new phase during the 1970s (Ercan, 2003, p.109). World witnessed an immense economic crisis in the 1970s due to the Oil Crisis and the subsequent period of stagflation.[23] The long-lasting economic boom that followed WWII came to an end. Keynesian economics that dominated the world

[21] For an overview of Development Economics in historical perspective, please see K.S., Jomo and Reinert, Erik S. (eds.) (2005). *The Origins of Development Economics – How Schools of Thought Have Addressed Development*. Tulika Books, Zed Books.

[22] For an analysis of the development economics after WWII, please see Rostow, Eugene V. (1960). *Planning for Freedom – The Public Law of American Capitalism*. New Haven, Yale University Press; Kuznets, Simon (1964). *Postwar Economic Growth – Four Lectures*. The Belknap Press of Harvard University Press, Cambridge, Massachusetts; Lewis, W. Arthur (1955). *The Theory of Economic Growth*. George Allen & Unwin Ltd., Ruskin House Museum Street London; Haberler, Gottfried and Stern, Robert M. (eds.) (1961). *Equilibrium and Growth in the World Economy – Economic Essays by Ragnar Nurkse*. Harvard University Press, Cambridge, Massachusetts.

[23] Stagflation denotes the economic predicament where both high inflation and economic recession are experienced at the same time.

economy by its emphasis on demand side economics and government intervention started to be questioned. Neoliberal ideology that started to flourish in the 1970s came with the criticism of Keynesian economics and its recipes. The Keynesian emphasis on state intervention was harshly criticized generally and for the development routes of the less developed countries in particular.

> Within development studies the most far-reaching consequences were the questioning of the effectiveness of the state as the organizing force for development, and the neo-liberal assertion of the need for market-based principles of resource allocation.
>
> (Woodhouse and Chimhowu, 2005, p.188)

Neoliberalism is basically an iteration of the ideas of classical liberalism. The proponents of this ideology argue that governments should not intervene in the market. Market mechanism functions through universal laws, so there cannot be different rights and wrongs for the developed and less developed economies. What is to be done is to take the government away from the market, eliminate protectionist economic policies, decrease public spending and privatize state economic enterprises.[24] The intensification of the process of globalization during the 1970s has also fed this ideology and provided the grounds it can flourish. The rise of transnational and multinational companies signalled both the desire to end government intervention as well as the need for supra-institutions or governance that would provide the grounds for the new phase of international capitalism (Ercan, 2003, p.114).

The development paradigm of the 1960s defined development in terms of increases in either per capita income or Gross National Product (GNP). As such, it ignored notions such as the improvement of living conditions, an equitable distribution of social wealth and the protection of nature (Ercan, 2003, p.95). This point is very crucial to the environment and growth debate which is to flourish in the 1970s. Daly and Cobb (1994) approach the issue by discriminating between the concepts of "growth" and "development":

[24] For an analysis of neoliberalism, please see Harvey, David (2005). *A Brief History of Neoliberalism*. Oxford University Press.

> Although the two terms are used synonymously we suggest a distinction. "Growth" should refer to quantitative expansion in the scale of the physical dimensions of the economic system, while "development" should refer to the qualitative change of a physically nongrowing economic system in dynamic equilibrium with the environment.
>
> (Daly and Cobb, 1994, p.71)

In addition, various analyses demonstrated that not all of the less developed countries benefited from the development recipes they received, at least relative to the benefits obtained by the developed countries (Ercan, 2003, pp.125-139). The ignorance of the development paradigm to the qualitative elements of the economic growth process and the problems and failures associated with the economic growth process in the less developed countries led to the questioning and criticism of the development paradigm and the 'growthmania' that was prevalent.

Throughout the 1970s, several strands of criticisms appeared. The first was a "human development perspective" with "a specific focus on basic needs" (Harris and Goodwin, 2001, p.xxxi). This perspective was informed by the fact that the conditions of the poor people in the developing countries were not improving as a result of economic growth (Dresner, 2008). Poverty remained prevalent in most of the developing countries. The basic needs approach did not prove very successful as "the practice tended to concentrate on top-down state provision of basic public services, rather than the non-material aspects to empower the poor themselves" (Dresner, 2008, p.75). The approach was eventually abandoned with the arrival of the 1980s and the neoliberal agenda stressing free market economics, rolling back of the state, cutting public expenditure, privatization and free international trade. All these were argued to "increase economic growth", which "would eventually 'trickle down' to the poor" (Dresner, 2008, p.76). The 1990s witnessed the rise of the 'human development model' initiated by Amartya Sen and later adopted by the United Nations Development Programme (UNDP). Its main emphasis was not on increases in GNP but on "people's capabilities to lead the lives they value" (Dresner, 2008, p.76).

The second strand of criticism argued that the present state of development policy resulted in a "persistent dependency" of the developing countries which led to

the flow of wealth from the "periphery" to the "core" (Harris and Goodwin, 2001, p.xxxi). Dependency theory became "a leading paradigm in many countries" (Saad-Filho, 2005, p.137).

> For Frank and other *dependentistas*, the relations binding the centre and the periphery have generated a process of 'development of underdevelopment': underdevelopment is not a transitional stage through which countries must pass but, rather, a condition that plagues regions involved in the international economy in a subordinate position.
>
> (Saad-Filho, 2005, p.139)

These two strands arrived just in the same period with the environmentalist critique of the development paradigm, which emphasized the undesired consequences of the unquestioned belief in progress, technology and economic growth. Even though these critical understandings of the development paradigm have put forward similar arguments, modern environmentalism "can be distinguished by its focus on the economic, social *and* ecological dimensions and repercussions of development" (Baker, 2006, p.2). Baker (2006, p.2) argues that there are "seven key arguments" that constitute the criticism of modern environmentalism to the basic premises of the prevailing development paradigm. The first argument holds that the progress understanding of Western developmentalism is limited, "primarily in terms of increased domination over nature and the use of her resources solely for the benefits of humankind" (Baker, 2006, pp.2-3).

The second argument states that economic growth is taken to be above all in the development paradigm. Thirdly, "consumption" is taken to be "the most important contributor to human welfare" (Baker, 2006, p.3). Fourth, the development paradigm pays no attention to the importance of the preservation of natural resources for social stability. Fifth, the development model not only exploits its own natural resources, but also exploits that of the less developed countries. Sixth, development paradigm "is blind to the fact that it is not possible to achieve a *global* replication of the resource-intensive, affluent lifestyle of the high-consumption economies of the North" (Baker, 2006, p.4). Last but not least, the development paradigm ignores the fact "that there are limits to economic growth" (Baker, 2006, p.4).

Therefore, the environmentalist critique of the Western development paradigm argues that the economic growth that was achieved in the post-WWII period "was exceptional in that it cannot be replicated across space (from the West to the global level) or across time (into the future)" and "was contingent upon a short-term perspective, the prioritization of one region of the globe over another, and upon giving preference to one species (humans) over the system as a whole" (Baker, 2006, p.4).

The criticisms against the development paradigm that intensified in the 1970s, stressed the uneven distribution of the benefits of growth as well as the negative consequences it brought about in environmental and social terms. Indeed, these criticisms were pointing out that such shortcomings were "not minor", but instead, "appear to be endemic to development" (Harris and Goodwin, 2001, p.xxxii). The criticisms against Keynesian economics impacted upon the way environmental concerns were handled by the states and the international community. The idea that economic growth was necessary was kept untouched. However, as a result of the environmentalism of the period and the influential works that showed how the world was getting environmentally deteriorated and how it could not continue with limitless economic growth resulted in an understanding that economic growth that did not take the environment into consideration was not sustainable. Therefore, it was necessary to find a way to achieve economic growth within environmental limits.

Sustainable development arrived as a medicine for all the illnesses of the previous approaches to environmental policy. It arrived within the context of the dominant economic paradigm of the 1980s, the failures of the problem solving approaches, the criticisms against the development paradigm and the necessity to involve the business in the process. Its main achievement was to create a totally new discourse which emphasized the compatibility and not the contrast between the economy and the environment by changing the relation from a 'zero-sum game' to a 'win-win' case.

## 1.2. SUSTAINABLE DEVELOPMENT

The criticisms directed against the prevalent development paradigm led to the emergence of new development models, sustainable development being an example (Baker, 2006, p.5). As such, sustainable development was a model that challenged "the conventional form of development" (Baker, 2006, p.1). It was created "out of the marriage between developmentalism and environmentalism" (Sachs, 1997, p.71). Accordingly, it incorporated three equally important dimensions, namely ecology, economy and society. In addition, sustainable development arrived as a response to the environmental problems of the coming times. During the 1960s and the 1970s, pollution constituted the core of environmental problems. The 1980s however came with "new and often more complex environmental problems" among which were "acid rain, rainforest destruction, ozone depletion, loss of biodiversity, catastrophic technological accidents such as Bhopal and Chernobyl, and the specter of global warming" (Dunlap *et al.* 2002, p.13). In addition to their complexity, some other characteristics of the new problems necessitated a more integrated approach to solving them.

> The newer problems are often hard to detect by direct human sensory perception, making our awareness of them dependent upon scientific expertise; they often affect huge geographical areas, up to the global level; they have the potential of affecting future generations; and their potentially catastrophic consequences clearly exceed our ability to mitigate their impacts or adequately compensate their victims.
>
> (Dunlap *et al.* 2002, p.13)

Therefore, these 'newer problems' bound with their complexity, global nature, long-lasting effects and 'catastrophic consequences' necessitated a change in the old ways of dealing with environmental problems in favor of a new approach that addressed all these issues. As it had became clear by then that the goal of economic growth could not be abandoned, environmental concern had to be inserted in the functioning of the economic sphere. Furthermore, this had to be achieved through international cooperation since the problems of the coming times were global in nature. As a result, the sustainable development formula was devised by WCED with an aim to respond to

all these necessities and cure the ills of the predicament that created them. It received world-wide acceptance and soon established its discursive hegemony in relation to environmental protection and economic necessities (Dryzek, 1997). Dresner (2008, p.1) argues that one of the reasons behind the fact that the idea of sustainability became so important "is because it is much more powerful rhetorically than an idea such as being 'environmentally friendly'".

The term was introduced to the international environmental debate in the 1980s. It was first used in the World Conservation Strategy (WCS) presented by the International Union for Conservation of Nature and Natural Resources (IUCN)[25] in 1980 (Baker *et al.* 1997, p.2). The aim of the document was "to help advance the achievement of sustainable development through the conservation of living resources" (IUCN, 1980, p. iv). It had a focus on "ecological sustainability" and not on economic or social sustainability (Baker, 2006, p.18).

'Sustainable development' gained its essential meaning with the publication of the report, *Our Common Future*, by WCED in 1987.[26] After its introduction, the term gained worldwide acceptance as it offered a valuable solution to the double necessities of both achieving economic growth and sustaining it environmentally. It was endorsed not only by the UN, but also by NGOs such as the World Wildlife Fund[27] (WWF), WB and international business organizations such as the Business Council for Sustainable Development[28] (BCSD) (Dryzek, 1997, pp.126-8).

[25] IUCN was established in 1948 as the 'International Union for the Protection of Nature' (IUPN) and changed its name to the 'International Union for Conservation of Nature and Natural Resources' (IUCN) in 1956. For more IUCN, please visit their official website (http://www.iucn.org/).
[26] For the full text of the Brundtland Report, please visit the official website of the UN (http://www.un-documents.net/wced-ocf.htm).
[27] WWF was established in 1961 with the mission to protect and conserve nature. For more on WWF, please visit their official website (http://www.worldwildlife.org/home-full.html).
[28] Business Council for Sustainable Development (BCSD) was established in 1990 by the Swiss industrialist Stephan Schmidheiny. BCSD comprised 48 business representatives and aimed to provide input and represent the views of business in the 1992 Earth Summit. BCSD was merged with World Industry Council for the Environment (WICE) in 1995 in order to establish the World Business Council for Sustainable Development (WBCSD). For more on WBCSD, please visit their official website (http://www.wbcsd.org/templates/TemplateWBCSD5/layout.asp?MenuID=1).

There are different interpretations of sustainable development. Dryzek (1997) argues that it is not a concept but a discourse. This study appreciates this view but accepts sustainable development as a concept as well, as defined by the Brundtland Commission. Therefore, what sustainable development means as a concept for this study follows the Brundtland Commission's definition. The reason is the "authoritative status" gained by the Brundtland definition of sustainable development (Baker, 2006, p.17). Nevertheless, different interpretations of the concept will be presented in order to understand the different policy strategies that are adopted based on sustainable development.

### 1.2.1. Defining Sustainable Development

The Brundtland Commission was established after the call by the General Assembly of the UN to formulate "a global agenda for change" in order to "propose long-term environmental strategies for achieving sustainable development", in a way that would bring together all countries with differing economic development levels (WCED, 1987, p.ix). This was especially crucial when the arguments put forward by the developing countries in the 1972 Stockholm Conference with respect to how environmental protection was a matter of the developed nations are taken into consideration (Dresner, 2008, p.35-36). The Brundtland Commission thus put forward a new perspective on the relationship between environment and development which were previously thought of to be incompatible.

> We have in the past been concerned about the impacts of economic growth upon the environment. We are now forced to concern ourselves with the impacts of ecological stress – degradation of soils, water regimes, atmosphere, and forests – upon our economic prospects… Ecology and economy are becoming ever more interwoven – locally, regionally, nationally, and globally – into a seamless net of causes and effects.
>
> (WCED, 1987, p.5)

In an endeavor to establish the cause and effect relationship between economy and ecology, the report linked environment and development in four ways:

- Environmental stresses are linked one to another
- Environmental stresses and patterns of economic development are linked one to another
- Environmental and economic problems are linked to many social and political factors
- The systemic features operate not merely within but also between nations

(WCED, 1987, pp.37-38)

Therefore, the Brundtland Commission utilized the concept of sustainable development to guide the nations and the international community in finding environmentally sustainable development patters which was of great urgency. It defined sustainable development in *Our Common Future* as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p.43). It further argued that there are "two key concepts" linked to sustainable development:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

(WCED, 1987, p.43)

Therefore, sustainable development is informed by the needs of the poor nations and thus stresses the need for their economic development. "Essential needs" are described as the basic needs of people such as "food, clothing, shelter, jobs" and also "an improved quality of life" when these basic needs are met (WCED, 1987, p.43). However, these basic needs are not met for a large number of people, let alone an improved quality of life. Thus, "poverty and inequity" should be overcome as the world "will always be prone to ecological and other crises" if they are not eliminated (WCED, 1987, pp.43-44). By the emphasis on the elimination of poverty, and the argument that the elimination of poverty is essential to achieving sustainability, development becomes the prerequisite of sustainability (Lélé, 1991).

The Brundtland Report also stresses that there are limits to the fulfillment of needs imposed by the present level technology and earth's carrying capacity. Indeed, it

recognizes that there are "ultimate limits" to growth and in order for economic growth to be sustainable, "the world must ensure equitable access to the constrained resource and reorient technological efforts to relieve the pressure" (WCED, 1987, p.45).

Baker (2006, p.21) argues that the notions of "ultimate limits" and "ecosystem health" are linked with each other. In the ecosystem approach, "the health of the ecosystem is the 'bottom line' guiding sustainable development because, if the health of the environment is compromised, everything else is undermined" (Baker, 2006, p.21). Furthermore, Baker argues that the ecosystem approach might well see the environment "as a form of 'natural capital'" and thus bears the danger of sustaining "what is of instrumental value for human beings and does not protect nature for its own sake" (Baker, 2006, p.21).[29]

In relation to the emphasis on eliminating poverty and the recognition that there are limits to this process, the Brundtland Report also introduced the notions of intra-generational and inter-generational equity to the environmental debate. Intra-generational equity is closely linked to the emphasis on the need to eliminate poverty and hence the necessity to meet the basic needs of the people in less developed countries. Inter-generational equity means to take into account "the needs of future generations in the design and implementation of current policy" (Baker *et al.* 1997, p.4). Thus, it can be argued that inter-generational equity is related to the emphasis on limits, as future generations would be the bearers of the consequences of economic activities that do not take 'ultimate limits' into account.

There are also other normative notions associated with sustainable development. In close connection to intra-generational equity, the principle of 'common but differentiated responsibilities' acknowledges the huge disparities between different regions of the world in their contribution to the environmental crisis as well as their "capacities" to prevent the environment from further deteriorating (Baker, 2006, p.36).

[29] Baker (2006, p.21) argues that two related concepts also have "anthropocentric underpinnings". The first is the concept of "environmental space" which asserts that there are "limits to the amount of pressure that the earth's ecosystem can handle, without irreversible damage" (Baker, 2006, p.21). The second such concept is "ecological footprint" which "refers to the impact of a community on natural resources and ecosystems" (Baker, 2006, p.22).

This principle has also found place in the Rio Declaration published after the Rio Earth Summit under the call "for the diffusion of *differential obligations* through international environmental law", the different requirements requested from the developed and the developing countries in the Kyoto Protocol being an example (Baker, 2006, p.37).

The Brundtland Report also made it explicitly clear that the achievement of sustainable development could only be possible through a new mode of governance. It called for the governments to make sure that their agencies pursue economic and ecological sustainability in their policies and asked the regional and international organizations to integrate sustainable development in their activities (WCED, 1987, p.20). It also called for more support and participation from public, NGOs, scientific community and industry, arguing that "their rights, roles, and participation in development planning, decision making, and project implementation should be expanded" (WCED, 1987, p.21).

Therefore, the report asked the international and sub-national levels as well as civil society and the business sector to become the central actors of this new mode of governance. This is extremely important as the new development route proposed by the Brundtland Report diverges from the traditional environmental policy tools and techniques such as regulations and command-and-control techniques and moves towards a more 'democratic' way of policy-making. The consent and full participation of every interested party are requested so that the overall aim of economic development would not be jeopardized. All in all, the term sustainable development introduced a new development paradigm, bringing together the concerns regarding economy, ecology and society:

> It seeks to reconcile the ecological, social and economic dimensions of development, now and into the future, and adopts a global perspective in this task. It aims at promoting a form of development that is contained within the ecological carrying capacity of the planet, which is socially just and economically inclusive. It focuses not upon individual advancement but upon protecting the common future of humankind. Put this way, sustainable development would appear to be an aspiration that almost everyone thinks is desirable: indeed, it is difficult *not* to agree with the idea.
>
> (Baker, 2006, p.5)

As no one could disagree with the idea[30], everyone tended to develop its own version of sustainable development. Talking in the extremes, some environmentalists criticized the concept as being essentially a way to continue with environmental destruction whereas some others saw it as an over concern about the environment (Dresner, 2008, p.2). According to the defenders of the concept, different perceptions and disagreements over the concept of sustainable development does not make it meaningless, but a contested concept (Dryzek, 1997; Dresner, 2008). These two extreme standpoints notwithstanding, the term gained world-wide acceptance from all fronts. As a result, different policy interpretations associated with sustainable development flourished.

Before proceeding with the different policy interpretations of the concept, it should be noted once more that the introduction of the sustainable development concept reflects the needs to respond to the criticisms directed against the development paradigm, to devise a new approach to environmental policy-making that would reconcile the environment and the economy and to effectively deal with the complex and global environmental problems of the period such as the discovery of a hole in the Ozone Layer in 1985 and the Chernobyl Nuclear Accident in 1986. This time, environmental concern was global as the effects of environmental problems such as Ozone Layer depletion or nuclear accidents were global.

> Unlike the first wave of environmental concern in the late 1960s, which was confined to Western countries, the environmental wave of the late 1980s and early 1990s was felt almost everywhere in the world.
>
> (Dresner, 2008, p.39)

In addition, the global nature of the environmental concern of the 1980s necessitated concerted action at the global level. Action at the international level had to

[30] There are criticisms to the idea of sustainable development from some environmental circles. The Deep Ecology is one of the most prominent movements that not only rejects sustainable development, but also the underlying industrialist logic. Deep Ecology has profound effects on many environmental movements. For an analysis of the arguments, contradictions within and impacts of Deep Ecology, please see Luke, Timothy W. (2002). "Deep Ecology: Living as if Nature Mattered". *Organization & Environment*, Vol.15, No.2, June 2002, pp.178-186.

take into account the arguments put forward by the developing countries as policies that would aim at limiting economic growth did not have much prospect for success in the face of the developing countries' objections. This is the reason why the UN asked the WCED to devise a global solution to this 'controversy' between environment and development. The sustainable development formula proposed by WCED was a well-elaborated attempt to overcome this 'controversy', however, the vagueness of the concept resulted in the flourishing of different and sometimes contradictory interpretations.

### 1.2.2. Different Interpretations of Sustainable Development

There are ample definitions provided for sustainable development (Lélé, 1991; Dryzek, 1997). Yet, there is no agreement over what the term really means apart from the vague formulation of the Brundtland Commission. Strange and Bayley (2008, p.30) state that it is "a conceptual framework" for overcoming the conventional development paradigm, "a process" and "an end goal" at the same time. Its contested nature does not render sustainable development a meaningless concept. Baker (2006, p.27) argues that "the lack of clarity" over the concept has proved to be "politically advantageous, because it has allowed groups with different and often conflicting interests to reach some common ground upon which concrete policies can be developed". Sustainable development would not have provided such a platform for the coordination of environmental and economic objectives if it had been defined too strictly. There are different policy interpretations associated with sustainable development.[31] "The ladder of sustainable development" provided by Baker (2006, pp.30-31) (Table 1) and the "competing interpretations of sustainable development" by Söderbaum (2008, pp.13-18) highlight these different interpretations.[32]

[31] This section will present the typologies provided by Baker and Söderbaum as they highlight the main differences in understanding and implementing sustainable development.

[32] Baker *et al.* (1997, pp.8-9) provided a ladder of sustainable development in an aim to present "the diversity of policy options associated with…sustainable development". Later, Baker (2006, pp.30-31) provided a modified version of the sustainable development ladder with a global focus. This study will make use of the modified version (Table 1). Some parts of the ladder are not included in order to stay within the limits of this study and some cells are only a section of their original form.

## Table 1: The Ladder of Sustainable Development - the global focus

| Model of SD | Normative Principles | Type of Development | Governance | Technology | Policy Integration | Policy Tools | Civil society – state relationship |
|---|---|---|---|---|---|---|---|
| **Ideal Model** | Principles take precedence over pragmatic considerations | Right livelihood, meeting need not wants, biophysical limits guide development | Decentralization of political, legal, social and economic institutions | Labour-intensive appropriate, Green technology; new approach to valuing work | Environmental policy integration; principled priority to environment | Internalization of SD norms through on-going socialization, reducing need for tools | Bottom-up community structures and control; equitable participation |
| **Strong SD** | Principles enter into international law and into governance arrangements | Changes in patterns and levels of consumption; shift from growth to non-material aspects of development; necessary development in Third World | Partnership and shared responsibility across multi-levels of governance (international; national, regional and local); use of good governance principles | Ecological modernization of production; mixed labour- and capital-intensive technology | Integration of environmental considerations at sector level; Green planning and design | SD indicators; wide range of policy tools, Green accounting | Democratic participation; open dialogue to envisage alternative futures |
| **Weak SD** | Declaratory commitment to principles stronger than practice | Decoupling; reuse, recycling and repair of consumer goods; product life-cycle management | Some institutional reform and innovation; move to global regulation | End-of-pipe technical solutions; mixed labour- and capital-intensive technology | Addressing pollution at source; some policy coordination across sectors | Environmental indicators; market-led policy tools and voluntary agreements | Top-down initiatives; limited state-civil society dialogue; elite participation |
| **Pollution Control** | Pragmatic, not principled | Exponential, market-led growth | Command-and-control state-led regulation of pollution | Capital-intensive technology, progressive automation | End-of-pipe approach to pollution management | Conventional accounting | Dialogue between the state and economic interests |

**Source:** Baker, 2006, pp.30-31. (SD: sustainable development)

The ladder of sustainable development by Baker (2006) ranks the various sustainable development models according to their anthropocentric or ecocentric orientations.[33] Accordingly, as one moves from the bottom of the ladder to the ideal model of sustainable development, one also moves from anthropocentricism to ecocentricism. In the pollution control approach, there is a genuine belief in human capacity and technology in that they "can solve any environmental problem" (Baker, 2006, p.29). Baker (2006) exemplifies this approach with the declaration called Heidelberg Appeal, presented by business interests during the 1992 United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit. Heidelberg Appeal understands and commits itself to the necessity to preserve the environment, however, states anxiety over "the emergence of an irrational ideology which is opposed to scientific and industrial progress and impedes economic and social development" (Heidelberg Appeal, 1992)[34]. This approach argues that empirical data show high pollution levels at the beginning of industrialization which are dealt with at the later stages with effective pollution control strategies (Baker, 2006).

Baker (2006) furthermore argues that this approach is related to the Environmental Kuznets Curve (EKC) argument. EKC is based on the hypothesis by Simon Kuznets that there is an inverted U-shape relationship between income inequality and per capita income. In the 1990s, same analysis has been applied to the relationship between environmental degradation and per capita income. Increase in the empirical analyses of pollutants paved the way for such a hypothesis. According to the EKC hypothesis, environmental degradation is observed in the early stages of industrialization, however, environmental quality gets better after some point in the level of industrialization as the economy becomes "less-resource intensive" and enters into a "post-industrial stage" (Baker, 2006, p.32). EKC hypothesis was popularized by the 1992 WB Development Report (Stern, 2004). Stern (2004, p.1419) argues that the idea that "economic growth would be the means to eventual environmental

[33] In the anthropocentric view, nature is seen as a source of the realization of human needs and desires. Ecocentric view on the other hand holds that nature has a value in itself and establishes an equal relationship between nature and the human kind (Baker, 2006).
[34] For the full text of the Heidelberg Appeal, please visit the official website of the Europäisches Institut für Klima und Energie (http://www.eike-klima-energie.eu/uploads/media/theheidelberg_Appeal.pdf).

improvement" can also be observed "in the emerging idea of sustainable economic development" that was proposed by the Brundtland Commission. The EKC hypothesis is criticized because of its econometric weakness (Stern, 2004; Cole, 2007), its ignorance about the possibility of the displacement of polluting industries from the industrialized to the less developed regions (Baker, 2006) and its blindness to "other forms of pollutants present in the industrialized countries that are not equally visible but could potentially be more difficult to resolve" (Sinha, 2010, p.6). Therefore, the EKC analysis falls short of convincing "that economic growth can be de-linked from environmental impact" (Purdey, 2010, p.137).

The second step in the ladder is weak sustainable development. This approach has the target of achieving "capitalist growth with environmental concerns" (Baker, 2006, p.32). This approach, according to Baker (2006), is associated with the neoclassical economic view concerning the environment and also has links with the sub-discipline of environmental economics. The basic premise here is "putting a price on the planet" (Dresner, 2008, p.116).[35] In weak sustainable development, sustainability is considered to be the 'non-depletion of capital'. Therefore, if human-made capital can replace natural capital, than there is no problem. In addition, the way to preserve the natural capital from extinguishing is to price them "based on what people would be willing to pay to protect that natural capital" (Baker, 2006, p.32). This is then compared with the gains to be achieved if "economic exploitation" was done rather than preserving the natural capital (Dresner, 2008, p.115). And as a result of the CBA conducted afterwards, the choice would be ahead. The greater economic value would win.

Such a perspective on sustainability is criticized as some forms of environmental degradation cannot be valued. In addition, most of the environmental issues are concerned with the concept of 'natural capital'. Nevertheless, this view has left its imprint in international environmental policy. Baker (2006, p.33) argues that this approach has an important impact on international organizations that have

[35] Most of the views of this approach have been covered previously in this section, during the analysis of 'policy responses in the 1970s' and particularly under 'economic rationalism'.

environmental tasks as well, such as the WB. In addition, this approach lies at the bottom of the NEPIs like tradable permits (Baker, 2006).[36]

The third step is strong sustainable development. It differs from weak sustainable development in several aspects. In the weak sustainable development approach, economic development is necessary to achieve environmental protection. Strong sustainable development argues on the other hand that "environmental protection is a precondition of economic development" (Baker *et al.* 1997, p.15). Another difference concerns as to whether natural capital can be compensated by technology, i.e. human-made capital, and as to whether there is a level of "'critical' natural capital" that has to be kept intact (Baker, 2006, p.33). Both approaches assume some sort of substitutability, though differing in extent.

> Very simply, the non-declining capital rule can be refined into either 'strong sustainability' or 'weak sustainability'. The strong sustainability rule is 'non-declining natural capital'. The weak sustainability rule is 'non-declining total capital'.
>
> (Dresner, 2008, p.82)

Strong sustainable development rests upon the 'precautionary principle', which implies that "policy makers should err on the side of caution" when information on the perceived risk is not certain (Baker, 2006, p.34). A good example to such policy area is climate change as future action instead of present precaution might be too costly and too late. Precautionary principle requires a collaboration of efforts between all segments of society.

> For example, governments need to ensure adequate market regulation and develop new energy and transport policies to deal with climate change. The involvement of consumers, economic interests and local communities is also needed to bring about changes in consumption patterns and to ensure that society makes more use of environmentally friendly transport models.
>
> (Baker, 2006, p.34)

[36] This issue will be further elaborated in the analysis of ecological modernization, which also prescribes the use of market mechanisms in environmental policy.

This new form of governance and the use of new instruments are typical of this approach. Finally, strong sustainable development has a different view on economic growth, bearing in it notions from the environmental critique of the development paradigm. Thus, it "seeks a shift from quantitative growth, where growth is seen as an end in itself and a measure only in material terms, to qualitative development, where quality of life is prioritized" (Baker, 2006, p.34). This also represents a shift from the economic growth-oriented understanding of human progress.

On the top of the sustainable development ladder, there is the ideal model of sustainable development. Baker (2006, p.34) argues that the ideal model of sustainable development calls for "structural change". This approach is critical of the Brundtland Commission's definition of sustainable development. There are several strands that fall under this category. The most radical strand however is the "deep ecology" movement, known by its proponent Arne Naess (Baker, 2006, p.35). This position argues for "no more interference than is necessary in order to satisfy *vital* human needs; the term 'vital' being interpreted as wider than 'basic'" (Naess, 1997, p.62). In this respect, the movement diverges from the Brundtland formulation of sustainable development and proposes "full ecological sustainability" (Naess, 1997, p.61).

Söderbaum (2008) has also analyzed the different positions towards the environment and development relationship arguing that there are three orientations that can be adopted concerning the issue. The first is the "business as usual" approach (Söderbaum, 2008, p.14). This approach is similar to the pollution control approach in Baker's typology. Belief in human capacity to solve environmental problems through economic growth and technology is also central to this approach. Söderbaum (2008) argues that there is no prescription for a change in the institutional set-up of society.

> The response pattern is: 'If we do not speak about the problems, then perhaps they do not exist'; 'To the extent that they exist, they will be taken care of by the inbuilt mechanisms of our present market economy'; 'Public relations campaigns and lobbying will make people focus on traditional parameters such as economic growth and profits thereby forgetting about environmental problems'.
>
> (Söderbaum, 2008, p.14)

Thus the 'business as usual' approach foresees no serious structural change in the world political, economic and social system. It also does not foresee any modifications whatsoever. The second category, "social and ecological modernization" on the other hand admits that some economic and environmental practices are not sustainable and modification in the current institutional framework is necessary to deal with these unsustainable trends.

> The response pattern is therefore: 'Yes there are problems but don't worry, things are under control'; 'Environmental taxes, trade in pollution permits and other market instruments can be used, codes of conduct for corporations will be formulated'; 'Voluntary agreements between business corporations and environmental organizations, environmental management systems, environmental labelling etc. will do it'.
>
> (Söderbaum, 2008, p.14)

This description provided by Söderbaum lies somewhere in between Baker's two typologies, namely weak sustainable development and strong sustainable development. Baker (2006) analyzes these two types differently and argues that ecological modernization lies somewhere in between strong and weak sustainable development, whereas Söderbaum (2008) argues that ecological modernization is not a strong interpretation of sustainable development. However, both scholars agree that it is among the most commonly adopted policy strategies to implement sustainable development.[37]

Söderbaum's final category is the "radical interpretation" of sustainable development (Söderbaum, 2008, p.14). This category stands somewhere in between Baker's 'strong sustainable development' and the 'ideal model' of sustainable development. It is closer to the former in terms of actual policy and to the latter in terms of ideational orientation. Söderbaum (2008, p.14) argues that this approach admits the necessity to change the dominant paradigm accompanied by also "a major shift in thinking".

[37] Söderbaum (2008, p.17) argues that the 'business as usual' approach is also dominant in many areas. It is important to note however that Söderbaum tends to take the two categories of 'business as usual' and 'social and ecological modernization' as one category when talking about real politics of the environment.

> The response pattern is: 'We need complementary or alternative conceptual frameworks in economics and science more generally as part of a pluralistic and democratic philosophy'; 'Competition is preferred to the global neoclassical monopoly or cartel at university departments of economics'; 'Individuals and organizations alike need to reconsider their ideas about progress as actors privately, professionally and in society'; 'Institutional arrangements at the local, national and international level are too often dysfunctional in relation to sustainability objectives'.
>
> (Söderbaum, 2008, pp.14-15)

There are also some scholars who do not find sustainable development as a good point of reference for environmental policy. Beckerman (1994) argues that the concept of sustainable development is not very useful. He distinguishes between two types of sustainable development: strong and weak. His strong typology is similar to that of Söderbaum's, implying a hard environmentalist stance towards the preservation of nature. As this stance is not realistic and not applicable, Beckerman (1994) argues that the environmentalists have opted for weak sustainable development which assumes substitutability between natural and human-made capital with the general aim of preserving the well-being of people. According to Beckerman, here lies the weakness of weak sustainable development. If the aim is to preserve the well-being of people, the necessary path to go is not 'sustainability' but 'optimality'. As a result, Beckerman (1994) is doubtful about the meaning of the concept of sustainable development in the first place. Nevertheless, such views have not shaken the primary position of sustainable development in giving direction to national and international environmental policies.

Among all these different interpretations, ecological modernization holds a central position. The prescription of policy-making and cooperation between actors and the use of instruments under Baker's (2006) strong and weak sustainable development typologies have generally been labeled under ecological modernization. Strong sustainability elements in Baker's typology (2006, p.30) such as changes in consumption patterns, EPI, and ecological modernization of production clearly establish links with ecological modernization and strong sustainable development. However, weak sustainable development elements such as the emphasis on decoupling and market-based mechanisms for environmental policy are also constitutive of the ecological modernization policy strategy. In that sense, Baker (2006, p.140) argues that

"ecological modernization would appear to straddle the weak and strong versions of sustainable development".

In Söderbaum's analysis, ecological modernization is dealt with separately and not within strong sustainable development. The reason for this difference in categorization might be the emphasis of the concept on both sustainability and development. Purdey (2010, p.46) argues that even though sustainable development points both at ecological sustainability and economic growth, the latter "retains its priority status". Cole (2007, p.243) also argues that the weak sustainable development approach finds no conflict between "economic growth and environmental health". Reminding the Brundtland Report's emphasis on the necessity to achieve "more rapid economic growth in both industrial and developing countries" (WCED, 1987, p.89), Cole (2007, p.243) argues that "the recommendations of the Brundtland Report would fall into the weak sustainability category". In both Baker's and Söderbaum's typology however, it is stressed that ecological modernization has been the most widely used and adopted policy strategy to achieve the commitment to sustainable development by nation states and international organizations. As such, ecological modernization has become the dominant policy strategy to implement sustainable development (Connelly and Smith, 2003, p.66).[38]

Despite all its vagueness as a concept, sustainable development cannot be easily discarded. It has been taken on by governments and the international community as the basis of environmental and economic policy. As Strange and Bayley (2008, p.23) put it, "sustainable development has become a kind of conceptual touchstone, one of the defining ideas of contemporary society". After its introduction by the Brundtland Report, sustainable development was quickly taken up by the international community in an endeavor to coordinate efforts to achieve a sustainable future. Hence, the world witnessed the emergence of global environmental governance in the aftermath of the publication of *Our Common Future*.

[38] The following section on ecological modernization will elaborate on this process, and on the dominant position it holds in national and international environmental policy-making.

### 1.2.3. Global Environmental Governance

The theory of realism describes international relations as a venue of anarchy, constituted of nation states each willing to maximize its own good in the absence of a world government. However, this does not mean that the theory of realism in international relations is totally unchallenged. New forms of governance have emerged at the international level that lead nation states to cooperate even at the expense of their immediate interests. Purdey (2010) argues that there is "a fully integrated global political system" and states that "the growth paradigm" is the example of such governance:

> Whether international relations are fundamentally conflictual or cooperative in nature, and notwithstanding key roles played by powerful states, institutions and ideologies, a single shared purpose clearly reveals the presence of one dominant ordered system with which all major actors voluntarily comply, and with which all major international institutions willingly conform. I refer to this form of governance as the growth paradigm. Its central feature is a common commitment to economic growth.
>
> (Purdey, 2010, pp.3-4)

In terms of international environmental cooperation, there are clear signs of such an establishment from the 1980s onwards. And it is in direct relation with the abovementioned common commitment to economic growth. This commitment has brought the international community to the point where cooperation became necessary in order to achieve both economic growth and environmental protection. The motto that led to the establishment of such governance was sustainable development. Whether global environmental governance is successful or whether it can be called governance is a matter of debate. What is for sure is that international environmental cooperation intensified mainly after the publication of the Brundtland Report.[39] The first concrete move towards global environmental governance came with the UNCED that convened in Rio in 1992.

[39] International environmental policy started before the publication of the Brundtland Report with the Stockholm Conference held in 1972 and the Stockholm +10 Conference held in Nairobi in 1982 as well as the adoption of international environmental agreements. Nevertheless, the main push and the initiation of global environmental governance came with the publication of the Brundtland Report.

#### 1.2.3.1. United Nations Conference on Environment and Development

The years following the publication of the Brundtland Report can be described to be a period when environmental issues were top on the international political agenda. The 'Changing Atmosphere: Implications for Global Security' conference was held in Toronto and International Panel on Climate Change (IPCC) was established by the World Meteorological Organisation and UNEP in 1988 (Elliott, 1998). One of the proposals made by the Brundtland Report was to convene a big international conference. Hence the UNCED was decided to take place in 1992 in Rio, twenty years after the initiation of international environmental cooperation in Stockholm. It is also known as the Earth Summit.

The Earth Summit had many important conclusions in terms of the promotion of environment and development issues. Participation was immense compared to the Stockholm Conference. Its focus was twofold: "the link between environment and development" and "the practical issues surrounding the promotion of sustainable development" (Baker, 2006, p.55). It produced crucial documents and institutional bodies that were to be the venues for the promotion of sustainable development in the following period. Three agreements (the Rio Declaration, Agenda 21 and Forest Principles) and two conventions (Convention on Biological Diversity – CBD and United Nations Framework Convention on Climate Change – UNFCCC) were adopted in the Earth Summit. In addition, the Commission on Sustainable Development (CSD) was established along with the proposals of Agenda 21 (Elliott, 1998, p.20).

##### 1.2.3.1.1. The Rio Declaration

The Rio Declaration is a non-binding document consisting of 27 principles. Through these 27 principles, most important messages that were conveyed were the centrality of human beings to every policy of sustainable development, state sovereignty to exploit own resources, the right to development albeit with environmental considerations, the principle of "common but differentiated responsibilities", introduction of new technologies, participation, the precautionary principle and the

polluter pays principle (UN, 1992a).[40] However, there is ample discussion as to whether the Rio Declaration said something new or just reiterated the already agreed upon points (Elliott, 1998, p.21). Due to the first three messages mentioned above, Dresner (2008, p.43) criticizes the document with a "lack of a new environmental ethic". Dresner further argues that the Rio Declaration is a step backwards compared to the Stockholm Declaration:

> In general, the Rio Declaration was less progressive than the Stockholm Declaration 20 years earlier. The Rio Declaration emphasized development and national sovereignty, while the Stockholm Declaration had emphasized environmental protection and international cooperation.
>
> (Dresner, 2008, p.44)

The principles criticized by Dresner reflect the concerns of the developing countries. The emphases on state sovereignty and the right to development surely render the realization of sustainable development difficult (Elliott, 1998). Nevertheless, the precautionary principle and the polluter pays principle which were nonexistent in the Stockholm Declaration are enshrined in the Rio Declaration (Dresner, 2008). Furthermore, the Rio Declaration is much more "inclusive" than the Stockholm Declaration (Elliott, 1998, p.21).

#### 1.2.3.1.2. Agenda 21

Agenda 21[41] is a comprehensive document composing of 40 chapters which is also non-binding. It is an action plan to achieve sustainable development. Due to the very long character of the document, it is impossible to analyze it here in detail. However, it should be noted that some points are stressed in the document such as the "the importance of bottom-up participation, especially community-based approaches, through Local Agenda 21" (Baker, 2006, p.56) and "open government" (Dresner, 2008, p.44). These emphases are important as they clearly show the changing structure of

[40] For the full text of the Rio Declaration, please visit the official website of the UN (http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm).
[41] For the full text of Agenda 21, please visit the official website of the UN (http://www.un.org/esa/dsd/agenda21).

environmental governance with the sharing of sovereignty rights with the sub-national level. Added to this is the ongoing internationalization of environmental policy. Needless to say, such a localization and internationalization of environmental policy coincided with the end of the Cold War and the subsequent "demise of state socialism and the general disillusionment with bureaucratic approaches to problems" (Dresner, 2008, p.44). In Agenda 21, developed countries also reaffirmed their previous commitment to give the 0.7 % of their GNP for Official Development Assistance (ODA) and also committed themselves to the "transfer of environmentally sound technologies" to the developing world (UN, 1992b).

#### 1.2.3.1.3. Forest Principles

Statement of Forest Principles[42] is the third non-binding document agreed upon in the Earth Summit. The idea was originally to establish a forest convention, which was supported by the Western countries (Dresner, 2008). However, as the discussions intensified, it became clear that the developing countries were totally opposed to the idea and they perceived the insistence of the Western countries as "a way of diverting attention from the issue of developed country commitments on climate change" (Elliott, 1998, p.86). As the hopes for a binding convention failed, the participants of the Earth Summit settled down for what came to be known as the Forest Principles. The document's main emphasis was the state sovereignty over forests while also listing the "general principles of forest protection and sustainable management" (Baker, 2006, p.56). As such, Forest Principles was severely criticized by the environmentalists.

#### 1.2.3.1.4. The Commission on Sustainable Development

CSD is included in the 'International Institutional Arrangements' chapter of Agenda 21 (UN, 1992b). The document advises the establishment of CSD "to ensure the effective follow-up of the Conference, as well as to enhance international cooperation and rationalize the intergovernmental decision-making capacity for the

[42] For the full text of the Forest Principles, please visit the official website of the UN (http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm).

integration of environment and development issues and to examine the progress in the implementation of Agenda 21" (UN, 1992b, para.38.11). The task of CSD is challenging and difficult to accomplish due to the nature of intergovernmental relations. When the meeting frequency (annually) and the low level of resources allocated to the institution are taken into consideration, the task becomes "over-ambitious" (Dresner, 2008, p.45). However, CSD has still performed a central role in the efforts to achieve sustainable development. It has "stimulated the development of a system of national reporting, which, in turn, has helped to build a picture of global progress towards sustainable development" (Baker, 2006, p.57).

#### 1.2.3.1.5. The Convention on Biological Diversity

CBD was a result of the growing concerns that there was a decrease in the number of species in the world. The issue was touched upon as far back as the Stockholm Conference and some non-binding instruments were agreed upon (Elliott, 1998, p.75). However, the issue was of controversy and this made it difficult to achieve a common response in this field. The main arguments about the issue during the negotiations in the Earth Summit "were not those of conservation strategies but those related to the ownership of genetic resources, to intellectual property rights and to the distribution of benefits from genetic exploitation, with countries cleaved between the gene-rich South and the (bio)technology-rich North" (Elliott, 1998, p.76). The result of this cleavage was reflected in the emphasis on state sovereignty over the protection of biodiversity.[43] In the end, the CBD adopted the objectives of "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources" (CBD, 1992, Article 1). The US refused to sign the CBD and argued that this was "a threat to the American biotechnology industry" (Dresner, 2008, p.43).

The CBD established a Conference of Parties (CoP) with the task of the implementation of the Convention as well as the adoption of protocols when necessary

[43] For the full text of the Convention on Biological Diversity, please visit the official website of the CBD (http://www.cbd.int/convention/convention.shtml).

(CBD, 1992, Article 23). As a result of the CoP meetings, the most important achievement in the field of biodiversity was the 2000 Cartagena Protocol on Biosafety.[44] The objective of the Cartagena Protocol was "to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity" (CBD, 2000, Article 1). The Protocol deals mainly with genetically modified organisms and rests upon the precautionary and prior notification principles.

#### 1.2.3.1.6. United Nations Framework Convention on Climate Change

Climate change is caused by the "build-up of greenhouse gases in the atmosphere" as a result of carbon dioxide releases from fossil fuels (Baker, 2006, p.82). This very nature of the issue of climate change renders it one of the most important cornerstones of sustainable development as energy generated from fossil fuels is at the root of industrial production. The relation between climate change and industrialization has led to the internationalization of the policy to a greater extent than other environmental problems. The issue is described in alarming figures that led the international community to intensify efforts for both short and long-term measures:

> In consequence, dealing with climate change requires, in the short term, the introduction of energy efficiency measures, or processes of ecological modernization… Taking a medium-term view, it calls for a technological revolution aimed at the decarbonization of the economy. A longer-term view points towards the reappraisal of industrial development and the shift towards sustainable production and consumption patterns.
>
> (Baker, 2006, p.82)

Climate change was addressed in international environmental policy also before the Earth Summit. Important landmarks were the first World Climate Conference held in 1979, the 'Changing Atmosphere: Implications for Global Security' conference held in Toronto and the establishment of the IPCC in 1988. IPCC published its first

[44] For the full text of the Cartagena Protocol on Biosafety, please visit the official website of the CBD (http://bch.cbd.int/protocol/text/).

assessment on climate change in 1990.[45] The concerns of the expert panel led international cooperation in climate change to accelerate in the way to the Earth Summit. The main push for the internationalization of climate change policy came afterwards with the binding convention agreed upon in the Earth Summit, namely the UNFCCC.[46]

The UNFCCC showed the determination of the international community to tackle the problem of climate change in a global manner, albeit appreciating the different levels of contribution of the northern and southern countries to climate change. It committed the signatories to the transfer of both financial help and environmental technologies to the developing countries in order for them to comply with the UNFCCC commitments (UNFCCC, 1992).[47] The Convention established a CoP as a "supreme body", with the task to "keep under regular review the implementation of the Convention" (UNFCCC, 1992, Article 7.2). Overall, the aim of the Convention was proclaimed as the:

> …stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.
>
> (UNFCCC, 1992, Article 2)

Therefore, while accepting the alarming and challenging task of combating climate change, the Convention definitely aimed to achieve this goal without jeopardizing economic development. Along with the principle of common but differentiated responsibilities, the Convention distinguished between the main contributors to climate change as Annex I countries and within these countries, listed

[45] For the full text of the IPCC First Assessment Report, please visit the official website of the IPCC (http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml).
[46] For the full text of the United Nations Framework Convention on Climate Change, please visit the official website of the UNFCCC (http://unfccc.int/resource/docs/convkp/conveng.pdf).
[47] One example here is 'low carbon technology transfer' from the developed to the developing world. For more on this and also 'low carbon growth and innovation in developing countries', please visit the website of The Sussex Energy Group (http://www.sussex.ac.uk/sussexenergygroup/1-2-22.html).

Annex II countries which are the most affluent ones among Annex I countries (Baker, 2006, p.85).[48] Annex I countries were responsible with the task of mitigating climate change by limiting their greenhouse gas (GhG) emissions and increasing the amount of their greenhouse sinks (UNFCCC, 1992, Article 4.2.a). Annex II countries had to provide financial assistance to the developing countries in meeting their costs in applying the Convention (UNFCCC, 1992, Article 4.3). Furthermore, the Convention committed Annex I countries to stabilize their emissions at the 1990 levels by the end of the century. However, this aim was only proclaimed and was not set as a binding target due to the US refusal to accept binding targets (Dresner, 2008, p.42).[49]

When the Earth Summit is analyzed according to its successes and failures, different views arise. The general cleavages lie in the way actors perceive the relationship between environment and development as well as between human beings and nature. There are some actors such as the US under the then Bush administration that was totally critical about the commitments made at Rio, which also shadowed the post-Rio process in terms of meeting the financial provisions (Baker, 2006, p.59). On the other hand, there were also green critics of the process such as *The Ecologist* (1993), which argued that the real issue was not how to manage the environment as elaborated in the Earth Summit, "but *who* will manage the environment and in *whose* interest" (Baker, 2006, p.60). Another related and important argument was related to the definition of the "'global' environment":

> …designating certain issues as global, such as climate change and biodiversity loss, and others as local, such as desertification, was seen to reflect the interests of the politically and economically powerful nations of the industrialized world.
>
> (Baker, 2006, p.60)

As such, the Earth Summit has been questioned in terms of ever having an environmental focus at all. It is argued to be the realization of national interests through

[48] UNFCCC distinguishes between three categories of countries, namely Annex I, Annex II and Non-Annex I countries. For information regarding the members countries of these categories, please visit the official website of the UNFCCC (http://unfccc.int/parties_and_observers/items/2704.php).
[49] More on the UNFCCC process will be elaborated during the analysis of the Kyoto Protocol.

global environmental governance. These arguments gain ground when the fact that the Earth Summit produced concrete results only in the fields that the Northern governments gave more prominence to than the Southern governments is taken into account (Dresner, 2008, p.47). There are also positive views about what the Rio process resulted in. Jänicke (2006) argues that the Earth Summit produced a new and successful type of governance. The origins of environmental policy-making were top-down through command-and-control strategies whereas the new politics is shaped by a multitude of actors at the local, national and supranational levels. According to Jänicke (2006), the Rio model of governance accomplished to integrate various actors in the environmental policy process.

An example to the abovementioned predicament could be the Business Charter for Sustainable Development that was formulated by the International Chamber of Commerce (ICC) in 1991[50] and the establishment of the BCSD prior to the Earth Summit. These developments were a clear sign of how business and industry embraced the concept of sustainable development. This was also proposed by the Brundtland Report (WCED, 1987, p.329). BCSD stemmed from the idea proposed by Stephan Schmidheiny, a Swiss industrialist, who argued for the positive involvement of business in the goal to achieve sustainable development.

This engagement with environmental politics on behalf of business is characteristic to the post-Brundtland era (Ekins, 1993, p.275). It is also a defining feature of ecological modernization which will be explored in the following section. In terms of global politics of the environment, business comes mainly to denote "multinational corporations (MNCs) as contributors to environmental degradation and as major stakeholders in environmental negotiations" (Elliott, 1998, p.123). Therefore, it is not a surprise that the BCSD was established prior to the Earth Summit to impact upon the process.

[50] ICC was established in 1919 with the mission to work for trade liberalization and free capital movement. In 1991, ICC declared the Business Charter for Sustainable Development that puts forward principles to guide businesses in their environmental management. For more on ICC and the Business Charter for Sustainable Development, please visit the official website of the ICC (http://www.iccwbo.org/).

#### 1.2.3.2. Post-Rio Developments

Even though there are criticisms against the content and orientations of the Earth Summit, it definitely placed the environment on top of the international political agenda. Sustainable development was set as a goal to be achieved by the collective efforts of the members of the international community. The UN became the platform for the coordination of efforts. The step taken in Rio was supposed to be furthered by new steps in order to achieve the integration of sustainable development to the policy structures of all the interested parties. However, the period following the Earth Summit witnessed the withdrawal of bold attempts to achieve sustainable development from the world agenda. Efforts continued, albeit with less enthusiasm and less concern over achieving concrete steps.

##### 1.2.3.2.1. United Nations General Assembly Special Session

Diminishing level of enthusiasm in global environmental governance characterized the period until the United Nations General Assembly Special Session (UNGASS), also known as the Earth Summit II, which was convened in 1997 to assess the achievements of the Rio promises.

> It had to be admitted that not much had been achieved in practical terms. Agenda 21 had not been funded and very little of it had been implemented. Despite their commitment in the Framework Convention on Climate Change to stabilize greenhouse gas emissions, most Western countries were still increasing theirs.
>
> (Dresner, 2008, p.49)

In addition to the unfulfillment of the Rio promises, the world environmental predicament was also going worse. These facts however, did not lead to important developments at the UNGASS. There were discussions about the unkept promises of ODA amounts and the technology transfer, which according to Southern countries signalled the "breakdown of the global partnership for development declared at the Rio Earth Summit" (Baker, 2006, p.62). As a result of this and other discussions, Earth Summit II did not produce substantial results.

One concrete development was that, "for the first time, NGOs were able to deliver speeches to the plenary session and have access to ministerial level consultations" (Elliott, 2004, p.62). Furthermore, UNGASS adopted a resolution[51] that requested the UN member countries to devise "national strategies for sustainable development" by 2002 (UN, 1997, para.24 (a)). This led to a speedy adoption of sustainable development strategies in most of the UN member countries. Busch *et al*. (2004, p.7) argue however that this speedy adoption mainly owes to the fact that "environmental strategies do not require radical changes and can be easily added to the existing regulatory structure". Nevertheless, this development is an important step in the commitment of countries to achieve sustainable development.

#### 1.2.3.2.2. The Kyoto Protocol

The Kyoto Protocol[52] was formulated as a result of the third meeting of CoP established by the UNFCCC. The protocol commits the Annex I countries in the UNFCCC to achieve at least 5% reduction in the 1990 levels of GhG emissions for the five year commitment period 2008-2012 (UNFCCC, 1998, Article 3.1). The amount specified was the total reduction amount of all the emissions of the Annex I countries. As such, different countries had different reduction rates (US 7%, EU 8%) whereas some countries could even increase theirs (Australia 8%). The Kyoto Protocol entered into force in 2005 as the conditions specified in Article 25 were realized:

> This Protocol shall enter into force on the ninetieth day after the date on which not less than 55 Parties to the Convention, incorporating Parties included in Annex I which accounted in total for at least 55 per cent of the total carbon dioxide emissions for 1990 of the Parties included in Annex I, have deposited their instruments of ratification, acceptance, approval or accession.
>
> (UNFCCC, 1998, Article 25.1)

[51] For the full text of the Resolution Adopted by the General Assembly: Programme for the Further Implementation of Agenda 21, please visit the official website of the UN (http://www.un.org/documents/ga/res/spec/aress19-2.htm).
[52] For the full text of the Kyoto Protocol, please visit the official website of the UNFCCC (http://unfccc.int/resource/docs/convkp/kpeng.pdf).

The implementation of the Kyoto Protocol would primarily lie within nation states. However, the Protocol also introduced three 'market-based' mechanisms; emissions trading[53], clean development mechanism[54] and joint implementation[55] . These mechanisms were mainly thought of to be supplementary to national measures. The introduction of market-based mechanisms is an important development as it attests to the marketization of environmental protection in the 1990s (Newell, 2008). In addition, it lends evidence to the adoption of one of the core elements of ecological modernization policy strategy at the international level, namely the introduction of market-based instruments (MBIs) for effective implementation of environmental policies.

The 5% target was determined as a result of the discussions and final compromise between the EU and the US. The proposed EU offer was a reduction of 15%, which was not acceptable by the US due to economic and competition reasons. The US obstruction continued after the acceptance of the Kyoto Protocol as well. The Protocol was not ratified in the US Senate and President Bush declared in 2001 "that he was unilaterally withdrawing from the agreement" (Dresner, 2008, p.58). It is important to note the difference between the positions of the EU and the US starting from the UNFCCC, Kyoto and beyond. While the US was resisting any binding targets and arguing for its national interests, the EU moves were mostly targeted at achieving binding levels that would prevent climate change.

The Kyoto Protocol is the most important international effort to combat climate change. It has achieved to make a large number of countries to commit themselves to the target of reducing GhG emissions. But still, important problems remain in terms of implementation.

[53] Emissions Trading, or the carbon market is a mechanism that allows the countries that have non-used emission units to the countries that have already exceeded their permitted rates (UNFCCC, 1998, Article 17).
[54] Clean Development Mechanism allows for the countries that have to reduce or limit their emissions to undertake projects in the developing countries that aim at reducing emissions and earn "certified emission reduction" credits in return (UNFCCC, 1998, Article 12).
[55] Joint implementation is a mechanism where the countries who have to reduce or limit their emissions can undertake projects for reducing or removing emissions in similar countries and earn "emission reduction units" in return (UNFCCC, 1998, Article 6).

> Major strengths of the Kyoto Protocol are the achievement of a global climate change regime, the unprecedented setting of targets and timetables, the provision of a solid institutional framework, and the availability of cost-effective and flexible instruments. The Protocol's main weaknesses are the small number of parties with commitments, the modest targets, the possibilities to avoid domestic actions, the absence of effective enforcement mechanisms, auditing problems, and the short time horizon.
>
> (Wijen and Zoeteman, 2004, p.1)

2009 UN Climate Change Conference, also known as the Copenhagen Climate Change Conference convened with an aim to remedy some of the abovementioned weaknesses. The main push was that the Kyoto Protocol's commitment period was ending in 2012 and it was necessary to agree on a new treaty that would replace the Kyoto Protocol. The Copenhagen Climate Change Conference was attended by more than 100 heads of state and was a big event in that sense. This also raised the level of expectations globally concerning the chances for reaching a fruitful outcome. However, the outcomes were not so spectacular. There was no agreement for a new climate change regime that would replace the Kyoto Protocol, apart from a non-binding Copenhagen Accord.[56] In the aftermath of the CoP 15, hopes regarding the effectiveness of an international climate change regime were halted. As a result, 2010 UN Climate Change Conference, also known as the Cancun Climate Change Conference convened without high hopes and with less participation. Nevertheless, it was more productive than the CoP 15. The most important outcome was the transfer of the non-binding Copenhagen Accord commitments to the UN framework with the Cancun Agreements.[57]

#### 1.2.3.3. World Summit on Sustainable Development

World Summit on Sustainable Development (WSSD), also known as the Johannesburg Summit, was the third of the series of summits dealing with the realization of sustainable development. It was convened with the aim to achieve both a

[56] For the full text of the Copenhagen Accord, please visit the official website of the UNFCCC (http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf#page=4).
[57] For the full text of Cancun Agreements, please visit the official website of the UNFCCC (http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2).

"review of the 1992 Earth Summit and to reinvigorate the global commitment to sustainable development" (Baker, 2006, p.64). When the process started in Rio, the environment was a priority on the political agenda. Countries and people were alarmed by the discovery of a hole in the Ozone layer, by the environmental disasters such as Chernobyl and by the deteriorating environmental predicament. Therefore, Rio gave almost equal emphasis to the three pillars that sustainable development rested upon, namely society, economy and ecology. However, the international political agenda was different when the Johannesburg Summit was about to convene in 2002. Throughout the 1990s, rapid globalization brought development issues more on the agenda:

> The WSSD occurred under changed circumstances. Held in South Africa, it highlighted a common international concern with the urgency of poverty alleviation alongside the increasing strength of some developing world economies under conditions of rapid globalization.
>
> (Vogler, 2007, p.439)

The decreasing emphasis on environment and an increasing emphasis on the remaining two pillars of sustainable development were also evident from the name of the summit. In 1972, Stockholm Conference was named as the 'United Nations Conference on Human Environment'. In 1992, Rio Conference was named as the 'United Nations Conference on Environment and Development'. In 2002 however, the name of the conference that convened in Johannesburg was the 'World Summit on Sustainable Development'. This choice of name should be read as a sign of the prominence of the development agenda in Johannesburg.

The WSSD adopted a declaration[58] and a plan of implementation[59] in the end. In the declaration, the main emphasis was placed on the eradication of poverty and underdevelopment. The declaration stressed the need for "a long-term perspective and broad-based participation in policy formulation, decision-making and implementation at all levels" (UN, 2002a, Article 26). Within this context, private sector was called upon

[58] For the full text of the Johannesburg Declaration, please visit the official website of the UN (http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POI_PD.htm).
[59] For the full text of the Plan of Implementation of the WSSD, please visit the official website of the UN (http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf).

to become active in the pursuit of achieving sustainable development. This emphasis is given concrete shape in the Plan of Implementation of the WSSD.

The Plan of Implementation's first and foremost emphasis was on the eradication of poverty, followed by changing the unsustainable consumption and production patterns. It then stressed the issue of environmental sustainability, defined as "protecting and managing the natural resource base of economic and social development" (UN, 2002b, p.14). Environment was hence defined with respect to being a resource base for other more prominent themes, such as social and economic development. This was a clear indication of how environment had been sidelined in the Johannesburg Summit.

In addition, there was a new emphasis on sustainable consumption and production, which deserves more attention. The plan made particular reference to the importance of promoting sustainable consumption and production. The emphasis on increasing the awareness among people to consume in a sustainable way, combined with the emphasis on the need to increase eco-efficiency and technology transfer attests to a new trend in global approach to environmental sustainability. This new emphasis is in line with the rising ecological modernization policies that argue for such a transformation of consumption and production processes (Spaargaren 2000a, Spaargaren 2000b). Furthermore, the plan made ample reference to the importance of establishing public-private partnerships and involvement of the private sector in the efforts to achieve sustainable development. Baker argues that "the most innovative, but potentially most problematic" strategy proposed by the Plan of Implementation was "the so-called Type II partnerships":

> While Type I actions are negotiated by governments, Type II partnerships are the result of groups of countries, their national or sub-national governments, the private sector, especially the business community, and civil society actors, backed by financial commitments, working in partnership to agree international, voluntary agreements for specific, concrete initiatives.
>
> (Baker, 2006, p.66)

This strategy reflects the emphasis on moving away from top-down measures to multilevel governance in environmental policy. The inclusion of the private sector and especially the business community is maybe the most crucial component of this strategy. This is also the problematic side of the strategy as Baker argues. The main danger lies in the possibility that as more private initiatives are involved in the field of environmental protection and sustainable development, the more there is the risk of "commodification of the environment":

> There is also concern that state authorities may lose authority over their sustainable development policies and programmes, particularly in selected areas such as forests, by allowing control to shift to powerful business or industry interests, and groups that do not prioritize the promotion of sustainable development. Political corruption and the lack of democratic transparency and accountability can also enhance these dangers.

(Baker, 2006, p.67)

These dangers pose serious threats to the promotion of sustainable development with a sound environmental focus. As noted however, there are clear signs that environmental concerns are losing their equal footing with development objectives. With the globalization of international markets and the promotion of market-based solutions to almost every problem, private sector became more central to the efforts to achieve sustainable development. However, as the private sector's main aim is to increase profits by definition, it is most probable that they would invest and direct their efforts to areas that would yield the highest profits. Environmental protection would be no exception to that. Therefore, even if the private sector would undertake environmental investments, these would be directed to environmental fields where there are profits. Hence, the general predicament of the environment and the non-profitable areas of environmental protection would be undermined.

When the history of international conferences on sustainable development is analyzed in general, it is fair to conclude that the tide in Rio that favored environmental concerns as much as development concerns was turned down in Johannesburg. Park *et al.* (2008, p.1), argue there was a lack of "a serious environmental agenda" in WSSD, in their article named *The Death of Rio Environmentalism*. This is the reason why the

Johannesburg Summit is sometimes called Rio -10 instead of Rio +10. Similar arguments can be made concerning the failure to implement the Kyoto Protocol and the failure to achieve substantial progress in the Copenhagen Climate Change Conference. These are certain weaknesses of the international efforts to combat environmental degradation. Still, the achievements should also be counted on the success side. Above all, a system of global environmental governance has emerged as a result of this process.

#### 1.2.3.4. Important Actors of Global Environmental Governance

UN is not the only international organization that has environmental tasks. WTO, WB and IMF are also involved in the promotion of sustainable development, particularly in the developing countries (Baker, 2006). Elliott (2004, p.64) argues that the "real authoritative and executive institutional power in global environmental governance is located outside the UN", as the Global Environment Facility (GEF)[60] which was jointly established by the WB, UNEP and UNDP in 1991 "has become the primary funding mechanism for the 'global environment'".

WB and IMF have become central institutions in the age of economic and political globalization after the 1970s. WB is an institution that aims to help the developing world in their efforts for development through providing them with the necessary money to do so. However, this lending process has "resulted in a spiral of debt and poverty" as the "interest rate on the so-called 'cheap' loans taken out in the 1970s rose dramatically" throughout the 1980s (Baker, 2006, p.180). At that point, the developing countries applied to the IMF, which conditioned its loans on the 'structural adjustment' these countries should undertake, namely the cutting of public expenditures, privatization and rolling back of the state. WTO also has become an important institution in terms of environmental policy. WTO dispute mechanisms

[60] GEF was established in 1991 within the WB. GEF projects were implemented initially by the WB, UNDP and UNEP. GEF became an independent institution in 1994, providing financial assistance to developing and transition countries for their environmental projects. For more on GEF, please visit their official website (http://www.thegef.org/gef/).

generally rule out efforts of countries that want to restrict imports of commodities that lie below the environmental standards these countries have.

Therefore, these institutions, particularly the WB became central to any development efforts in the third world, sustainable development policies included. WB has also become one of the central actors in global environmental governance starting with the 1990s as a result of the "expansion of the Environment Department" (Elliott, 2004, p.65). However, critics argue that such an involvement on behalf of the WB is proving bad for environmental protection:

> It has become institutionally central to the pursuit of sustainable development, as well as materially central to the continued environmental decline in those countries in which it funds projects and programmes.
>
> (Elliott, 2004, p.65)

OECD is also an important international organization that has been involved in environmental issues from the late 1970s onwards. It contributed to the discussions on the relationship between environment and the economy. It introduced the 'polluter pays' principle to the environmental debate with the argument that "pollution problems mostly indicated a gross inefficiency and that the costs of pollution should be borne by the polluters" (Hajer, 1995, p.97). Hajer (1995) also argues that the OECD has been an important actor in the development of policies associated with ecological modernization.

It should also be noted that the MNCs have direct relations with the institutions mentioned above as well as with other business initiatives such as the World Business Council for Sustainable Development (WBCSD) that direct their efforts for the achievement of sustainable development. Well established business interests use these international and supranational institutions to achieve their profit-maximizing aims under the goal of sustainable development. This process is in line also with the market-based mechanisms that became central to international environmental policy-making starting with the mid-1980s. The result in this sense is the institutionalization of such a

"market approach, which basically *turns environmental problems into an additional opportunity for further and even accelerated industrial development*" (Finger, 2008, p.51).

There are also criticisms in terms of what has been described as the 'global' in global environmental governance. Elliott (2004) argues that the global has been constructed in a way that supports mainly the interests of the powerful nations and groups. In that sense, the real practices gathered under the process of global environmental governance can be criticized for rationalizing and establishing the in-built inequalities to the system itself.

#### 1.2.3.5. Assessing Global Environmental Governance

To describe the international efforts directed at achieving sustainable development after the publication of the Brundtland Report in 1987 is generally referred to as the emergence and establishment of global environmental governance. There are conflicting views as to whether this new system can be called governance or not. There is a proliferation of international environmental agreements in a variety of fields from the 1980s onwards, such as the CBD and the UNFCCC. These conventions and others aim at setting guidelines to tackle the specific issue of their concern. Such practices are examples of international environmental regimes[61]:

> An international environmental regime exists when there are agreed-upon formal and informal institutional structures, principles, norms, rules and decision-making procedures and action programmes to address a specific environmental issue.
>
> (Baker, 2006, pp.52-53)

In the development of international environmental regimes as such, states and intergovernmental organizations are the main actors. However, states are not the only actors in the process. There is an increasing level of involvement on behalf of other actors such as the civil society and the private sector in the formation and

[61] International regimes can be defined as "international rule-governed activity" (Little, 2001, p.299).

implementation of such international environmental regimes. This according to Baker (2006, p.53) has led to the creation of a "global environmental governance".

> Global environmental governance is the establishment and operation of a set of rules of conduct that define practice, assign roles and guide interaction so as to enable state and non-state actors to grapple with collective environmental problems within and across state boundaries.
>
> (Young, 1997; quoted in Baker, 2006, p.53)

There are counter arguments as to whether what has been realized in the international politics of the environment can be called governance or not. Elliott (2004) argues that there is no clear-cut definition of global environmental governance. In this view, the term is used to conceal the practices of the powerful:

> Global environmental governance is more than 'doing better' or expanding the network of institutions and decision-makers. It is a political practice which simultaneously reflects, constitutes *and masks* global relations of power and powerlessness. It is neither normatively neutral nor materially benign. In practice, it has come to legitimise a neoliberal ecopolitics, characterised by a rehabilitation of the state, liberal-individual notions of justice, and a technocratic emphasis on managerialism, standard setting and rules-based behaviour.
>
> (Elliott, 2004, p.58)

The involvement of the Bretton Woods institutions[62] and their increasing influence in global environmental governance renders this argument plausible and even empirically justified. To return once back to the issue as to whether this system can be called governance or not, it is argued here that despite the market logic that captures the global politics of the environment, there is definitely a system of global environmental governance with the multilateral environmental agreements, international institutions, the involvement of the civil society and the general adoption of the hegemonic discourse of sustainable development. Drawing upon game theory and public choice theory, Froyn (2007, p.395) argues that "the bottom line in international environmental

[62] Bretton Woods institutions denote the institutions that were established as a result of the decisions taken at the Bretton Woods Conference held in 1944, namely the IMF and the WB. The negotiations at the conference were over the creation of "a new world economic order" based on "a stable global monetary system and an open world trading system" (Woods, 2001, p. 278).

cooperation will always be determined by what is politically feasible". This point is crucial to understand the involvement of every related party in global environmental governance and the result of the agreements reached. Most generally, international environmental summits are bound with discussions over the limiting of economic growth objectives vis-à-vis environmental objectives, the funding issues of sustainable development practices and such issues that directly reflect the interests of the involved parties. Furthermore, business interests and civil society also organize in order to impact on the outcomes. What happens in the end is an agreement that reflects the minimum common denominator and is close to what obstructive nation states such as the US wills to do. Froyn (2007, p.397) captures this with the notion of the "law of the least ambitious program":

> Where international management can be established only through agreement among all significant parties involved, and where such a regulation is considered only on its own merits, collective action will be limited to those measures acceptable to the least enthusiastic party.
>
> (Underdal, 1980, p.36; quoted in Froyn, 2007, p.397)

Looking through the lenses of the 'law of the least ambitious program', it is easier to understand why the environmentalism in the Earth Summit was gradually degraded until the Johannesburg Summit. It is also easier to understand why the countries do not meet their Kyoto Protocol requirements, or sign it in the first place. These counted, it also makes it easier to capture the involvement of business interests in the global politics of the environment and the marketization of environmental protection policies. As the business society is the most obvious contributor to environmental degradation, any policy that would not involve the business society and which does not seem 'nice' to them was thought of to be doomed to failure. The same also holds for the demands of environmental NGOs and the public in general, albeit to a lesser extent. Needless to say, business interests are perceived to be more prominent due to their economic power and importance in terms of shaping national and international policies. Thus, what results in the end is 'politically feasible' global environmental governance.

Ecological modernization theory, discourse and policy strategy which will be explored in the next section should be read and analyzed with such a background of the global politics of the environment. Ecological modernization policy strategy is a way to converge the interests of the powerful groups by its emphasis on the win-win relationship between environment and the economy, technological optimism, and the prominence it attaches to the involvement of all the related actors in the environmental policy process, the business society being one of the crucial actors in this sense. Sustainable development is a clearly established international environmental regime. This does not hold for ecological modernization, as the strategy is not explicitly espoused in any legally binding national or international document. However, it has become central to the efforts to achieve sustainable development.

## 1.3. ECOLOGICAL MODERNIZATION

A paradigm shift occurred in terms of perceiving the relationship between human beings and nature, and between development and environment starting from the 1960s onwards. It took its decisive turn however during the 1980s, particularly with the arrival of the sustainable development discourse. During the early phases of modern environmentalism, the belief that the domination of nature was a justified goal in itself, propagated by the Enlightenment tradition, started to be questioned. The early responses to this rising environmental awareness centered around the idea that economic growth could be continued within the existing order, only if institutional corrections were made. The ever-deteriorating environmental predicament however attested to the fact that environmental problems were not solvable with more and more industrial development, unless a new understanding of industrial development was constructed. The culmination of these discussions and the deterioration of the environmental predicament particularly through the 1970s and the 1980s necessitated first a change in the perception of the nature of the problems. This also necessitated the devising of new environmental policies. Otherwise, the policy proposals would be a repetition of the problem solving approaches of the 1970s. This change in perception was brought by the concept of sustainable development.

Sustainable development is a vague concept and different interpretations exist as to how it should be implemented. Thus, the way the environmentalists hang on to the concept of sustainable development was different from that of powerful policy makers such as nation states, intergovernmental organizations and business groups that impact these institutions to a great extent. Most of the environmentalists prefer a stronger interpretation of sustainable development. Governments and the business sector on the other hand opt for the policy strategy of ecological modernization, which is a weak interpretation of sustainable development. Due to the powerful position of nation states, international organizations and the business society in shaping national and international policies, ecological modernization rather than strong sustainable development became the dominant policy strategy to implement sustainable

development. It can further be argued that ecological modernization theory that started to develop in the early 1980s was the underlying theoretical orientation of the concept of sustainable development.

Ecological modernization theory was developed by European social scientists during the 1980s. It aimed to capture the turn in environmental politics that happened during the course of the 1970s (Mol and Sonnenfeld, 2000, p.3). It particularly concentrated on the experiences of West European countries such as Germany and the Netherlands. From the 1990s onwards, it became to be adopted by most of the developed countries as a policy strategy to solve environmental problems.

It is necessary to distinguish between ecological modernization as a theory of social change and as a political program. Some scholars of ecological modernization perceive it as a broad framework for analyzing the structural change in modern society, whereas other perceive it in the narrow sense, implying the policies associated with the development of environmental technologies and the policies that support such a development.[63] Furthermore, it is necessary to note that ecological modernization has been more successful as a policy strategy rather than as a theory that explains the transformation of modern industrial society from the 1970s onwards. This section will highlight these differences and test the above argument.

### 1.3.1. The Road to Ecological Modernization

Ecological modernization theory that developed in the 1980s owes both to the environmental policy developments in progressive states in the 1970s and to the development of international environmental concern and politics. During the 1970s, environmental groups were arguing for zero-growth strategies whereas industrial groups were mostly reluctant to accept that there was a problem at all. Starting with the 1980s however, these antagonistic camps joined efforts in a way to achieve the unimaginable a

[63] Jänicke and Jacob (2002, p.1) for instance define ecological modernization as "the innovation and diffusion of marketable environmentally (more) applied technologies, including the innovation and diffusion of supporting policies".

decade earlier. This was achieved around the uniting concept of sustainable development. Sustainable development eliminated the environment-economy dichotomy and integrated the formerly opposite ideas within a cooperative framework. Among others, this is the foremost important contribution of the discourse of sustainable development to the environmental debate. The reasons behind this cooperation need however to be analyzed.

The interesting point in this transformation was the acceptance on behalf of the previously uncompromising environmental movement that it is possible to achieve both environmental protection and economic development. According to Hajer (1995) there are several reasons behind this turn in radical environmentalism:

- Economic crisis of the late 1970s that bring stagflation and unemployment as greater concerns than the environment.
- Changes within the environmental movement that redirected the movement to a more reformist strategy.
- Emergence of other emblematic issues such as the Ozone Layer and acid rain that the environmental movement can capitalize on.
- Availability of the alternative discourse of ecological modernization.

(Adapted from Hajer, 1995, pp.94-95)

The change in the environmental movement starting with the 1980s was an important factor behind the general adoption of the concept of sustainable development and the establishment of a coalition around the core ideas of ecological modernization. However, there were also other factors that enabled the ecological modernization discourse to take hold with the 1980s. Hajer (1995, p.96) argues that the discursive turn in the environmental debate can be related to “three different tracks”. The first is the publication of the WCS in 1980. WCS was an influential document that introduced the concept of sustainability. Furthermore, the report was a joint effort of IUCN, WWF, UNEP, Food and Agriculture Organization of the United Nations and United Nations Educational, Scientific and Cultural Organization, and focused on policy-making (Hajer, 1995, p.97). As such it reflected a different vision than the fights of the earlier decade:

> So while the antagonistic parties initially continued fighting their battle on nuclear power, a new discourse-coalition emerged in the environmental domain, made up of moderate forces, bridging the gap between supra-national organizations, quangos, and non-governmental organizations. The WCS was a focal point for a discourse-coalition that effectively started to exploit the middle ground that had not seemed to exist during the heyday of the nuclear controversy.
>
> (Hajer, 1995, p.97)

Hajer's second track in the emergence of the discourse of ecological modernization is the involvement of the OECD in the environmental debate. OECD approached the environmental issue as an efficiency problem that had to be cured by the polluters. It introduced the 'polluter pays' principle to the environmental policy domain (OECD, 1984). This principle was introduced among other measures to achieve effective environmental policies, such as the increase in the use of economic instruments and enhanced industry involvement in environmental policy. As such, the OECD functioned as an important vehicle to introduce ecological modernization principles and discourse to its member governments:

> …the OECD clearly brought eco-modernist notions to the attention of governments, emphasizing their potential in terms of economic growth while underlining the need to come to an integrated approach embracing policies towards land use, energy, transport, and tourism without which anticipatory policies were likely to be a failure.
>
> (Hajer, 1995, p.98)

One of the basic features of ecological modernization is the emphasis it places on environmentally sound economic development. Environmental policies of the 1970s are criticized in this sense due to their end-of-pipe character and the inability to solve environmental problems at source, which leads to the displacement of the problem instead of solving it (Weale, 1992, p.76). Relatedly, the OECD further contributed to the adoption of ecological modernization ideas by handling the environmental issue as an issue of effective management, by putting forward technology as one of the fundamental means to achieve a "reinforcing" relationship between economic development and environmental protection:

> Continued environmental improvement and sustained economic growth are essential, compatible and interrelated policy objectives for OECD member countries. This, the major conclusion of the Conference, means that the environment and the economy, if properly managed, are mutually reinforcing; and are supportive of and supported by technological innovation.
>
> (OECD, 1984)

The third track in Hajer's analysis is the UN involvement in the environmental discussion that culminated in the publication of the Brundtland Report. Sustainable development and ecological modernization are perceived as twin-sisters as they share assumptions, terminology and priorities. There are also differences between these two policies, which will be elaborated later in this section. Nevertheless, ecological modernization is the dominant strategy to implement sustainable development. Hence it is necessary to note that the arrival of the concept of sustainable development and the emergence of ecological modernization discourse are closely related to each other.

Ecological modernization originated as a social theory in the 1980s to explain the transformation of the modern industrial society into a more ecologically aware one, to analyze the environmental policy discourses that started to gain prominence with the 1980s as well as to offer policy proposals for the achievement of "a shift toward more environmentally benign modes of industrial development" (Murphy and Gouldson, 2000, p.33). A combination of factors in the intellectual, political and economic domains hence lie behind the ascendance of ecological modernization to a highly accepted way of perceiving and reacting to environmental problems (Buttel, 2000a, p.57). The area where ecological modernization has been most successful is where it is used "as a concept for praxis, as a political program" (Leroy and Tatenhove, 2000, p.196). Nevertheless, before concentrating on the ecological modernization policy strategy, it is necessary to elaborate on the ecological modernization theory in order to have a fuller account of the concept.

### 1.3.2. Ecological Modernization – Theoretical Underpinnings

Ecological modernization theory rests upon the premise that environmental protection and economic growth are not contradictory goals if a different mode of industrial production is developed (Redclift and Woodgate, 1997, p.64). It argues that economic and environmental policies "can be combined to synergistic effect" (Gouldson and Murphy, 1997, p.74). Indeed, ecological modernization has at its core the idea that environmental protection reinforces economic growth. The theory has developed to a great extent since its introduction in the mid-1980s. As Weale (1992, p.75) delicately puts it, "there is no one canonical statement of the ideology of ecological modernisation as *The General Theory* is a source for Keynesianism". Different scholars have contributed to the theory in different aspects. Below, the general characteristics of the ecological modernization theory will be presented in a historical fashion, based on the contributions of the prominent scholars working in this field. First, ecological modernization as a theory of social change will be analyzed. Afterwards, different genres within the theory will be elaborated.

#### 1.3.2.1. Ecological Modernization as a Theory of Social Change

Ecological modernization theory is basically the product of the efforts of social scientists to understand and interpret the transformations that took place around the 1980s concerning "the continuing undermining of sustenance bases of western industrial societies" (Mol and Sonnenfeld, 2000, p.3). In the previous decade, namely the 1970s, emphasis of environmental social science was mainly on stopping further economic growth and sustaining the ecology. This strategy however was not adopted by the major political actors since an end to growth was neither desirable, nor politically feasible. Yet, it was also clear that the environmental deterioration was jeopardizing the institutional setup of modern society. There was clearly a change in perceiving the present and the future of modern society in environmental terms. Ecological modernization theory attempts at analyzing the structural turn that is taking place in modern societies in the face of this new ecological predicament. This new predicament also brings about social change, which ecological modernization theory steps in to

explain. This is where ecological modernization becomes a theory of social change. As a theory of social change, the main premise of ecological modernization is its emphasis on "the emergence of an ecological sphere, introducing and institutionalizing an ecological rationality" and is in this sense in close relation to the classical modernization theories (Leroy and Tatenhove, 2000, p.194).

> Modern social theory has been interpreting modernization as a process of differentiation of a 'holistic', 'one-sphere'-society into different and, subsequently, relatively insulated sub-spheres: the economic sphere, the political sphere, the personal life sphere etc. Each of these spheres was developing its own rationality, its own guiding principles and institutions. On a similar basis society was regarded as differentiated into subsystems such as the state, the market and civil society, ruled respectively…by bureaucracy, competition and solidarity. These modernization and differentiation processes are said to be induced by a modern, capitalist economy, by modern techniques, and to be reinforced by and reinforcing in turn cultural changes such as secularization and the dissemination of (economic) rationality in all spheres.
>
> (Leroy and Tatenhove, 2000, p.194)

Leroy and Tatenhove (2000, p.194) further argue that this neatly elaborated perspectives on the modernization of societies started to be challenged in the course of the 1970s, as the consequences of modernization processes started to become destructive, particularly in terms of the environment. At this point, ecological modernization theory argued for the emergence of an ecological sphere that needs to be analyzed to understand the dynamics of this change. This ecological sphere is the fourth sphere added to the already existing economic, political and socio-ideological spheres (Spaargaren, 2000a, p.54). The new ecological rationality is rooted in the economic sphere and the ecological sphere is on an equal footing with the economic sphere (Spaargaren, 2000a, p.55). This is actually where the innovative role is played by the theory of ecological modernization as a theory of social change.

> As a theory of social change, ecological modernization meant a break with de-modernizing perspectives which had dominated the environmental discourse until then. As against both counter-productivity theory and radical ecological thinking, the ecological modernization theory starts from the proposition that the environmental crisis can and should be overcome by a further modernization of the existing institutions of modern society.
>
> (Spaargaren, 2000a, p.56)

Therefore, ecological modernization theory was more constructive in approaching the environmental crisis than the early environmentalism arguing for zero-growth in the 1970s. It was also more realistic in the political sense than green radicals who argued for a priority of ecological rationality to other rationalities (Spaargaren, 2000a, p.55). It was taken to be "a process of re-embedding of society within its physical context and constraints, as a necessary next step in modernization, induced not by economic but by ecological rationality" (Leroy and Tatenhove, 2000, p.194).

Ecological modernization is generally related to the theory of reflexive modernization developed by Ulrich Beck and Anthony Giddens. There are differences between the analyses of these social scientists on reflexive modernization. However, in terms of the emphasis they place upon the role of ecological factors in the transformation process of the modern society, they share common views.

> According to the theorists of 'reflexive modernisation', the institutional and cultural forms and the major sources of social and political identity and conflict which characterised earlier phases of modernity, are in the process of being displaced. One of the key features of the new phase is the significance of ecological destruction and large-scale hazards in the transformation not only of the physical, but of the moral and political landscape.
>
> (Benton, 1997, p.34)

Beck's reflexive modernization is in relation with risk society theory where he argues that modern industrial society has been transformed into a risk society (Buttel, 2000b, p.28). Beck (1997, pp.18-19) argues that there are basically three arguments of the risk society theory: "end of nature", "end of tradition" and how they "have changed the epistemological and social status of science and politics". 'End of nature' implies the new characteristic of risk, as being internal rather than external, i.e. not as a result of faith but of decisions and choices made in industrial, scientific and political circles. 'End of tradition' implies that in the new age, people face the necessity to take the responsibility of their lives in every sense. The third argument states that science is now not only the creator of the internal risks, but also the actor that defines such risks and profits from them. All these lead to a change in "the image of conventional politics":

> Thus the image of conventional politics shifts in the political system. Society becomes 'political', though not in the sense of party politics. Rather, conflicts erupt everywhere over how we plan living and working together for the future, even where the political system with its fronts and majority relations appears ossified and obstructive.
>
> (Beck, 1997, p.19)

Beck argues that risks are created as a result of the modernization process (Buttel, 2000b, p.29). According to Beck (1997) there is a phase that the generated risks are not at the core of political debates. The picture changes however when these risks "begin to dominate public, political and private debates and conflicts" (Beck, 1997, p.27). The theory of reflexive modernization comes as a result of these two phases:

> In light of these two stages and their sequence, it is possible to introduce the concept of 'reflexive modernization'. This does not mean (as the adjective 'reflexive' might suggest) reflection, but rather self-confrontation and self-transformation. The transition from the industrial to the risk epoch of modernity occurs *un*intended and *un*seen, inexorably in the wake of the autonomous dynamics of modernisation, following the pattern of unintended consequences.
>
> (Beck, 1997, p.28)

One of the central tenets of Beck's reflexive modernization theory is the emphasis on the necessity of further modernity. According to Beck, "reflexive modernization means not less but more modernity, a modernity radicalized against the paths and categories of the classical industrial setting" (Beck, 1992, p.14; quoted in Buttel, 2000b, p.29). Here lies a relationship between the reflexive modernization theory and the ecological modernization theory:

> …most sociological proponents of ecological modernization strongly concur with the two constituent notions of reflexive modernization: first, human and institutional choices are not simply the reflections of master-structural forces of capitalism, industrialization and so on; and second, the solutions to environmental problems will lie in a progressive modernization of societies (rather than in the 'de-modernization' or 'counter-modernization' that is advocated within radical environmentalism).
>
> (Buttel, 2000b, p.29)

Therefore, the emphasis of reflexive modernization on the general transformation of society as well as the necessity to pursue a strategy of more modernization have led environmental social scientists to find close relationships between these two theories. After analyzing the theory of ecological modernization as a theory of social change and also establishing its relationship with the theory of reflexive modernization, this section will now focus on the development of ecological modernization theory.

#### 1.3.2.2. Three Genres of Ecological Modernization Theory

The theory of ecological modernization has differed to a great extent since its introduction in the early 1980s. Mol (2000a) and Mol and Sonnenfeld (2000) argue that there are three phases of the theory of ecological modernization. The first phase is characterized by the works of Huber (1982) and Jänicke (1985) (Mol, 2000a; Mol and Sonnenfeld, 2000; Spaargaren, 2000a; Gibbs, 2000; Murphy and Gouldson, 2000). These German scientists developed the theory based on Germany's policies in the environmental field (Dryzek, 1997). Huber (1982) argued that "super-industrialization" would be the way to solve environmental problems, which "involves addressing the environmental impacts of industrial society largely through the transformation of industrial production based on the development and application of advanced technologies" (Murphy and Gouldson, 2000, p.34). Thus, there was an extensive emphasis on the role of technology in Huber's analysis. In this 'super-industrialization process', Huber argued that state should not intervene (Spaargaren, 2000a). Therefore, Huber's contributions to the theory involved "a critical attitude towards the (bureaucratic) state" and "a favourable attitude towards the role of market actors and dynamics in environmental reforms" (Mol and Sonnenfeld, 2000, p.4). In addition, Huber did not give an extensive role to the environmental movement for making society "more environmentally benign" and argued that "economic actors and entrepreneurs" are the main actors for achieving ecological modernization (Murphy, 2000, p.2).

In the early works of Jänicke (1985), however, there is a greater appreciation of the role of the state in environmental reform through ecological modernization. Role

that would be played by the state is crucial as "the steering potential of markets and market actors is structurally weak" (Spaargaren, 2000a, p.46). In relation to the role of governments, Jänicke (1985) argued that the following measures should be taken:

- Change in government expenditure – in a way to move from remedial to innovative strategies for environmental protection
- Change in tax policy – in a way to charge more levies on the depletion of non-renewable resources, harmful emissions, private transport, etc.
- Institutionalization of independent technology assessments
- Intensification of pollution control standards
- Dismantling economic rigidities – in a way to control cartels and support medium-sized, small and alternative enterprises.

(Adapted from Jänicke, 1985, pp.30-31)

These measures actually form the basis of a new approach to environmental policy on behalf of the state that departs from regulatory measures that are "top-down" and mostly "end-of-pipe" in character (Jänicke, 2006, p.1). What takes hold instead is the effort "to internalize the solution of environmental problems into the polluting sectors" which according to Jänicke, "is the core idea of 'ecological modernisation'" (Jänicke, 2006, p.1). This internalization is to be achieved via a reorientation of economic policy and by inserting environmental concerns "into the re-design of the system" (Dryzek, 1997, p.141).

Simonis (1989) has also emphasized the need to change 'conventional economic policy'. He argued that ecological modernization has to be achieved through "a conversion of the economy, a re-orientation of environmental policy, and a replenishment of economic policy" (Simonis, 1989, p.41). Therefore, both Jänicke (1985) and Simonis (1989) expanded the theory from its emphasis on "industrial innovation" and focused on the need of "macro-economic restructuring of advanced industrial economies as another essential component of ecological modernisation" achieved through "a shift in the sectoral composition of industrial economies, away from heavy industry toward less resource intensive and environmentally burdensome sectors such as tourism and financial services" (Murphy and Gouldson, 2000, p.34). As can be observed from the emphases placed by the scholars that formulated the theory of

ecological modernization, technology, industry and state play significant roles in the transformation of industrial society. In particular, an important role is assigned to the state in terms of "conscious and coordinated intervention" (Dryzek, 1997, p.141).

In the typology provided by Mol (2000a) and Mol and Sonnenfeld (2000), the second phase in the development of ecological modernization theory covers the period from the late 1980s until the mid-1990s. The theory expanded to appreciate the role played by market forces as well as the governments in precipitating environmental reform. This period also witnessed the growing emphasis placed on other factors that bring about ecological modernization such as institutional and cultural factors:

> The second period, from the late 1980s onward, showed a less strong emphasis on technological innovation as the motor behind ecological restructuring, a more balanced view of state and market dynamics in ecological transformation processes, more attention was given to the institutional and cultural dynamics of ecological modernisation, and studies on industrial production were complemented with attention paid to consumption processes.
>
> (Mol, 2000a, p.46)

Some very influential works on ecological modernization have been provided during this period that paved the way for the development of ecological modernization as a policy strategy to achieve environmental reform (see Weale, 1992). Weale (1992) presented a general outlook to the transformation of environmental policy and the different approaches to the environment-economy relationship comparing the 1970s and the 1980s. He argued that ecological modernization not only stated that environmental protection is not necessarily at the expense of economic losses, on the contrary, it could also generate revenue: "instead of seeing environmental protection as a burden upon the economy the ecological modernist sees it as a potential source for future growth" (Weale, 1992, p.76).

Furthermore, comparing German and British policies towards acid rain, Weale (1992) demonstrated how institutional factors led to different feasibilities for the implementation of ecological modernization.

> In both cases, there was a conflict between a 'clean-air coalition' and an 'economic feasibility coalition'. In the German case, however, a kind of synthesis developed between these two approaches, whereas no such synthesis occurred in the British case.
>
> (Seippel, 2000, p.288)

Therefore, institutional and contextual differences play an important role in the implementation of ecological modernization policies. The political culture of a country also plays a role in environmental policy success. After analyzing the reasons why different countries have different levels of success in environmental policy reform, Jänicke (1992, p.53) argues that countries that have a "capacity for modernisation" are performing better in terms of environmental policy output. "Capacity for modernisation" in Jänicke's analysis refers to "the achieved level of institutional, material and technical ability in a country to find solutions to problems" (Jänicke, 1992, p.53). This capacity is determined by the "sum of all opportunities for the advancement of innovations and representatives of new interests" (innovative capacity), "a country's political ability to co-ordinate and, over an extended period, to implement long-term objectives" (strategic capacity), "the ability of a country to achieve negotiated solutions within the framework of a co-operative political style" (consensual capacity) and the "economic performance" of the country (Jänicke, 1992, p.53).

The second phase of ecological modernization theory also witnessed path-breaking works that analyzed ecological modernization as discursive construction. Hajer (1995) presented a very elaborate analysis on how ecological modernization discourse was created and gained increased impact afterwards. He stressed the need to illuminate how environmental problems are defined, and analyzed ecological modernization in this respect "as the new dominant way of conceptualizing environmental problems" (Hajer, 1995, p.4). Seippel (2000, p.289) argues that as such, Hajer adopts an "anti-realist position that results in a social constructivist approach". Accordingly, environmental problems do not exist in themselves but exist in the way they are conceived and defined. What the discourse of ecological modernization does in this sense is that it "recognizes the structural character of the environmental problematique but none the less assumes that existing political, economic, and social

institutions can internalize the care for the environment" (Hajer, 1995, p.25). Due to the need to internalize environmental concerns, Hajer (1995) argues that ecological modernization has introduced concepts and rested upon specific assumptions:

- Ecological modernization introduces concepts in order to make environmental degradation calculable – combines monetary units with discursive elements derived from the natural sciences.
- Ecological modernization presents environmental protection as a 'positive-sum game' and argues that any obstacles to sound environmental protection are caused by collective action problems – presents environmental protection as a management problem.
- Ecological modernization assumes that environmental protection and economic growth can be reconciled – pollution prevention pays.

(Adapted from Hajer, 1995, pp.25-26)

Similar to Hajer (1995), Dryzek (1997) also presents ecological modernization as a discourse. He argues that "ecological modernization refers to a restructuring of the capitalist political economy along more environmentally sound lines" (Dryzek, 1997, p.141). This entails a combination of market mechanisms with state measures. In his analysis, industry cooperates willingly and participates in the policy process as there is money to be made through environmental protection. Accordingly, business strategically cooperates due to several reasons: "pollution prevention pays" as "less pollution means more efficient production"; solving environmental problems might be more expensive in the future, a cleaner environment would be reached that would lead to "more productive workers", "there is money to be made in selling green goods and services" and finally there is money to be made via "making and selling pollution prevention and abatement products" (Dryzek, 1997, p.142).

According to Buttel (2000a) there was a clear difference between the first and second generation literature on ecological modernization:

> The first-generation literature was based on the overarching hypothesis that capitalist liberal democracy has the institutional capacity to reform its impact on the natural environment, and that one can predict that the further development ("modernization") of capitalist liberal democracy would tend to result in improvement in ecological outcomes. The second-generation ecological modernization literature, by contrast, has increasingly revolved around

> identifying the specific sociopolitical processes through which the further modernization of capitalist liberal democracies leads to (or blocks) beneficial ecological outcomes.
>
> (Buttel, 2000a, p.59)

Two things follow from here. First ecological modernization of environmental protection is not to be taken for granted with simply technological innovation. Specific contexts and institutional designs are more favorable for implementing ecological modernization. This emphasis is in relation to the fact that ecological modernization theory evolved mostly around the experiences of West European environmental leader countries such as Germany and the Netherlands (Mol, 2000a, p.46). Second, and relatedly, with the emphasis on sociopolitical factors, the theory opens itself to the analysis of the possibility of ecological modernization policies outside these West European countries. This leads to the third phase of ecological modernization literature.

Mol (2000a) and Mol and Sonnenfeld (2000) argue that the third phase of the ecological modernization theory starts from the mid-1990s onwards. This period is characterized by the extension of the theory of ecological modernization "theoretically and geographically" (Mol and Sonnenfeld, 2000, p.5) and studies have focused on the role of consumption (Spaargaren, 2000a; Spaargaren, 2000b; Spaargaren and Vliet, 2000; Mol and Spaargaren, 2004), have extended to analyze ecological modernization outside Western Europe (Rinkevicius, 2000; Kotilainen *et al.* 2008; Milanez and Bührs, 2008; Howes *et al.* 2009), and also aimed to establish the analysis of ecological modernization vis-à-vis global dynamics (Mol, 2002).

Spaargaren (2000a) argues that the main focus of ecological modernization theory had been on production and not on consumption. In an aim to correct the "productivist" focus of the theory, he argues that establishing the relationship between ecological modernization and consumption is crucial and analyzes domestic consumption in this sense (Spaargaren, 2000a, p.56). He particularly elaborates on "the way ecological modernization theory can be combined with an actor-centered approach" (Spaargaren, 2000a, p.58). Here, ecological modernization theory is actually not very much concerned with how much to consume but what to consume:

> The question is thus not "how much is enough," but "what consumption is environmentally sustainable" and how can we turn unsustainable consumption practices into environmentally more sound ones. In setting out such a research program, ecological modernization starts its analyses from the existing institutions and lifestyles that "govern" contemporary consumption, developing realist-utopian models of environmental transitions.

(Mol and Spaargaren, 2004, p.264)

Therefore, the main focus in the analysis of consumption in the theory of ecological modernization is on how to transform the consumption styles to make such behavior more environmentally sustainable. For Spaargaren (2000a), this could be achieved through an analysis and deconstruction of some components of daily routines:

> The ecological modernization of domestic consumption can be conceived of as a series of de- and re-routinizations with regard to a great number of domestic routines or domestic practices, ranging from child rearing to gardening or doing the laundry.

(Spaargaren, 2000a, p.60)

Another important development in the third phase of ecological modernization theory is the extension of the analysis to non-Western European contexts, to the cases in developing countries, East European countries and others. This is crucial when the criticism against the theory of ecological modernization concerning its Eurocentricism is taken into consideration (Spaargaren *et al.* 2006). Rinkevicius (2000) analyzed the role of ecological modernization theory in the case of Lithuanian environmental policy. Kotilainen *et al.* (2008) discuss the explanatory potential of the ecological modernization theory in analyzing Russian environmental politics with a focus on the forest industry. Milanez and Bührs (2008, p.784) analyze the promotion of ecological modernization in Brazil and differentiate between "internationally oriented" and "domestically driven" ecological modernization processes. Howes *et al.* (2009) try to utilize ecological modernization theory in order to analyze environmental transformations taking place in Australia. All these studies and the others that are not mentioned here point to the fact how ecological modernization theory is extended beyond its narrow focus on West European industrialized countries to a global focus.

This is also related to another aspect of the third phase of ecological modernization theory as provided by Mol (2000a) and Mol and Sonnenfeld (2000), namely ecological modernization and global dynamics. Mol (2002) analyzes the consequences of the globalization processes for the ecological modernization theory. He argues that the explanatory power of ecological modernization theory still holds even in conditions of economic globalization and the "move from the level of the national state to the level of the global economy" (Mol, 2002, p.96).

> The system of nation states, the global markets, the world-wide economic and political institutions, and the global civil society are all "put to work" in greening global production and consumption processes; but, at the same time, all these institutions are transformed in the process of global environmental reform itself.
>
> (Mol, 2002, p.110)

Thus, Mol (2002) contends that ecological modernization still holds as an explanatory device in analyzing environmental transition in a global scale. The three genres presented above show how the theory of ecological modernization developed from its first introduction onwards. It has extended its contextual, theoretical and geographical breadth. As mentioned before, there is no one simple definition of ecological modernization and the different emphases placed by scholars producing academic analyses in this field for the last three decades makes it even more difficult to approach ecological modernization from a definitional point of view. This, however, does not imply that there are not any key characteristics of the theory.

#### 1.3.2.3. Key Characteristics of Ecological Modernization

Ecological modernization theory has become an analytical tool to analyze the transformations taking place in the modern industrial society. Even though there are variations in the analyses of different scholars on ecological modernization, it is still possible to detect common characteristics associated with ecological modernization. Gouldson and Murphy (1996) argue that there are four core themes in ecological modernization:

- Environment and economy can be successfully combined for further economic development with the aid of government intervention;
- Environmental policy goals should be integrated into other policy areas;
- Alternative and innovative policy measures should be explored; and
- The invention, innovation and diffusion of new clean technologies is essential.

(Gouldson and Murphy, 1996, p.14)

Similarly, Mol and Sonnenfeld (2000) argue that scholarship on ecological modernization "have three broad perspectives in common":

- Moving beyond apocalyptic orientations to see environmental problems as challenges for social, technical and economic reform, rather than as immutable consequences of industrialization
- Emphasizing transformation of core social institutions of modernity… including science and technology, production and consumption, politics and governance, and the 'market', on multiple scales (local, national and global)
- Positioning in the academic field distinct from counter-productivity/deindustrialization, postmodernist/strong social constructionist, and many neo-Marxist analyses

(Mol and Sonnenfeld, 2000, p.5)

The first and foremost common theme in all ecological modernization analyses is the emphasis on win-win solutions concerning environmental protection and economic growth. The displacement of the older dichotomy with the constructed synergy between environmental and economic goals has become one of the cornerstones of ecological modernization theory. Mol and Sonnenfeld (2000) argue that one of the central tenets of ecological modernization is based on the changing discourse concerning environmental protection and economic objectives. They argue that the previous discourses on the incompatibility of the abovementioned goals "are no longer accepted as legitimate positions" (Mol and Sonnenfeld, 2000, p.7). This is crucial in terms of the dominance of ecological modernization ideas in designing and implementing environmental policy. Therefore, ecological modernization attempts to rewrite the equation to produce a positive sum game between environmental protection and economic growth so that "rather than ecological considerations being regarded as a brake on growth they come to be seen as a framework for sustainable development" (Buller *et al.* 1993, p.187).

Another point is the importance of EPI. What is meant here is the necessity for the government to integrate environmental concerns in making public policy in general. This is to avoid the piecemeal approach to environmental protection in favor of a more holistic approach. According to Gouldson and Murphy (1996, p.13), this "is central to ecological modernization". The theory developed from a purely technological point of view to encompass changing roles for the state and other actors as well as broadened its scope to analyze the transformations in the global age. In all however, two concepts prevail in the theory of ecological modernization: "ecologisation of economy" and "economisation of ecology":

> As a theory of social change in industrial societies, ecological modernisation can be characterised by two main projects. The first project emphasizes technological transformations. First-generation technologies (end-of pipe) must be replaced by second-generation environmental technologies geared for clean production processes and products. In the end this must lead to an ecologisation of economy. The second project involves an 'economisation of ecology' by for instance placing an economic value on nature as a production force besides labour and capital.

(Tatenhove, 1999, p.74)

Mol (1997, p.140) argues that "science and technology are principle institutions in *ecologizing economy*". Technological innovations would be the mechanisms to overcome the problematic character of end-of-pipe technologies as they do not bring about the solution of the problem but actually displace them. Therefore, a new genre of technology should be developed for solving environmental problems. That would mean a greening of production. In that sense, technology is no more seen as only the cause of environmental problems but also as a way to solve them (Mol and Sonnenfeld, 2000). Technology in that sense can either be improved or innovated:

> "Ecological modernisation" may come in the form of incremental improvement (cleaner technology) or radical innovation (clean technology). Improvement affects such different dimensions as material intensity (efficient use of materials), energy intensity (efficient use of energy), transport efficiency (efficient logistics), surface intensity (efficient use of space), or risk intensity (regarding plant, substances, products). Innovation describes the initial market introduction of a new technology that may improve some or all phases of a product's life cycle.

(Jänicke, 2006, p.11)

This emphasis on the role of science and technology in bringing about ecological modernization via improvements or innovations is related to the emphasis on the necessity to make "prevention, rather than cure" the main rule in environmental policy (Hanekamp *et al.* 2005, p.295). Therefore, ecological modernization has strong ties with the precautionary principle. The precautionary principle has originated in Germany (Eberg, 1999; Andersen and Massa, 2000). The main premise of the precautionary principle is to take preventive action where long-run risks are unforeseeable and pose great dangers:

> The precautionary approach acknowledges that, while scientific proof can be provided only with great difficulty and delay to justify regulations against toxic or harmful emissions, reasonable doubts about the environmental effects of certain processes or products justify the search for alternative approaches to provision of the goods or services in question. This is where technological innovation and the use of science – that is, ecological modernization *per se* – becomes pertinent.
>
> (Andersen and Massa, 2000, p.339)

Preventive action guided by the precautionary principle is a strong component of ecological modernization. Jänicke and Jacob (2002) compare and contrast curative and preventive approaches. Curative approaches consist of reparative action and end-of-pipe treatment to reduce and compensate for the damage created, and to introduce clean-up technology respectively. On the other hand, preventive approaches, namely ecological modernization and structural change imply cleaner technology/eco-efficiency and the decrease of dirty industries/activities respectively (Jänicke and Jacob, 2002, p.1). They also emphasize the importance of technology in the preventive approaches and argue that "technological progress" is a necessity and indeed a "prerequisite" for ecological modernization "to influence the *direction* of modernisation" (Jänicke and Jacob, 2002, p.2). Here is where the important role of the state in ecological modernization stands.

Ecological modernization theory, particularly after the initial contributions of Huber, argued for more state intervention in an effort to introduce preventive rather than reactive environmental policies (Tatenhove, 1999). Andersen and Massa (2000, p.338)

state that “the concept of ecological modernization in fact belongs to a regulatory philosophy, which is at odds with the conventional paradigm of neoclassical environmental economics”. They further argue that ecological modernization has relations with social market economy. The key reason behind that is the need for “regulatory support” for the achievement of technological innovations in the field of environment and the need for “political modernisation” (Trittin, 2006, p.iii).

Mol and Sonnenfeld (2000, p.6) argue that the central tenets of such political modernization are the emergence of “more decentralised, flexible and consensual styles of governance” accompanied by “less top-down, national command-and-control environmental regulation”. Therefore, the state acts as a facilitator of environmental reform via ‘regulatory support’, yet deliver more room for non-state actors to step into the policy process. Thus, ecological modernization reassesses the role of the state in environmental policy without dispensing it:

> Rather, the role of the state in environmental policy is changing, or will have to change, from curative and reactive to preventive, from ‘closed’ policy making to participative policy making, from centralized to decentralized, and from dirigistic to contextually ‘steering’.
>
> (Mol, 1997, p.141)

This also means an increasing involvement of business in the initiation of environmental reform with the necessary support taken from the government.

> Private economic actors become involved in environmental reform, for instance by certification of products and processes, by asking for environmental audits and by competition on environmental performance and the creation of niche markets.
>
> (Mol, 1997, p.141)

The increasing involvement of business in the environmental policy field denotes also the increasing role of market mechanisms in promoting environmental reform. The ‘economisation of ecology’ argued by Tatenhove (1999) above is in line with the rise into prominence of the market in bringing ecological modernization. Mol and Sonnenfeld (2000, p.6) argue that new actors such as business, customers, insurance

companies etc. take more active role in environmental reform in an age of ecological modernization in addition to the roles played by the governments and environmental movements. Deriving upon the compatibility between the economy and the environment, ecological modernization theory stresses the possibility of reforming "modern economic institutions and mechanisms" in order to comply with the new "ecological rationality" (Mol, 1997, p.141). This also brings about an extended use of NEPIs, which are argued to be more efficient than command-and-control type of instruments as they motivate the polluters to comply with environmental criteria and to invest in environmental technologies.

Ecological modernization theory also focuses on the changing role of social movements in environmental reform (Mol, 1997; Mol and Sonnenfeld, 2000). Throughout the 1970s and 1980s, environmental movements were mostly critical about the policies aimed at environmental reform conducted by states and other actors. However, this position has changed as analyzed previously in this section (Hajer, 1995). As a result, Mol (1997) argues that:

> …the role of environmental movements is slowly shifting from that of a critical commentator outside societal developments to that of a critical – and still independent – participant in developments aimed at an ecological transformation.
>
> (Mol, 1997, p.142)

Based on the compatibility of economics and the environment, ecological modernization stresses that with the achievement of EPI, new roles for science and technology, an extended use of NEPIs and a more participatory form of governance, the level of environmental reform and ecological restructuring would go far beyond the 'polluter pays' principle as introduced by the OECD. One of the fundamental principles of ecological modernization is "pollution prevention pays" (Hajer, 1995, p.26). Hajer (1995) argues that this principle has started to be taken by private actors as a strategy in the mid-1980s. This principle refers to both the prevention of costs via producing cleaner products and therefore not paying for the abatement of pollution and also the potential such investments have in bringing about profits in the global markets.

> …with the advent of global markets, the standards of product acceptability will be determined by the country with the most stringent pollution control standards. Hence the future development of a post-industrial economy will depend upon its ability to produce high value, high quality products with stringent environmental standards enforced.
>
> (Weale, 1992, p.77)

So far, the theory and the key characteristics of ecological modernization are presented to provide the background for the analysis of ecological modernization discourse and policy strategy. Ecological modernization discourse is central to the environmental policy-making particularly after the 1990s. It has been adopted by most of the governments as an environmental policy strategy. Indeed, it has proven to be much more successful as a discourse and policy strategy than as a social theory to count for the changes in modern industrial society from the last quarter of the 20th century onwards.

### 1.3.3. Ecological Modernization Discourse and Policy Strategy

Scholars working on the theory of ecological modernization stress the need to differentiate between ecological modernization as a theory and as a political program (Tatenhove, 1999; Leroy and Tatenhove, 2000; Murphy, 2000; Murphy and Gouldson, 2000; Spaargaren 2000a). As a theory of social change, ecological modernization tries to capture the ongoing ecological transformation of the late industrial society. Therefore, it tries to describe "social reality" based on "historical empirical developments" (Spaargaren, 2000a, p.52). As a political program however, it "refers to the historic-empirical developments in the field of environmental policies and politics during the seventies and the eighties in some western European countries" (Spaargaren, 2000a, p.53). These transformations can be captured by focusing on the discursive and the political shift to ecological modernization following the 1980s.

Following the mid-1980s ecological modernization started to become the dominant view in the environmental debate. Policy strategies associated with ecological modernization become the main routes for most of the developed countries to handle

environmental issues. This was most visible and observable in the case of West European countries. However, this trend was not peculiar to the developed countries. Both OECD and UN were important international organizations to disseminate ideas and discourses associated with ecological modernization.[64] Hajer (1995, p.26) argues that "the conceptual shift to ecological modernization can be observed in at least six different realms":

- Change in the environmental policy-making techniques
  - From 'react-and-cure' to 'anticipate-and-prevent' type of regulation – integration of pollution prevention aims to other ministries
  - New techniques to let the private sector to integrate environmental concerns to their cost and risk calculation – polluter pays principle, cost-benefit analysis, risk analysis, precautionary principle, tradable pollution rights, charges on polluting activities
- A new role for science and technology
- Microeconomic level – pollution prevention pays instead of environmental protection increases costs
- Macroeconomic level – change in conceptualizing nature
  - From a sink or a free good to a public good or resource
  - The necessity to end the externalization of costs to the environment
  - Emphasis on the need to conserve and manage scarce natural resources
- Changing legislative discourse – burden of proof shifts to the polluter
- Reconsideration of the existing participatory practices
  - Opening up of existing policy-making practices
  - Creation of new participatory practices

(Hajer, 1995, pp.26-9)

All these components were also translated into environmental policy. Led with the dominant discourse of sustainable development, developed countries started to adopt policies that fell under the realm of ecological modernization. Hence, ecological modernization became the strategy of all industrial countries that aimed to overcome environmental problems (Jansen *et al.* 1998; Drake *et al.* 2003; Baker, 2007). Gibbs (2000) argues that ecological modernization as a political program is related to the programs below:

[64] The role of the UN in popularizing and disseminating the policies associated with ecological modernization is visible mostly in the aftermath of the publication of the Brundtland Report. Both UNCED and the WSSD included elements of the ecological modernization discourse and proposed policy instruments that fall under the category of NEPIs, i.e. instruments that are more flexible and market-oriented, such as CDM and emissions trading.

- Compensation for environmental damage and the use of additional technologies to minimise the effects of growing production and consumption on the environment;
- A focus upon altering the processes of production and consumption, through the use of clean technologies and economic valuation for example;
- The dismantling and deindustrialization of economies and a transformation towards small-scale units and a closer link between production and consumption.

(Gibbs, 2000, p.12)

In realizing these programs, government action is indispensable as the nation states are the main initiators of environmental policies, even though they increasingly share this competence with other actors. This has two components. First, governments intervene in order to bring about innovation that will foster environmental protection (Weale, 1992). As an example to such government action, Weale (1992) cites the Dutch National Environmental Policy Plan (DNEPP) of 1989. The main aim of the plan was "to specify environmental policy objectives in quantitative terms, with targets to be achieved by the year 2010" (Weale, 1992, p.125). The importance of the plan was the interventionist role played by the Dutch government not in the traditional command-and-control sense, but rather with respect to the injection of the core themes of ecological modernization into the plan, such as the promotion of innovation and the involvement of all the related actors.

Second form of government intervention concerns the integration of the environment into public policy generally (Murphy, 2000). Concerning the cross-boundary character of most of the environmental problems, it is necessary to integrate environmental concerns to the fields that directly affect the environment, such as the industry and transport sectors. This is also crucial for the policy strategy of ecological modernization. Murphy (2000, p.3) argues that "ecological modernization requires strong integration with the strategic and operational characteristics of government departments modified to the extent that their original character may be lost altogether".

In addition to these, ecological modernization strategy also stresses the need to develop new forms of environmental policy tools to overcome the handicaps of the old command-and-control techniques. This mainly implies the "the introduction of

economic concepts, mechanisms and principles into environmental policy" (Murphy, 2000, p.3). Therefore, new mechanisms would be in the direction of the win-win scenario. This concerns both the persuasion of the producers and consumers that their environmentally sound investments or consumption patterns would yield economic gains, via maximization of profits or cheaper products respectively (Jansen *et al.* 1998, p.293). This necessity to operate within the market logic can either be achieved through a "more extensive use of economic instruments" or "instruments that encourage internalisation of environmental values among economic actors":

> The first of these two types of instruments aims at internalising environmental costs in the prices of the goods. Its recommendation is based on the assumption that it is feasible to promote actions with less damaging consequences for the environment by changing the costs of the different alternatives open to economic actors. In other words, this type of instrument does not imply that economic actors have to take environmental considerations into account when they make their decisions. They do not follow 'the road to sustainable development' because they have changed their motivation and values, but rather because they find it, according to their calculation of costs, profitable to do so.
>
> (Jansen, *et al.* 1998, p.294)

This notion is very important to ecological modernization. The idea that economic actors can profit from environmentally sound behavior is one of the main differences of ecological modernization than the strategies of the 1970s, where environmental protection instruments devised by governments led the industry to object based on the arguments of economic losses. The same holds for the arguments put forward by the developing countries that environmental protection would hinder their development goals. Now, the equation is rewritten, emphasizing that profits would follow once the right economic and instrumental choices are picked.

The second type of instruments mentioned above has more to do with value internalization – "the intention is to ensure that standard operational procedures are designed and evaluated in accordance with *both* economic *and* environmental criteria" (Jansen *et al.* 1998, p.294). This also holds for value internalization within the state itself. Lundqvist (2000) argues that the human capacity of an environmental ministry is directly related to its capacity to internalize environmental values in itself and also

export them to other departments of the state. Jansen *et al.* (1998, p.295) argue that in order for such a "turning government green" to become the case, two changes are crucial:

- The necessity of improving information about 'the state of the environment': economic and environmental values can and should be integrated on the basis of analyses and calculation, and therefore reliable data on the state of the environment as well as on aspects of the production process are decisive.
- The necessity of implementing procedural changes to ensure that such information is included as premises in the policy process: for instance, by including in the policy process organisations that possess such knowledge (e.g. through interministerial committees, hearing procedures) and/or by making such information part of the standard operating procedures of the sectoral agencies and ministries.

(Jansen *et al.* 1998, p.296)

Environmental policy instruments utilized by the proponents of ecological modernization strategy are various. These instruments are less top-down, more participatory and have market logic in order to persuade the actors to willingly conform. Such instruments are generally called NEPIs which comprise of MBIs, eco-taxes, voluntary agreements (VAs) and eco-labels and their share in environmental policy has been growing since the 1980s (Jordan *et al.* 2003a).

MBIs are different from command-and-control type regulatory instruments that impose "constraints on the polluter"; instead, they provide the "incentive to which the polluter responds" (Sprenger, 2000, p.3). This property makes MBIs one of the central elements of the ecological modernization policy strategy. Sprenger (2000) argues that there are four objectives of MBIs:

- forcing producers and consumers to take account of the implications for the environment of their action;
- leaving them the freedom to choose and adapt their activities;
- enabling them to apply least-cost solutions;
- creating a dynamic which encourages the search for and application of better and cheaper means of maintaining and improving environmental quality.

(Sprenger, 2000, pp.3-4)

The promotion of NEPIs is directly related to the abovementioned changing role of the state in the field of environmental policy. In addition to the less top-down and more participatory forms of environmental policy-making and the increasing use of NEPIs as policy tools, it is important to note once more that the state plays and important role in stimulating the private sector to invest in innovative technologies (Lundqvist, 2000, p.2). Focusing on the government-related aspects of the ecological modernization policy strategy, Lundqvist (2000) argues that the following strategies are crucial:

- Ecological tax shift in order to create a 'double dividend' – decreasing taxes on labour and increasing taxes on resource use and pollution
- Greening governmental throughput – learning and internalization of environmental values and objectives into every sector of the state apparatus
- Greening government consumption
- Provision of green indicators in order to provide reliable data

(Adapted from Lundqvist, 2000, pp.4-11)

Finally, ecological modernization places heightened emphasis on the role of science, eco-efficiency and the promotion of environmental technologies. The development of environmentally sound technologies that would increase efficiency in resource use and decrease environmental pollution is expected to serve the win-win strategy and increase the competitive advantage of the leading countries or firms in the innovative realm.

### 1.3.4. Criticisms against Ecological Modernization

Ecological modernization has received considerable criticism with respect to its theoretical premises and policy implications (Fisher and Freudenburg, 2001). Buttel (2000b, p.32) argues that there are three main strands of criticisms to ecological modernization theory. One line of criticism is that ecological modernization theory is "based on the Northern European experience" (Buttel, 2000b, p.32). Leroy and Tatenhove (2000) similarly argue that ecological modernization theory rests upon the empirical analysis of some and not too many Western late industrial societies.

Consequently, they argue that unless conditions such as "a high level of environmental concern, an already institutionalized environmental policy and a well developed, politically accepted and professionally organized environmental movement" are met, the likelihood of the theory to apply in other contexts is "very questionable" (Leroy and Tatenhove, 2000, pp.196-7).

Such criticisms have led the ecological modernization theory to establish its links with global modernity and increase its explanatory power (see Mol, 2002). The studies mentioned previously regarding the ecological modernization policy strategy outside the West European geographical context attest to that effort. Despite the criticisms as regards the geographical breadth of the theory of ecological modernization, these studies highlight the possibilities of the theory to explain the ongoing environmental transformations in non-West European contexts.

The second strand of criticism in Buttel's analysis stresses the fact that "aggregate consumption of minerals and other raw materials has continued unabated" despite ecological restructuring and efficiency improvements (Buttel, 2000b, p.32). This criticism is reminiscent of Jevons' paradox, where efficiency in the use of a resource can in the end lead to a using of this resource even in more amounts (Alcott, 2005). The main reason behind is that increased consumption of efficiently produced goods and a concomitant growth of the economy "makes no practical difference" even if resources are used efficiently (Connelly and Smith, p.69). Furthermore, as Pepper (1998, p.3) argues, "neither the technological adjustment nor policy discourse aspects of EM necessarily *diminish total resource use consumption*".

This criticism is also a challenge to the decoupling argument of ecological modernization which implies that economic growth can be achieved without environmental destruction. The emphasis on eco-efficiency in ecological modernization attests to the fact that nature is still taken "as a 'standing reserve' of exploitable resources" which "does not challenge the western economic development model" (Baker, 2007, p.303). Connelly and Smith (2003, pp.68-69) furthermore argue that the decoupling cases observed so far are mostly the result of the exportation of

environmental pollution "through a displacement of high energy-consuming and polluting industries to less-industrialised countries". Pepper (1998, p.3) similarly states that there is rising evidence about the "steady flow of toxic wastes from Western countries to India" as an example to such displacement. Baker (2007, p.303) also argues that policies of ecological modernization in West European countries and Japan in particular are conducted with the displacement of dirty industries. Furthermore, natural resource preservation in the developed world has been achieved at the expense of their exploitation in the developing world (Baker, 2007, p.303).

The third strand of criticism states that ecological modernization "can serve to legitimate a political culture of environmental policy-making that basically absolves industrial corporations and other agents of environmental destruction of their responsibilities" (Buttel, 2000b, p.32). This criticism shares some commonalities with the arguments that describe ecological modernization as a new form of capitalist defense against ecological necessities. Baker (2006, p.217) argues that the over-emphasis in ecological modernization in terms of the role industry would play in sustainable development policies bears the danger to present MNCs responsible for high level of environmental destruction "as corporate environmentalists upon whom society can rely to promote sustainable development". Leroy and Tatenhove (2000, p.197) argue that in its early Huberian version, with an emphasis on taking the state out and letting economic actors in environmental policy, "the ecological modernization theory fitted well with the neo-liberal political offensive of the 1980s". A similar argument is made by Hajer (1995) where he argues that ecological modernization cannot only be seen as a way to solve environmental problems:

> …ecological modernization is not merely a technical answer to the problem of environmental degradation. It can also be seen as a strategy of political accommodation of the radical environmentalist critique of the 1970s. Being the antithesis of the existing administrative judicial system, ecological modernization could mesh with the deregulatory move that typified public administrative thought in the early 1980s. Likewise ecological modernization had distinctive affinities with the neo-liberal ideas that were in good currency in government think-tanks and advisory agencies during the 1980s, especially concerning the need to restructure the industrial core of the economy of Western countries.
>
> (Hajer, 1995, pp.32-33)

In a similar fashion, Connelly and Smith (2003, p.68) argue that "ecological modernisation aims to 'green' capitalism", but are skeptical about the success of such an attempt. They criticize the approval given to ecological modernization by some environmentalists, on the grounds that this approval would only lead to the legitimization of current environmentally damaging practices:

> Reform-minded environmentalists are enthusiastic in the greening of capitalism, but capitalism it remains. The danger is that the radical critique of the environmental movement is blunted (if not neutralised) and the very structures and institutions responsible for continuing ecological decline are legitimised by apparent green approval.
>
> (Connelly and Smith, 2003, p.70)

Apart from these criticisms, some argue that the "optimism" of the theory of ecological modernization about the "very probable" emergence of ecological modernization is probably one of its most crucial deficiencies (Leroy and Tatenhove, 2000, p.197). However, it is necessary to note that ecological modernization policy strategy does not need to appear in every country to the same extent. Practices are various. Furthermore, Langhelle (2000) argues that ecological modernization is a contested concept like sustainable development as it may come to denote many things such as technological innovation, discourse and theory of social change. In addition, there are also levels of ecological modernization. Christoff (1996, p.490) makes a distinction between "weak" and "strong" ecological modernization (Table 2):

**Table 2: Types of Ecological Modernisation**

| Weak Ecological Modernisation | Strong Ecological Modernisation |
|---|---|
| Economistic | Ecological |
| Technological (narrow) | Institutional/systemic (broad) |
| Instrumental | Communicative |
| Technocratic/neo-corporatist/closed | Deliberative democratic/open |
| National | International |
| Unitary (hegemonic) | Diversifying |

**Source:** Christoff, 1996, p.490.

Christoff (1996, pp.490-491) argues that even if these two types "are not always mutually exclusive binary opposites", there is a "political contest" between

environmentalists and governments/industry about which type of ecological modernization route to follow. Dryzek (1997, p.151) argues that "ecological modernization requires a consensual and interventionist policy style consistent with corporatism". As such, it can be observed "in the cleanest and greenest developed nations", however, "in its weak and techno-corporatist senses" (Dryzek, 1997, p.152).

Another important criticism relates to the direct association of ecological modernization with sustainable development. Ecological modernization is the dominant way to implement sustainable development. As such, ecological modernization and sustainable development came to be used as synonyms (Baker, 2006, p.300). However, ecological modernization is one way of interpreting sustainable development. It stands in the middle ground of weak and strong interpretations of the concept. Dryzek (1997, p.143) argues that compared to sustainable development, "ecological modernization has a much sharper focus" as to the way to reform "the capitalist political economy".

Baker and Eckerberg (2008, p.5) distinguish sharply between ecological modernization and sustainable development. They argue that the reason why there is such a "conceptual pragmatism" is the inclination to take the "Brundtland formulation of sustainable development as if it were an empty conceptual shell, to be filled by whatever characteristics or variables are deemed appropriate to the political, social and cultural context within which it is applied" (2008, pp.5-6). However, as Schreurs (2011) argues, sustainable development is a broader concept in many ways. Whereas ecological modernization is more about the transformation of the economic system to a more ecologically aware one, sustainable development incorporates elements such as participation by social groups and equity. In addition, Baker and Eckerberg (2008, pp.6-7) argue that sustainable development proposes a decrease in economic growth whereas ecological modernization lacks such a focus. In addition, they argue that there is a contrast between the two approaches in terms of perceiving social change. Whereas ecological modernization over-emphasizes "technology and economic entrepreneurs as determinants of social change", sustainable development takes social change as "a process involving a wider set of actors who are engaged with a deeper set of principles" (Baker and Eckerberg, 2008, p.7). Similarly, Toke and Strachan (2006) argue that even

if there are commonalities between sustainable development and ecological modernization, there are also important distinctions between the two approaches:

> …whereas sustainable development arose partly as a response to perceived North-South divisions on environmental issues, EMT arose much more as a response to divisions between environmentalists and industrialists in the North. Second, while sustainable development says that ecological sustainability and economic development are compatible, and also mutually necessary, EMT goes further to imply that, under an EMT strategy, ecological protection actually accelerates economic development, and vice versa… Third, whereas sustainable development emphasizes equity, EMT emphasizes the need to use market based mechanisms to achieve its objectives.
>
> (Toke and Strachan, 2006, p.156)

The necessity to emphasize their differences notwithstanding, it is necessary to note that ecological modernization and sustainable development are intertwined. This mainly owes to the fact that ecological modernization has become the dominant interpretation of sustainable development and the main way of thinking in current environmental policy circles. Even though there are many approaches to ecological modernization, the common characteristics previously mentioned in this section "begun to dominate the conceptualization of problems, solutions, and the social strategies through which regulatory achievements are to be made" (Hajer, 1995, p.30). Therefore, even if there are criticisms against the ecological modernization theory, it is necessary to emphasize its dominant position as both a discourse and a policy strategy. According to Buttel (2000a, p.58) the reason behind this rise of the theory of ecological modernization is not about its merits as a social theory, "but rather because of how ecological modernization accorded particularly well with a number of intellectual and broader political-economic factors".

Hajer (1995, p.31) argues that there are four reasons "why the policy discourse of ecological modernization would appeal to governments". First governments, faced with criticism of their failure to address environmental problems, wanted to find a solution to the environmental issue. Second, governments were content with the win-win scenario proposed by the ecological modernization discourse. As such, contradictions with the industry would be avoided and economic growth would

continue. Third, ecological modernization operated within the existing institutional order. Finally, ecological modernization had also accommodated the radical environmentalism of the 1970s. Furthermore, it fitted to the rise of neoliberalism in the 1980s (Hajer, 1995, pp.31-33).

At first glance, it might seem reasonable to assume that ecological modernization basically appealed to right-wing governments. This is not the case. Apart from the support of reformist environmentalists, ecological modernization also got support from the new social democracy of the 1990s, known as the Third Way.[65] Curran (2001, p.41) argues that ecological modernization is the "Third Way's approach to the environment in the late twentieth century". Indeed, the most prominent Third Way supporter Giddens (2006, p.51) has argued that one way of Europe to lead the world technologically is "the further development of ecological modernisation". This support from the social democratic front, albeit in its new post-Cold War form, lends evidence to the dominance of ecological modernization.

Ecological modernization theory was developed initially by German social scientists, based on the environmental policy experiences in Germany. The Netherlands is also an important country in terms of the implementation of the ecological modernization policy strategy, the DNEPP of 1989 being a prominent example in this sense. Even though contributions by social scientists from all around the world flourished afterwards, ecological modernization theory was developed mainly based on the experiences of Northern European green countries mentioned above. These countries not only adopted many aspects of the ecological modernization policy strategy nationally, but also uploaded many of their policy principles and paradigms to the EU, to which they are members since its inception.

As a *sui generis* form of polity, the EU has a considerable *environmental acquis*. As an environmental actor, its policies have a considerable impact on its member states as well as on the global politics of the environment (Berger *et al.* 2001).

[65] Third Way denotes a political stance that lies in between capitalism and socialism, the 'right' and the 'left' or the 'market' and the 'state'. Third Way is mainly propagated by and known to be the ideology of the social democracy of particularly the 1990s.

EU environmental policy draws its main direction from the principle of sustainable development from the 1990s onwards. There are different interpretations of sustainable development and different policy strategies to implement it accordingly. For the case of EU environmental policy, it will be argued and demonstrated that the EU has adopted the ecological modernization policy strategy to achieve sustainable development. Put differently, EU environmental policy was shaped by ecological modernization policy strategy particularly after the 1990s.

In that sense, the process through which, how and why the dominant discourse and policy strategy of ecological modernization has entered into the environmental policy field of the EU need to be elaborated. Through this analysis, it would be possible to understand the impact of ecological modernization on EU environmental policy and the environmental policies of its member states, as well as the candidate states trying the join the EU. Hence, it would be possible to illuminate the extent to which ecological modernization is of explanatory value for the environmental policy developments of countries beyond the industrialized West European countries.

In that fashion, the following part of this study will elaborate on the historical and institutional development of EU environmental policy in detail. Specific emphasis will be placed on the development of competencies, discourses and choice of policy instruments. Furthermore, the EU efforts for achieving sustainable development will be dwelled upon in detail. During the analysis, tracks of ecological modernization discourse and policy strategy will be sought and analyzed in a critical manner. There is a variety of components of ecological modernization as a discourse and policy strategy. It is hard to give a precise definition of ecological modernization as a policy orientation. Building on the previous analysis of the key characteristics of ecological modernization, the following part will explore the presence of ecological modernization in EU environmental policy with respect to the four core themes of ecological modernization as provided by Gouldson and Murphy (1996). As such, the presence and taking hold of ecological modernization discourse and policy strategy in EU environmental policy will be analyzed with respect to the ‘win-win discourse’, ‘EPI’, ‘NEPIs’ and the ‘emphasis on new clean technologies’. In addition, the impact of the EU ecological modernization

discourse and policy strategy on the member and candidate states of the EU will be captured by an analysis of Europeanization of ecological modernization with particular focus on the policy transfer of NEPIs and the transformation of Turkish environmental policy with respect to the abovementioned core themes. Through the analysis mentioned above, the argument that the ecological modernization discourse and policy strategy has become dominant in shaping current environmental policies will find the chance to be empirically tested.

# PART 2. ECOLOGICAL MODERNIZATION DISCOURSE AND POLICY STRATEGY IN EU ENVIRONMENTAL POLICY AND IMPLICATIONS FOR TURKEY

Environmental policy has climbed to a high priority policy area in most of the countries during the last 50 years, particularly in the developed Western world. The increasing pace of environmental deterioration, the intellectual contributions regarding the negative effects of human activity on the environment and the concomitant increase in environmental awareness all contributed to this political predicament. The growing eminence of environmental protection has manifested itself through the "institutionalization of environmental policy" (Orhan, 1999, p.35). Governments initially dealt with the issue through their existing government branches, followed by the establishment of environmental ministries and finally abandoning the "piecemeal approach" in favor of "a more comprehensive strategy", which is sustainable development (Orhan, 1999, p.35).

Sustainable development became an internationally adopted motto to denote the concern as regards the necessity to consider the environment in the development projections of humanity. It proposed a framework whereby economy and the environment were presented as compatible goals, thus rejecting the prevailing dichotomy between these two realms. The arrival of the sustainable development discourse also initiated a process through which environmental protection was internationalized by the efforts of leading international organizations such as the UN. Ecological modernization became the dominant way to interpret sustainable development and deal with environmental problems. Ecological modernization theory and policy strategy appealed to the governments and most of the policy-making elites in international society with its emphasis on the economic potential of environmental protection.

This part of the study would reflect the analysis considering the dominance of ecological modernization in interpreting and implementing sustainable development

upon the case of the EU. First, the emergence and the development of environmental policy in the EU will be presented. Afterwards, polices aimed at realizing sustainable development within the EU will be analyzed. The presence and/or dominance of ecological modernization discourse and policy strategy in EU environmental policy will be traced throughout this analysis.

EU environmental policy is committed to the achievement of sustainable development from the 1990s onwards. This espoused policy endeavor has been accompanied by an implicit adoption of the discourse and policy strategy of ecological modernization. Hence, it will be argued that while the EU has committed itself to sustainable development and enshrined it to its environmental policy, the dominant strategy to implement sustainable development in the EU has been ecological modernization (Pepper, 1999; Baker, 2006; Baker, 2007). This argument draws evidence from and thus will be examined with an explicit focus on the ideas and orientations behind the formulation of environmental policies, the environmental policy discourses that are adopted as well as the environmental policy tools that are utilized.

The EU not only adopts but also disseminates the ecological modernization policy strategy to countries where ecological modernization theory has not been as effective as it has been in countries such as Germany and the Netherlands. Therefore, the Europeanization of ecological modernization in the EU will also be elaborated with respect to the policy transfer of NEPIs. In the last section of this part, the development of Turkish environmental policy will be analyzed as a case study. The impact of ecological modernization discourse upon the ideational orientations of Turkish environmental policy, the role of the EU in this process and prospects for ecological modernization in Turkey will be particularly assessed.

## 2.1. EMERGENCE AND DEVELOPMENT OF EU ENVIRONMENTAL POLICY AND THE DISCOURSE OF ECOLOGICAL MODERNIZATION

European integration started in the immediate aftermath of WWII with an aim to achieve peace and political stability through economic cooperation.[66] It was initiated by the efforts of influential political leaders. European Coal and Steel Community, established in 1951, was the first sectoral integration attempt by the European countries. After a failed attempt to establish integration in the political realm, the six founding members decided to establish an economic community to initiate economic cooperation in every economic field. Hence, European Economic Community (EEC) was established in 1957 with the Treaty of Rome. Its primary aim was to realize the free movement of goods, services, workers and capital and to achieve a customs union (CU) among the member states. Along with the EEC, European Atomic Energy Community was also established in 1957, in order to "promote collaboration on the development of nuclear energy for peaceful economic purposes" (Urwin, 2003, p.21). The three communities' executives were merged in 1967, and named thereafter as the European Community (EC).

The first amendment to the Treaty of Rome came in 1986 with the Single European Act (SEA), which committed the EC to achieve the single European market by 1992. In 1992, the 'European Union'[67] was created with the Treaty of Maastricht, also known as the Treaty on European Union (TEU). In addition to the EC, the EU also incorporated two intergovernmental pillars, namely Common Foreign and Security Policy and Justice and Home Affairs. Afterwards, the Treaty of Amsterdam (1997), the

[66] The history of European integration is beyond the limits of this analysis. For further information on the historical development of European integration, please see Dinan, Desmond (ed.) (2006). *Origins and Evolution of the European Union*. Oxford University Press. For a detailed analysis of EU institutions, politics and policy-making, please see Cini, Michelle (ed.) (2003). *European Union Politics*. Oxford University Press. And also Wallace, Helen; Wallace, William & Pollack, Mark A. (eds.) (2005). *Policy-Making in the European Union*. Fifth Ed. Oxford University Press.

[67] EEC, EC and EU signify different periods in the European integration process. For simplicity, this study will use the 'EU' to denote all the periods of European integration from its inception onwards.

Treaty of Nice (2001), (the failed attempt for a European Constitution), and the Treaty of Lisbon (2007) have been put into effect. The EU has developed an immense *acquis* from its inception onwards. Environmental policy is a prominent example of the policy areas that the EU has developed an immense amount of *acquis*.

The initial aim of European integration was to achieve economic cooperation through the realization of four freedoms and a CU. Policies that were not directly related to economic integration featured later in the process of European integration, mostly as a result of concerns that they were preventing the economic cooperation within the EU from fully functioning. From the 1980s onwards, the EU gained more competence in the fields other than economic issues, environmental policy being a prominent example. The emergence and the development of EU environmental policy will be presented below, in a view to understand why an economic body like the EU needed and established such a comprehensive body of law and competence in the field of environment.

There were no references to the environment in the founding treaties of the EU and environmental policy was accepted as a formal policy field of the EU as late as 1986 with the adoption of the SEA (Bailey, 2003). However, "more than 100 legally binding EU environmental measures had been adopted" during these 30 years (Wurzel, 2008, p.65). This has occurred with no legal basis for environmental policy in the treaties. The reasons for such a development of EU environmental policy need to be explored and the justifications for such policy development should be presented.[68] This analysis will be done particularly with respect to the political and economic rationale behind the development of EU environmental policy, the adoption of the principle of sustainable development and the strategy to implement sustainable development within the EU, namely ecological modernization.

Various scholars have analyzed the development of EU environmental policy in phases (McCormick, 2001; Hildebrand, 2005; Knill and Liefferink, 2007; Wurzel,

[68] The aim of this section is not to present a detailed analysis of the specific environmental policies of the EU. Directives or regulations related to the environment will feature only in relation to the analysis of the strategic and political orientation of EU environmental policy.

2008). Even though some of these scholars do not accept that there was an EU environmental policy before 1972, they all agree that the period after 1972 can be analyzed as three distinct periods. Accordingly, from the Paris Summit (1972) until the SEA (1986) represents the first period. From 1987 until 1992 represents the second period, whereas the final period starts with 1992 and is still argued to be continuing. Another contribution has been made by von Homeyer (2009) where he argues that four environmental governance regimes have emerged in the course of the development of environmental policy in the EU. These are "the 'environment regime' which dates back to 1972; the 'internal market regime' (1982); the 'integration regime' (1992); and the 'sustainable development regime' (1998)" (von Homeyer, 2009, p.3). Accordingly, all these phases or regimes denote different characteristics of the development process of EU environmental policy.

This section will adopt a similar periodization to the aforementioned contributions concerning the development of EU environmental policy. The period 1957-1972 is sometimes not analyzed with respect to EU environmental policy as there is no EU environmental policy *per se* during this period. However, this period will be analyzed here as it witnessed some important developments in the environmental realm (Hildebrand, 2005, p.19). The analysis of the development of EU environmental policy will be conducted with respect to the Treaties and the six EAPs adopted by the EU as well as other strategy documents that have an environmental dimension. The emergence of the sustainable development policy in the EU and the implicit[69] adoption of the ecological modernization policy strategy will also be detected.

### 2.1.1. 'Incidental' Environmental Moves (1957-1972)

European integration started with an economic orientation. The Treaty of Rome listed "an accelerated raising of the standard of living" as a goal of the integration process, however, no particular reference was made to the role of the environment in this general goal (Treaty of Rome, 1957, Article 2). This ignorance of the environment

[69] There are no direct references to 'ecological modernization' in EU legislation. It is a background concept that shapes ideas and policies (Schreurs, 2011).

was not only an attribute of the EU. There was a general lack of interest in the environment on behalf of the EU member states as well. McCormick (2001, p.43) argues that "the environment was a policy issue whose significance varied from marginal to non-existent" for the European countries during the 1950s.

Such a lack of interest continued until 1972, when the EC member states convened in Paris to take a common position against the emerging case of environmental deterioration. Until 1972 however, there was nevertheless some action in the field of environment. The environmental measures taken by the EU during 1957-1972 mainly drew legitimation and were enacted "out of creative interpretations of the Preamble to the EEC treaty[70], and combinations of Articles 2[71], 100[72] and/or 235[73]" (McCormick, 2001, p.43). In the Preamble to the EEC, "the constant improvement of the living and working conditions" was stressed, whereas Article 2 set "an accelerated raising of the standard of living" as a goal that the European integration process would pursue. Article 100 gave the right to the CoM to issue directives (unanimous decision-making) for the approximation of laws in the member states when such laws were directly related to the common market (CM). Article 235, on the other hand, gave the CoM the right to take action if it is necessary to achieve the CM and when the "(EEC) Treaty has not provided the necessary powers" (Treaty of Rome, 1957, Article 235).

[70] For the full text of the Treaty of Rome, please visit the Eur-Lex website (http://eur-lex.europa.eu/en/treaties/index.htm).

[71] "It shall be the task of the Community, by establishing a Common Market and progressively approximating the economic policies of Member States, to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increased stability, an accelerated raising of the standard of living and closer relations between its Member States".

[72] "The Council shall, by a unanimous decision, on a proposal of the Commission, issue directives for approximation of such legislative and administrative provisions of Member States as directly affect the establishment or operation of the Common Market.
The Assembly and the Economic and Social Committee shall be consulted in the case of directives the implementation of which would involve amending legislation in one or more Member States."

[73] "Where action by the Community appears necessary to achieve one of the objectives of the Community, within the framework of the Common Market, and where this Treaty has not provided for the necessary powers of action, the Council shall adopt the appropriate provisions by a unanimous decision, after consulting the Assembly."

During the period, the EU adopted nine directives[74] and one regulation[75] "which were little more than harmonization measures to prevent differing national environmental standards from being barriers to trade" (Barnes and Barnes, 1999, p.25). This is the reason why some scholars argue that there cannot be argued for the presence of an EU environmental policy prior to 1972. The environmental measures taken during this period did not represent a coherent approach to establish a European environmental policy on its own right but served mainly to the prevailing goal to establish a CM:

> …in this first phase – such environmental measures as were agreed were unconnected elements in the general drive to harmonize the national laws of the member states, and that they were incidental to the primary goal of building a common market.
>
> (McCormick, 2001, p.45)

This 'incidental' (Hildebrand, 2005) feature of the environmental policy measures taken in the period 1957-1972 has changed dramatically with the advent of the 1970s. The process that led to the increased involvement of the EU in environmental affairs and the factors that paved the way for such a development need to be explored.

### 2.1.2. Beginnings without a Legal Basis (1972-1987)

The previous part has shown how the environment became a high policy issue starting with the 1960s, initially as a result of the intellectual contributions demonstrating the impact of economic development and unlimited use of technology on the environment, such as the *Silent Spring* by Rachel Carson. In addition, the environmental catastrophes that took place during the 1960s turned public attention to the harmful effects of unlimited human activity on the environment. The increase in global awareness regarding environmental deterioration has also led influential reports to be issued such as *The Limits to Growth*. The UN Conference that convened in Stockholm in 1972 also affirmed the eminence of environmental concerns. Such

[74] Directive is a type of EU legislation that puts forward "general rules to be transformed into national law by each country as they deem appropriate (Commission, http://ec.europa.eu/legislation/index_en.htm).
[75] Regulation is a type of EU legislation that "is similar to a national law with the difference that it is applicable in all EU countries (Commission, http://ec.europa.eu/legislation/index_en.htm).

developments created an attentive public to the impacts of economic and scientific activities on the environment, particularly in Europe. The rise of "the new environmentalist movement" across European countries helped increase concern and "awareness" towards environmental issues among West European public, though varying in extent (Jansen *et al.* 1998, p.282). All these developments have led the leaders of European countries to accept "that coordinated action was required to address common environmental problems" (Bailey, 2003, p.13).

With such an understanding and on the background of the rising eminence of the environment on the national and international political agenda, the EU member state leaders and the leaders of the then accession countries (UK, Denmark and Ireland) convened in 1972 in the Paris Summit. The Summit produced important results in terms of EU environmental policy as it emphasized the importance of environmental measures alongside economic growth (McCormick, 2001, p.47). Knill and Liefferink (2007, p.2) also argue that the Paris Summit "can be viewed as the beginning of an independent EU environmental policy". European countries that convened in the Paris Summit "declared that economic expansion was not an end in itself, but should result in an improvement in the quality of life as well as the standard of living" (Baker, 2006, pp.135-136). As a result of the Summit, the Commission was asked to prepare an EAP, which in turn led to the establishment of the Environment and Consumer Protection Service (ECPS) in Directorate General III (DGIII) for industrial policy (McCormick, 2001, p.47). ECPS was the body that would be later transformed into a separate DG Environment. Furthermore, a Committee on the Environment was created within the European Parliament (EP) (McCormick, 2001, p.47).

#### 2.1.2.1. The First Environmental Action Programme (1973-1976)

In 1973, the Council of Environmental Ministers adopted the First EAP that would cover the years 1973-1976. The First EAP is the first concerted EU effort in the environmental field. Hildebrand (2005, p.20) argues that it "must be regarded as a landmark in the evolution of Community environmental efforts". The First up to the

Fifth EAPs were not legally binding.[76] Nevertheless, all EAPs are crucial for the future direction of EU environmental policy. They "specify the focal areas of EU legislation for the coming years and determine the fresh strategic directions in environmental policy, and hence constitute a policy framework to be filled in by appropriate directives" (Knill, 2001, p.120). Therefore, the First EAP was an important document in the sense that it laid down the objectives and principles that would guide future EU environmental policy (McCormick, 2001, p.48; Barnes and Barnes 1999, p.29). The principles and objectives of EU environmental policy set by the First EAP are presented below (Table 3):

**Table 3: Principles and Objectives in the First EAP**

- Prevention at source
- Precautionary principle
- Proximity principle – environmental damage should be rectified at source
- Incorporating environmental considerations into all-planning and decision making
- Polluter-pays
- The impact of EC policies on developing countries should be assessed
- EC should be an international actor in the field of environment
- EC should take action at the most appropriate level
- EC should promote education to increase environmental awareness
- National environmental policies should be harmonized
- Exchange of environmental information should be improved
- Overexploitation of resources should be avoided

**Source:** Adapted from Barnes and Barnes (1999, p.30) and Bailey (2003, p.14)

The First EAP represented a comprehensive perspective regarding EU environmental policy as it touched upon important aspects of a sound environmental policy. However, real action at the policy level was not as promising as the principles laid down. The EU adopted several directives in the aftermath of the First EAP. As there was still no legal basis for EU environmental action, the directives were based on Articles 100 and 235. Hence, the rationale behind environmental action was still trade-related and the measures taken were far from an independent EU environmental policy.

[76] The Sixth EAP is different from the first five EAPs in terms of its legal status. With the Treaty of Amsterdam (1997), the adoption of the EAPs would be subject to the co-decision procedure and hence be legally binding on both member states and applicant states to the EU (Budak, 2003, p.70).

> Those directives which related directly to the functioning of the market, that is, the removal of trade barriers by the setting of emission standards, were adopted using article 94 TEC (100 EEC)… Standards contained in the directives were low and represented little more than a limited attempt to harmonize product standards to prevent market distortion. Those directives that were adopted using article 308 TEC (235 EEC) were more far-reaching, but many did not require direct action. The result was slow adoption and patchy implementation of these directives. Overall the approach to environmental policy during the 1970s was based on measures which were either directly related to trade interests or restricted to very general provisions which did not target the main sources of pollution.

(Barnes and Barnes, 1999, p.35)

Therefore, it can be argued that the main motive behind the early moves for EU environmental policy were related to the overall aim of achieving a CM and preventing market distortions based on environmental reasons. Even though the First EAP set broader principles and objectives, they were not directly transferred to the policy and implementation realm. The principles set in the First EAP were further emphasized with the Second EAP.

#### 2.1.2.2. The Second Environmental Action Programme (1977-1981)

The Second EAP was a reiteration of the principles laid down in the First EAP. It aimed at the continuation of the activities determined in the First EAP. However, it should be noted that the Second EAP emphasized the importance of preventive action in the design of all EU environmental measures (Barnes and Barnes, 1999, Budak, 2000). Furthermore and relatedly, the Second EAP also included more emphasis on the implementation and monitoring of environmental measures as well as touched upon areas that were not directly associated with the functioning of the CM (Barnes and Barnes, 1999, Bailey, 2003). In accordance with the principle of preventive action, it emphasized "the use of environmental impact assessments (EIAs) and the development of environmental labels" (Barnes and Barnes, 1999, p.35). Even though these measures were not realized until the 1980s and the 1990s respectively, they were still important developments in the environmental realm, particularly when the non-existence of a legal basis for environmental policy in the EU is taken into consideration.

An important development during this period was the creation of DG XI (later named DG Environment) from ECPS due the Greek accession to the EU in 1981 and the concomitant creation of another DG in the Commission. Furthermore, during the period of the First and Second EAPs, the environment became one of the important policy areas in EU legislation. During the period,

> …more than 110 regulations, directives and decisions were adopted, covering issues as varied as water quality, air quality and the disposal of hazardous wastes, and including what remain to this day some of the most important pieces of European environmental law.[77]

(McCormick, 2001, p.52)

By the time the Third EAP was to be adopted, the EU had accomplished a serious expansion of the *environmental acquis*, touching upon areas that were justified by Articles that related to trade issues, however, covering more than what is necessary for achieving the CM.

#### 2.1.2.3. The Third Environmental Action Programme (1982-1987)

The Third EAP included more concrete measures compared to the First and Second EAPs (Budak, 2000, p.230). Barnes and Barnes (1999, p.36) argue that the Third EAP "was different in tone from the two earlier programmes". The most important was the emphasis on EPI. The principle of EPI rests upon the recognition that environmental problems cannot be dealt with in isolation as activities in other sectors are generally the principle causes of environmental deterioration. This principle is also an important element both in the Brundtland Report and in the ecological modernization theory and policy strategy.

Therefore, with the Third EAP, the EU started to see environmental protection as a way to promote economic development as well:

[77] For the list of the directives adopted during 1973-1982, please see McCormick, John (2001). *Environmental Policy in the European Union*. Palgrave, pp.52-53.

> The Commission had another reason to call for integration, believing that integration is 'the lynch-pin in the process of establishing social and economic development patterns'…The belief that environmental protection can be the source of economic development links integration with 'ecological modernization', an ideology which…represents one way in which the EU is operationalizing the principle of sustainable development.
>
> (Baker, 1997a, p.94)

According to Barnes and Barnes (1999, p.37), the principle of EPI was adopted due to "the twin challenges of the Mediterranean enlargement and the completion of the programme to integrate the market" together with the possible consideration that this principle could serve to lower unemployment through an integration of "environmental and economic considerations". However, it should be noted that the development of a more integrated approach towards environmental protection will be emphasized more in the Fourth EAP. Suffice to say however that the core arguments of ecological modernization have started to take root in EU environmental policy as early as the proclamation of the Third EAP.

The Third EAP also had other emphases that could be regarded as further initial steps in reconciling environment and the economy. These are the importance attached to the 'polluter pays principle' and 'prevention at source'. As regards the 'polluter pays principle', the EU emphasis on the market mechanisms to achieve pollution reduction coincided with the international emphasis on the same method to deal with pollution. As mentioned before, OECD was one of the leading bodies that promoted the use of the 'polluter pays principle' to achieve better pollution control. This principle is also an essential component of the policy strategy of ecological modernization. So accordingly, with the Third EAP, the EU increased emphasis on the setting of pollution standards, which when exceeded, would infer costs upon the polluter. Thereby, the polluters were encouraged to take the necessary steps to reduce pollution.

> As such it was to be the chief way of bringing market forces to bear to achieve optimum restructuring within the market economy and, at the same time, pollution control.
>
> (Barnes and Barnes, 1999, p.37)

> In this way, the PPP provides an incentive to make products less polluting and/or to reduce the consumption of polluting goods – that is, the PPP corrects for market failure, requiring the use of market-based, policy instruments to do so. In other words, the PPP is entirely consistent with EM principles.
>
> (Johnson, 2004, p.161)

Another emphasis of the Third EAP was on the notion of 'prevention at source'. The idea that prevention of pollution is actually better than curing it attests to the importance attached to a proactive rather than a reactive approach to pollution prevention at the EU level. Barnes and Barnes (1999, p.37) argue that the development of new technologies for a sound environment is also related to this principle. Innovation and development of new and clean technologies is also a central concept of the ecological modernization theory. Ecological modernization theory argues that by way of environmental innovation, the dual goals of environmental protection and economic growth could be achieved by creating new markets for new products. Furthermore, by investing in these new technologies, there is the chance of creating new fields for employment. Similarly in the EU, "the introduction of eco-technology was seen as a way of fulfilling several objectives, including providing the basis for early pollution control and employment creation" (Barnes and Barnes, 1999, p.37).

Due to the positive relationship established between economy and the environment, the Third EAP might therefore be taken as an initial move towards the incorporation of ecological modernization ideas into EU environmental policy-making. The document had arguments with respect to the possibility that environmental protection could trigger an increase in employment and technological advances (Philip, 1998, p.259). This and the inherent move towards less command-and-control measures and more flexible approaches are indicators of the gradual adoption of the ecological modernization policy strategy in the EU. Similarly, Hajer (1995, p.29) argues that the Third EAP "was written in eco-modernist spirit". However, the real turn towards the new reconceptualization of the environment-economy relationship and the argument that environmental protection is actually the prerequisite for economic growth (a central

theme of the ecological modernization theory) will be more visible from the Fourth EAP onwards.

During this period, "nearly 100 new regulations, directives and decisions were adopted, once again including substantial pieces of legislation"[78] (McCormick, 2001, p.55). As mentioned before, EU environmental measures taken during these years were based on Articles 100 and 235 EEC. However, it is important to analyze the justifications for EU environmental policy during the period in order to fully understand how the EU developed such a comprehensive set of environmental policies during 1972-1987 without an explicit legal basis in the Treaties.

#### 2.1.2.4. Justification of EU Environmental Policy during 1972-1987

The reasons behind the early non-existence and the later development of environmental policy in the EU needs to be assessed in order to understand how a principally economic integration project such as the EU has engaged in environmental policy with no legal basis in the treaties. The main aim of the European integration process was the achievement of the four freedoms and the removal of trade barriers among the member states so that a CM could be established. These barriers were basically tariffs and quotas, which were removed successfully as early as 1968 and a CU was achieved between the six.[79] However, there were also non-tariff barriers (NTBs) which are bureaucratic, technical or fiscal barriers that also prevent the free movement of goods and services between the participating countries. Trade restrictions based on environmental standards is an example of such NTBs that could hinder trade. Therefore, the first and foremost motive of the EU to introduce policies in the environmental field was to avoid such distortions on trade and competitiveness based on various national product standards (Knill and Liefferink, 2007, p.3). To avoid such "eco-protectionism" (Weale *et al.* 2005, p.32), the EU developed environmental policies

[78] For the list of the directives adopted during 1983-1986, please see McCormick, John (2001). *Environmental Policy in the European Union*. Palgrave, p.55.
[79] For more on the EU Customs Union, please visit the official website of the Commission (http://ec.europa.eu/taxation_customs/40customs/customs_general_info/about/index_en.htm).

to achieve the CM. Yet, these measures did not represent a coherent environmental policy mainly due to the lack of an explicit legal basis in the Treaties.

Nevertheless, this period should be distinguished from the initial phase of EU environmental policy (1957-1972) where the EU and its member states lacked an environmental vision. Instead, it should be understood as a period when the EU started to develop an environmental policy based on competition concerns, yet, also with a rising awareness concerning the environment.

> A comprehensive programme for European environmental policy had emerged from an initial series of more or less 'coincidental' and non-coordinated activities. In legal terms, this programme still relied on its trade policy foundations, but with regard to its political aims it had increasingly freed itself from purely economic motives. Even if environmental policy formally could only be substantiated as trade policy, on the informal level environmental policy goals had increasingly come to the fore as the motivation for joint environmental measures.
>
> (Knill and Liefferink, 2007, pp.9-10)

Therefore, another reason for the development of environmental policy within the EU was growing environmental awareness. Added to the environmental awareness of the period was the recognition that most of the environmental problems and pollution in particular were cross-boundary in nature. Many environmental problems do not only affect their place of origin but are transferred to other regions through wind, water and etc. This issue has been brought to public attention with the fact that "the acidification of Scandinavian lakes" and the concomitant "decline in the fish stock" were actually not the results of air pollution generated by Sweden but countries such as the UK (Knill and Liefferink, 2007, p.4-5). As the problem was transnational in nature, it had to be dealt with internationally. Thus, it should be noted that one of the chief reasons of developing environmental policy within the EU was the need to adopt a concerted response to transnational environmental problems as the EU was "a more appropriate regulatory arena" (Wurzel, 2008, p.70).

Another important reason behind the development of EU environmental policy was the commitment made by the member states in 1957 to increase the living standards

of the peoples of the EU (Treaty of Rome, 1957, Article 2). Knill and Liefferink (2007, p.5) argue that the "qualitative" as well as the "quantitative" interpretation of this Article caused "the improvement of the state of the environment" to be considered "among the goals of the Community". In addition to that, Wurzel (2008, p.71) argues that environmental measures led to the development of a policy area through which the EU would gain a "human face". Finally, it should be noted that the EU has introduced environmental policies also due to the national and international pressure exerted by the environmentalist groups to make governments and the international community more environment-oriented in their policies. As a result, "governments felt the need to initiate a coherent response" (Hildebrand, 2005, p.28).

As the initial moves and the reasons behind the development of EU environmental policy reveal, environmental concerns were less an agenda than trade concerns in the first phase of EU environmental policy. Most importantly, there was no explicit legal basis for EU environmental action until the SEA (1986). So, a new phase of EU environmental policy started with the adoption of the SEA, where the EU established legal competence in the field of environment.

### 2.1.3. Single European Act and the Establishment of a Legal Basis for Environmental Policy (1987-1992)

The SEA[80] was a landmark in the development of EU environmental policy as environmental policy became one of the formal policy areas of the EU. This meant that EU action on the environment needed no longer to be based on trade policy and the related Article 235 of the EEC Treaty. The newly introduced Articles 130r, 130s and 130t laid down the aims and the decision-making procedures of EU environmental policy as well as further measures that can be taken by the member states. In addition, Article 100a allowed for decisions to be taken by qualified majority voting (QMV) if the issue is related to the completion of the single market. This Article is also related to environmental measures. Before proceeding with the new environmental chapter and its

[80] For the full text of the SEA, please visit the Eur-Lex website (http://eur-lex.europa.eu/en/treaties/index.htm).

implications for the development of environmental policy however, a few words need to be expressed about the reasons for the adoption of the SEA.

The SEA was the first revision to the founding treaties and its major aim was to undertake the necessary institutional reforms to complete the single market. The EU had the goal of achieving the single market from its inception. However, this goal was not realized due to the difficulty of harmonizing national standards mainly because of the strict decision-making mechanism and the rule of unanimity in the EU. However, by the 1980s, the costs of the non-completion of the single market increased as the EU was facing hard competition from American and Japanese industries. Thus, the EU had to complete the single market so that it would not lose further markets vis-à-vis the American and Japanese economies (Budak, 2000, p.270; Knill and Liefferink, 2007). In addition to this, the enlargement of the EU to the three Mediterranean countries, particularly Spain and Portugal, had the potential to halt down the speed of economic integration due to the difficulty to reach unanimous decisions with even more member states (Knill and Liefferink, 2007, p.12). Therefore, it should be stressed that the principle aim of the SEA was to proceed with economic integration.

Nevertheless, the political leaders in the way to the adoption of the SEA showed determination to include environmental policy in the formal policy areas of the EU, which according to Knill and Liefferink (2007, p.13) had three basic reasons. Accordingly, the first reason is the recognition on behalf of the member states that different environmental standards were one of the principle causes of the non-achievement of the CM. Second, via incorporating the new chapter on the environment, the EU actually "only confirmed in legal terms what had already been accomplished *de facto* in the preceding years" (Knill and Liefferink, 2007, p.13). Third, the interests of the two European institutions, the Commission and the EP, in part rested upon "gaining new capacity for action vis-à-vis the member states", which led them to pursue ways to increase their "political influence by enhancing their environmental policy authority" (Knill and Liefferink, 2007, p.13).

All in all, by the adoption of the SEA and the further developments in the environmental realm, the EU "moved from providing little more than a loose framework for the development of common environmental policies, to being a firm institutional platform for the formulation of such policies" (Liefferink *et al.* 1993, p.4). The development that enabled this transformation was most definitely the legal basis created with the SEA for environmental policy and the concomitant establishment of EU competence in the environmental realm.

#### 2.1.3.1. The New Chapter on the Environment

The environmental chapter added to the SEA involved three main Articles. Article 130r laid down the objectives[81] and principles[82] of EU environmental policy. The principles of EU environmental policy had first been laid down in the First EAP, yet their implementation had so far been less than perfect (Knill and Liefferink, 2007). Furthermore, Article 130r brought forward the principle of subsidiarity for EU environmental policy, meaning that the EU will take environmental action only if that action can be best attained at the EU level. This principle again had already been enshrined in the First EAP (Knill and Liefferink, 2007, p.15).

Apart from these objectives and principles, Article 130r also obliged the EU to consider the 'available scientific and technical data', different environmental conditions within the EU, 'the potential benefits and costs of action or lack of action' and 'the economic and social development of the Community as a whole and the balanced development of its regions' in taking environmental measures. This sub-paragraph has been criticized for creating leeway for less ambitious environmental policies at the EU level (Budak, 2000). Article 130t [83] allows member states to follow higher

[81] According to Article 130r (SEA), the objectives of EU environmental policy are:
- To preserve, protect and improve the quality of the environment;
- To contribute towards protecting human health;
- To ensure a prudent and rational utilization of natural resources.

[82] According to Article 130r (SEA), the principle of EU environmental policy are preventive action, proximity, polluter pays and environmental policy integration.

[83] The protective measures adopted, in common pursuant to Article 130s (SEA) shall not prevent any Member State from maintaining or introducing more stringent protective measures compatible with this Treaty.

environmental standards. Still, this is not an Article that gives the member states complete freedom in designing their environmental policies, as the goal of the completion of the single market is placed above any trade restrictions based on environmental standards.

In terms of decision-making in environmental issues, Article 130s and Article 100a are relevant. Previous to the SEA, all environmental measures based on Articles 100 and 235 of the EEC Treaty were taken by unanimity. Article 130s did not totally change this rule. However, it opened a window for the Council of Ministers to decide (also unanimously) on which issues to take decisions using QMV. Furthermore, Knill and Liefferink (2007, p.16) argue that Article 130s "is only significant in cases where there is no other treaty basis for action". However, Article 100a sets the right for the Council of Ministers to decide with QMV in every matter relating to the completion of the internal market. In addition, the co-operation procedure introduced at the SEA in areas where the QMV was to be used, increased the role of the EP in the issues that fall under this category, environmental policy being an example. This had important implications for the further development of EU environmental policy. The increase of the role of the EP through the co-operation procedure has also increased the chances of the European people "to have more of an impact on the process of environmental policy formation" (Hildebrand, 2005, p.33).

When the general implications of the SEA on EU environmental policy are analyzed, the foremost thing to emphasize is the new legal basis created for environmental policy. From the SEA onwards, the EU had the competence to take environmental measures which do not have to be related to trade issues. Knill and Liefferink (2007, p.18) argue that the 1990 Directive concerning "the free access to environmental information" is a prominent example of the use of such competence. In addition, the introduction of QMV, albeit related to the completion of the single market, made environmental measures that are also related to the single market to be taken more easily. However, as Knill and Liefferink (2007, p.19) argue, it is not very easy to assess the realization of these theoretical arguments regarding the impact of decision-making

procedures on actual environmental policy as "there are no systematic findings, only investigations into individual areas".

Von Homeyer (2009, p.11) argues that the period between 1987 and 1992 represents an "internal market regime". The main motive behind environmental measures taken during this period is competitiveness. Leader states that have introduced higher environmental standards want to "upload" these measures to the EU level in order not to lose competitive edge (von Homeyer, 2009, p.12). Furthermore, similar to the pre-SEA period, the main means to achieve common environmental standards during this period is harmonization measures, which "frequently take the form of legally binding, top-down regulation" (von Homeyer, 2009, p.13). However, there are also signs that this approach will be changed with a more flexible approach to environmental policy-making.

Therefore, it can be argued that the SEA was a major turn for EU environmental policy. The publication of the Fourth EAP in 1987 further increased this impact (McCormick, 2001, p.58). As the EU acquired new environmental policy-making authority, the Commission also became an important address in furthering this competence and providing new justifications for environmental policy which can be captured by the policy of ecological modernization (Baker, 1997a). An analysis of the Fourth EAP will reveal that from the mid-1980s onwards, the environmental policy strategy of the EU has been shifted towards "a more integrated approach", with a particular emphasis on NEPIs instead of regulatory and top-down instruments (Hey, 2005, p.21).

#### 2.1.3.2. The Fourth Environmental Action Programme (1987-1992)

The Fourth EAP[84] is formulated with an eco-modernist understanding (Baker, 1997a). It emphasized the role environmental protection can play in fostering economic growth. Indeed, it took environmental protection to be fundamental to economic and

[84] For the full text of the Fourth EAP, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:41987X1207:EN:HTML).

social development (Budak, 2000, p.235). Starting with the reminder from the 1985 European Council decision, the Fourth EAP stated that "environmental protection policy can contribute to improved economic growth and job creation", which are central themes in the ecological modernization theory (CoM, 1987, Article 1.6).

Furthermore, as another central theme in ecological modernization theory, the Fourth EAP also tried "to introduce a more holistic approach to environmental protection" (Barnes and Barnes, 1999, p.38). Even though EPI was mentioned in the Third EAP, within the framework of the Fourth EAP, "for the first time, environmental protection was not perceived as an additive, but rather as an integrated activity within the whole production process" (Hey, 2005, p.21). In addition, the Fourth EAP made it clear that EPI lied at the heart of "economic and social development", as these goals would not be achievable without the consideration of "environmental problems" (Johnson and Corcelle, 1992, p.309). So with the reformulation of the environment-economy 'dichotomy' and the heightened emphasis on the importance of EPI, the Fourth EAP can be argued to be the main reorientation of the EU towards ecological modernization. The role of the Commission in bringing about this shift in ideology should also be stressed:

> In adopting this ideology the Commission stated its belief that future economic development could be linked with obtaining competitiveness through higher standards of pollution control and the production of environmentally safer products and processes. Thus policies for economic development and policies for the protection of the environment came to be seen as complementary rather than as rivals.
>
> (Baker, 1997a, p.96)

It should also be noted that this approach was complemented with "a new regulatory approach for environmental policies" that was promoted by the Commission from the end of the 1980s onwards (Hey, 2005, p.22). This difference in environmental policy strategy will however, be more observable from the Fifth EAP onwards (Knill and Liefferink, 2007, p.19). Suffice to say here is that this would serve as additional evidence to the adoption of ecological modernization strategy, as one of the cornerstones of this theory is its emphasis on the use of NEPIs, which are more flexible,

market-based and incentive oriented. Therefore, with the Fifth EAP, the EU will shift emphasis from the previously dominant command-and-control strategy for environmental policy to a more flexible and market-oriented policy system.

Apart from the emphasis on notions associated with the ecological modernization theory, the Fourth EAP once more emphasized the objective and principles of EU environmental policy that were mentioned in the previous EAPs. Furthermore, the Fourth EAP also paid attention to the implementation deficit of the EU environmental policies in the member states and called for action to remedy this shortcoming (Barnes and Barnes, 1999, p.40).

Therefore, during 1987-1992, EU environmental policy established itself firmly within the Treaty system and this influence has been enhanced by the publication of the Fourth EAP. The period is characterized by the priority given to the completion of the single market by 1992. The inclusion of an environmental chapter to the SEA and the QMV decision-making procedure introduced for issues relating to the completion of the single market all have important results for EU environmental policy. More importantly, however, the EU started to justify its environmental policy objectives not by purely trade related arguments, but also by the main arguments of ecological modernization theory during this period. Accordingly, the positive relationship between environmental protection and economic growth, the emphasis on EPI and the shift towards a new regulatory approach and the prescription for the use of NEPIs all attest to this shift. The following periods will witness of a consolidation of this new policy understanding, complemented with an embracing of sustainable development as a guiding principle of EU environmental policy.

### 2.1.4. EU Environmental Policy from 1992 onwards

Environmental policy of the EU from 1992 onwards can be characterized by two major and related trends. The first is the shift of emphasis towards the achievement of sustainable development. Second is the adoption of the ecological modernization policy strategy to achieve sustainable development within the EU (Baker, 2007). The

discursive shift to the reinforcing relationship between environmental protection and economic growth is characteristic of EU environmental policy endeavors from the 1990s onwards. Furthermore, the discrediting of traditional command-and-control regulations, the rise of NEPIs, the emphasis on EPI and the importance attached to eco-innovation all represent the elements of this new approach to environmental policy within the EU. These elements are also the core elements of the ecological modernization policy strategy. Therefore, from 1992 onwards, the EU has tied itself firmly to the achievement of sustainable development, however, in its weak version, namely ecological modernization. Even though there are signs of such a shift in the Third and more importantly Fourth EAPs, this shift is most clear in the Fifth EAP published in 1993. Before proceeding with the implications of the Fifth EAP, the Treaty of Maastricht should be elaborated. The Treaty of Maastricht is an important step in this shift, as the EU for the first time made reference to the principle of sustainability.

#### 2.1.4.1. The Treaty of Maastricht (1992)

The Treaty of Maastricht[85] had important implications for EU environmental policy. The use of the QMV was increased with a change to Article 130s and the decision-making powers of the EP were concomitantly increased in most of the environmental policy fields.[86] As such, von Homeyer (2009, p.14) argues that Article 130s "allowed for a shift away from the regulatory harmonization approach of the internal market regime towards the integration regime's focus on economic efficiency and environmental effectiveness". The Treaty of Maastricht also dedicated the EU to become an international environmental actor with the changes made to Article 130r[87] (McCormick, 2001, p.62). It also paved the way for the creation of the Cohesion Fund to provide fiscal assistance to projects related to environment and transport

[85] For the full text of the Treaty of Maastricht, please visit the Eur-Lex website (http://eur-lex.europa.eu/en/treaties/index.htm).

[86] Areas where a derogation exists from the QMV rule are "provisions primarily of a fiscal nature; measures concerning town and country planning, land use with the exception of waste management and measures of a general nature, and management of water resources; measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply" (TEU, 1992, Article 130s)

[87] "Promoting measures at international level to deal with regional or worldwide environmental problems" was added to Article 130r as an objective of EU environmental policy (TEU, 1992, Article 130r).

infrastructure, which will be of great environmental importance after the completion of the single market (TEU, 1992, Article 130d).

Though set as a general principle, the principle of 'subsidiarity'[88] enshrined in the Treaty of Maastricht has also important environmental implications. The subsidiarity principle was first introduced with the First EAP. It basically prescribes the EU not to take excessive action, but only to act when it is appropriate to do so. Connelly and Smith (2003, p.276) argue that there are two possible directions that the principle of "subsidiarity" can lead EU environmental policy into. If accompanied by "increased deregulation", subsidiarity "could lead to a flexible approach to environmental protection that is sensitive to local environmental conditions – perhaps to an increase in the effective use of market-based instruments and genuine self-regulation" (Connelly and Smith, 2003, p.276). On the other hand, if the member states use the principle to object overriding EU regulation, than it might be a pretext for not acting in the field of environment (Connelly and Smith, 2003, p.277). This in turn might lead the EU "doing less" for environmental policy (Flynn, 1999, p.126).

Collier (1999) points out to the chronological overlap between the popularization of the principle of 'subsidiarity' with the Treaty of Maastricht and the arguments against state intervention that became highly popular with the fall of the Eastern Bloc. The tendency to roll back the state and give more leeway to the private sector via "deregulation" and "liberalisation", coincided with the rise of "subsidiarity", bears the risk that "in some cases national member states will see it as a welcome opportunity to loosen regulatory intervention" (Collier, 1999, pp.91-92). This risk is realized to some extent. Connelly and Smith (2003) argue that the results of the implementation of subsidiarity so far have been negative in terms of the environment:

> Although the principle of subsidiarity can be used to legitimise EU environmental action on the one hand or to strengthen the role of sub-national actors on the other, its effect in practice has

[88] Article 3b (TEU, 1992) defines sustainability as: "In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community".

> tended to be a down-grading of environmental proposals in which a greater scope is left for national interpretations. It has led to repatriation of proposed measures and there has also been a move away from the use of directives towards weaker framework directives and recommendations.

(Connelly and Smith, 2003, p.277)

Apart from the changes to the environmental chapter introduced by the SEA, the Treaty of Maastricht made ample reference to the principle of sustainability, though not exactly using the wording 'sustainable development'.[89] The only direct reference to sustainable development is in relation to developing countries.[90] In fact, terminological confusion about sustainable development continued until the Treaty of Amsterdam when the EU committed itself to the promotion of sustainable development in the legal sense. However, even before the Treaty of Amsterdam, the concept of sustainable development entered into the political discourse of the EU with documents such as the Presidency Conclusions of the 1988 Rhodes European Council[91] and the Fifth EAP (Pallemaerts, 2006, p.23).

Due to the intensive negotiations among the member states during the process that led to the Treaty of Maastricht and the unsuccessful attempt at the injection of the exact concept of sustainable development, Baker (2000, p.311) argues that the use of different terminologies such as "sustainable growth" and "economic and social progress that is sustainable" is not accidental. Furthermore, it has important implications for the implementation of sustainable development within the EU:

> The use of different terminology is of significance for EU policy. First, it increases the possibility of inconsistency in how sustainable development is promoted. Second, it could allow the Union to adopt its old strategy of economic development based on growth and onto which environmental considerations can be grafted… Third, it gives rise to uncertainty with respect to policy objectives. Sustainable growth as a policy goal would seem to uncouple

[89] Article B (TEU, 1992) states that one of objectives of the EU is "to promote economic and social progress which is balanced and sustainable". Article 2 (TEU, 1992) dedicates the EU to "to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment".
[90] Article 130u (TEU, 1992) commits the EU to work towards "the sustainable economic and social development of the developing countries".
[91] "Sustainable development must be one of the overriding objectives of all Community policies" (CoM, 1988, Annex I, para.2).

> environmental management from the more radical social, economic and political changes envisaged by the Brundtland Report and the UNCED process.
>
> (Baker, 2000, pp. 311-312)

Therefore, the EU in a way modified the radical Brundtland formulation of sustainable development and turned its face towards a weaker interpretation of the concept which finds its resonance in the theory of ecological modernization. From the Fifth EAP onwards, this interpretation would become clearer as the EU would more and more emphasize the positive relationship between environmental protection and economic growth, EPI, the role of eco-innovation and the use of NEPIs. Thus, by departing from a strong conceptualization and interpretation of sustainable development, it would opt for its weaker version, namely ecological modernization.

#### 2.1.4.2. The Fifth Environmental Action Programme (1993-2000)

Fifth EAP[92] covers the period from 1993 to 2000. First of all, the Fifth EAP committed the EU to achieve sustainable development. Therefore, the main goal of EU environmental policy became the realization of sustainable development (Connelly and Smith, 2003, p.279). Baker (1997b) argues that the impact of the Rio Summit and the EPI emphasis of sustainable development led the Commission to elevate the concept to an overarching level. As such, the Commission was able to both become an effective international player by acting as a leader "in relation to international efforts to promote sustainable development" as well as responding to the environmental critique of the single market programme through the EPI principle of sustainable development (Baker, 1997b, pp.383-384).

The Fifth EAP states that the word 'sustainable' is used "to reflect a policy and strategy for continued economic and social development without detriment to the environment and the natural resources on the quality of which continued human activity and further development depend" (CoM, 1993a, Article 5). The title of the document,

[92] For the full text of the Fifth EAP, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:41993X0517:EN:HTML).

*Towards Sustainability – A Community Program of Policy and Action in Relation to the Environment and Sustainable Development*, shows that a new direction is tried to be given to EU environmental policy (Budak, 2000, p.243). The document therefore is distinctive compared to the previous EAPs and EU environmental policy in general. Foremost important to be stressed is that the Fifth EAP rests on the rejection of a zero-sum game between environmental protection and economic growth:

> …the priority of the Fourth Action Programme was to make the link between the economy and the environment primarily in the industrial sector, through promoting the policy of ecological modernization. The Fifth Action Programme links environmental protection with the wider concept of sustainable development, to be operationalized across all economic sectors and policy areas.

(Baker, 1997a, p.97)

Such a cross-sector and economy-wide emphasis on the role of environmental protection through the promotion of sustainable development in fostering innovation is a fundamental argument of ecological modernization. The Fifth EAP therefore, tries to insert this new formulation to the core of future EU environmental policy:

> On the question of international competitiveness, the perceived conflict between environmental protection and economic competitiveness stems from a narrow view of the sources of prosperity and a static view of competition. Rather than reduce competitive advantage, stringent environmental requirements can actually enhance it by triggering upgrading and innovation… Turning environmental concern into competitive advantage is one of the objectives of 'Towards Sustainability'.

(CoM, 1993a, Article 4.1)

For the achievement of sustainable development, the Fifth EAP introduces "a new strategy for the environment and sustainable development" (CoM, 1993a) (Table 4):

**Table 4: Key EU Objectives for the Promotion of Sustainable Development**

- *Development of strategies in seven environmental priority areas*: climate change, acidification, biodiversity, water, urban environment, coastal zones and waste.
- *Targeting five key sectors* of environmental policy integration: industry, energy, transport, agriculture and tourism.
- *Broadening the range of instruments* used to promote sustainable development so as not to rely exclusively on legislation: this includes the use of fiscal, market and voluntary policy tools, and the involvement of actors other than regulatory authorities.
- *The application of the principle of shared responsibility*: the promotion of sustainable development is the responsibility of all the different levels of governance (EU, member state, regional and sub-national). It also requires new forms of partnership between economic and social actors and public policy makers.
- Deepening the Community's *international engagement*, particularly with respect to global environmental issues.

**Source**: Baker (2006, p.142)

The adoption of the ecological modernization policy strategy to achieve sustainable development is attested by the above table adapted from the Fifth EAP. Therefore, the EU embraced a weaker version of sustainable development from the beginning of its commitment to the policy. As Pepper (1998, p.3) states, this is maybe foremost the case with respect to the "basic contradiction" created by the simultaneity of the Fifth EAP with the process of the single market, which was a process initiated by the EU "to achieve more growth, more consumption, more trade at a distance and more transport, leading to more roads and pollution".

As mentioned before, the Fifth EAP differs from the previous EAPs in substantial ways. To begin with, EPI which is both attributable to sustainable development and its ecological modernization interpretation, the general idea behind the design of the Fifth EAP, represents a more economy-oriented approach rather than an environment-first approach. Baker (1997a, p.97) argues that in the Fifth EAP, the way set forward to achieve the twin goals of environmental protection and economic development "is achieved through the reduction of the environmental to the economic".

In terms of the range of policy instruments, the Fifth EAP is also a clear move towards the ecological modernization policy strategy. One of the core elements of ecological modernization is the promotion of NEPIs. The traditional form of environmental policy in the EU and its member states have been legislation which is

generally "in the form of command-and-control emission standards, licences, prohibitions or requirements to employ particular technologies" (Bailey, 2003). Accordingly, the prescriptions in the first four EAPs were largely based on "legal instruments" (Johnson, 2004, p.162). This tendency has changed with the Fifth EAP. The Fourth EAP had made it clear that there were serious implementation problems of EU environmental law. Therefore, the Fifth EAP made strong emphasis on the need to cure this implementation problem through the introduction of NEPIs. The traditional legislations and command-and-control type of regulations have been argued to be performing badly in terms of implementation of environmental policy, an argument also made by the Commission in the Fifth EAP (Bailey, 2003, p.42). Command-and-control type of environmental policy is also argued to be "inefficient" as it does not take into account "individual costs of pollution control and prevention, hampers innovation" and is not good in achieving environmental goals due to "implementation and enforcement deficits" (Rehbinder, 1997, p.1). In that fashion, the Fifth EAP prescribed the use of more NEPIs alongside traditional regulatory measures (Philip, 1998, p.261). Therefore, the use of NEPIs such as environmental taxes, tradable permits, environmental charges and other MBIs and VAs have been promoted by the EU and the Commission in particular. A report by the European Environment Agency (EEA) lays down the reasons why MBIs should be used:

> The implementation deficit and the rising cost of environmental measures call for cost-effective solutions in the short term and further savings through technological innovation in the longer term. Market-based instruments help to reduce environmental costs, because they make optimal use of the diversity of economic activities… Market-based instruments leave the choice of environmental technique to the firm.
>
> (EEA, 2006, p.11)

Therefore, the superiority of NEPIs over traditional command-and-control regulation has been continuously stressed within the EU from the 1990s onwards. It should be noted that the regulatory instruments are not discarded with the Fifth EAP, nor their use have been totally abolished. The important thing is the importance attached to the introduction of NEPIs as a way for effective and growth-oriented environmental policy and the shift towards this new policy strategy with the 1990s.

The concept of 'shared responsibility' is also important with respect to the adoption of ecological modernization within the EU. Participation of all the related parties to environmental policy-making is a central theme of both sustainable development as envisaged by the Brundtland Commission and for ecological modernization theory. Indeed, particularly the industry is assumed to cooperate willingly in environmental protection due to prospects for long-term advantages and economic gain. The introduction of NEPIs is thought to trigger the participation of a variety of actors in environmental policy:

> Whereas previous environmental measures tended to be proscriptive in character with an emphasis on the 'thou shalt not' approach, the new strategy leans more towards a 'let's work together' approach. This reflects the growing realization in industry and in the business world that not only is industry a significant part of the (environmental) problem but it must also be part of the solution. The new approach implies, in particular, a reinforcement of the dialogue with industry and the encouragement, in appropriate circumstances, of voluntary agreements and other forms of self-regulation.
>
> (CoM, 1993a, Article 19)

Hence, the concept of 'shared responsibility' and the use of NEPIs are mutually reinforcing each other. A positive conceptualization is created on behalf of the private sector as to the common goals of environmental protection and economic activity. Weale *et al.* (2005, p.61) argue that the emphasis on notions such as "shared responsibility" and "partnership" instead of "environmental problems" in the Fifth EAP attests to the adoption of the 1989 DNEPP "approach" in the document. The 1989 DNEPP is known to be one of the first documents that incorporated the elements of ecological modernization in environmental policy (Weale, 1992). Tews *et al*. (2002, p.18) similarly argue that the DNEPP "served as a model for" the Fifth EAP.

> It sought to sketch new institutional structures and to introduce a bottom-up approach to environmental action, focusing on specific actors rather than on European regulatory mechanisms.
>
> (Weale *et al*. 2005, p.61)

It is possible to conclude that the EU leaned increasingly towards policies and discourses associated with ecological modernization in the period following the Fifth EAP. Therefore, the post-1990s witnessed the consolidation of the ecological modernization policy strategy within the EU. As such, the discursive commitment to sustainable development and the policy strategy of ecological modernization became the main features that characterize EU environmental policies after the 1990s (Baker, 2007). This period is also characterized by a decline in the political activism within the EU towards environmental policy.

#### 2.1.4.3. Developments after the Turn of Ecological Modernization

After the initial commitment to ecological modernization in the Fifth EAP, the EU continued to make further discursive and political commitments to the strategy in the following periods. The then Commission President Jacques Delors[93], who was also the main figure behind the adoption of the single market programme, had views concerning the revision of the EU development model. In his proposal to the 1993 European Council Summit in Copenhagen, he argued that the environment has an important role to play in this new path:

- Taking into account the environment will create new jobs
- Taxing scarce natural resources will make it possible to reduce excessive taxes on labour, thus enhancing Europe's economic competitiveness.

(CoM, 1993b, Annex I, Article 7)

Here, it can be clearly seen how the positive relationship between environmental protection and economic growth is presented and established as a crucial step in the 'new model of development' that the EU should pursue. In addition, the market-based instrument, eco-taxes, is proposed as a way to increase competitiveness, through employment creation. Countries that have developed a well-established

[93] Jacques Delors (1925- ) is an important figure in the history of European integration. He served as the Commission President for ten years (1985-1995), during which the EU experienced a leap forward in terms of deepening. He was the main figure behind the design of the Single Market Programme and the EU budgetary reforms. As a social democrat, he was also active in incorporating a social dimension to the Single Market Programme (Hantrais, 2000).

environmental technology base generally create employment in these sectors, generally at a pace faster than the average job creation rate (Schreurs, 2011). Thus, "a double dividend" would be created as both environmental protection and employment would be achieved at the same time (Lundqvist, 2000, p.1). The way to achieve the abovementioned aim rested on "the promotion of a clean technology base" (Baker, 2007, p.306). As a result of this analysis by Delors, the European Council asked the Commission to prepare "a white paper on a medium-term strategy for growth, competitiveness and employment"[94] to be presented by December 1993 (CoM, 1993b).

#### 2.1.4.4. 1993 White Paper on Growth, Competitiveness and Employment

The 1993 White Paper[95] incorporated the elements that were stressed by Delors to the European Council the same year. Lundqvist (2000, p.1) argues that this document gave ecological modernization "another political boost". The White Paper was not directly related to the environment. Nevertheless, it incorporated the core arguments of the ecological modernization policy strategy.

Faced with the challenge of stagnating growth rates and increasing unemployment, the Commission argued that the EU could regain competitive advantage and increase employment via environmental protection. Decreasing taxes on labour and the introduction of taxes on the use of natural resources was proposed as a way to achieve both environmental protection and employment creation (CEC, 1993). Environmental protection coupled with increased employment, the so-called 'double dividend', is also a central theme of ecological modernization:

> The ecological modernization concept managed to put an imprint on the European Commission White Paper on economic growth, competitiveness and employment, which gave support to the thesis of a 'double dividend' (environment and employment) from strict and advanced

[94] White Paper is the general name given to the publications by the Commission that aims to explain specific policy proposals.
[95] For the full text of the White Paper: Growth, Competitiveness, Employment – The Challenges and Ways forward into the 21st Century, please visit the official website of the Commission (http://europa.eu/documentation/official-docs/white-papers/pdf/growth_wp_com_93_700_parts_a_b.pdf).

> environmental policies, in particular by lowering taxes on income and increasing them on environment and natural resources.

(Andersen and Massa, 2000, p.339)

Even though the ecological tax reform foreseen by the Commission was never realized[96], the White Paper foresaw that the EU would move into a new development path that would be more labor-intensive and environmentally friendly. The crucial element in achieving such a development was argued to lie in the development of "a new 'clean technology' base":

> A major element of the new development model will be to decouple future economic prosperity from environmental pollution and even to **make the economic-ecological relationship a positive instead of a negative one**. The key for doing this will ultimately lie in the creation of a new 'clean technology' base.

(CEC, 1993, p.147)

The realization of "a new 'clean technology' base" is expected to lead to "increased energy efficiency", "less raw material-intensive products", "a longer product lifetime", "more reuse and recycling" and "improved process technology" through which the EU would increase its economic competitiveness, and "show internationally how sustainable development can be translated into practice" (CEC, 1993, pp.147-148). Here, it becomes even more obvious that the Commission has adopted and proposes the EU to adopt an ecological modernization perspective not only for the environmental sector but generally in all of its policies. Furthermore, the Commission also reiterated the general goal of sustainable development and hence allowed no "contradiction between sustainable development and economic growth objectives, and thus economic objectives do not have to change" (Baker, 2007, p.307). Thus, it adopted a weaker interpretation of sustainable development, the reasons of which will be elaborated later.

The White Paper was not implemented with regards to all of its suggestions (Baker, 2007). Particularly, the Carbon Tax proposal by the Commission created

[96] This issue will be elaborated in the next section.

opposition in most of the member states and could not be adopted. However, the importance of the White Paper actually lied in the fact that "the principles set out within it have begun to permeate into other policy spheres" (Gouldson and Murphy, 1996, p.17). The 1994 Commission communication, Economic Growth and the Environment: Some Implications for Policy Making (CEC, 1994) and the 1994 Parliament Resolution regarding the positive correlation between developing environmental technology and increasing employment attest to this fact (Gouldson and Murphy, 2000; Baker, 2007). Gouldson and Murphy (1996, p.16) argue that even though not directly related to the environment, particularly the 1993 White Paper and the 1994 Commission Communication are even more important in environmental terms than the Fifth EAP.

In the 1994 Communication[97], the Commission linked the quality of the environment with the general concept of prosperity. It further argued that sustainable development and economic growth were not achievable unless one aims at achieving both, which is again a recurring theme that belongs to ecological modernization theory in particular (CEC, 1994, p.3). Other signs of continued political commitment to ecological modernization are to be found in the emphases on EPI, the role of the market forces and NEPIs, demise of regulation and state interference, environmental taxes and the development of clean technologies (CEC, 1994). Baker (2007) argues that the emphasis on devising clean technologies and the importance attached to research and development in fostering such innovation is attributable to ecological modernization:

> The crucial role of technology in the promotion of sustainable development… presents a typical ecological modernisation argument in that it enhances the role given to the economic sector in the promotion of ecological change and gives priority to technical solutions to the environmental *problematique*.
>
> (Baker, 2007, p.307)

Therefore, it can be argued that the ecological modernization policy strategy was adopted by the EU in the early 1990s and was consolidated further with influential

[97] For the full text of the 1994 Communication from the Commission, Economic Growth and the Environment: Some Implications for Economic Policy Making, COM (94)465 final, please visit the Archive of European Integration available at the official website of the University of Pittsburgh (http://aei.pitt.edu/5832/1/000866_1.pdf).

documents such as the Fifth EAP, 1993 White Paper on Growth, Competitiveness and Employment, and others. Before turning to the Treaty of Amsterdam, which committed the EU to sustainable development in the legal sense, one important development that took place in 1994 should also be mentioned. In 1994, EEA was established. Knill and Liefferink (2007, p.22) argue that this meant "an additional reinforcement and institutionalization of EU environmental policy". The duty of the EEA is to assist the EU and the member states in their efforts to achieve a better environment, incorporate the environment into their economic policies, achieve sustainability, and to collect and disseminate environmental data.[98] Such a gathering of environmental information at the European level was an important step in terms of a coherent environmental policy-making within the EU.[99]

The Treaties of Amsterdam (1997), Nice (2001) and Lisbon (2007) that were signed after the Treaty of Maastricht did not bring as far-reaching changes in environmental policy as the SEA and the Treaty of Maastricht. Therefore, at the expense of breaking the chronological sequence, these Treaties will be analyzed together. The Lisbon Strategy (2000), the European Union Sustainable Development Strategy (EU SDS) (2001) and the Sixth EAP will be elaborated after this analysis.

#### 2.1.4.5. EU Environmental Policy after the Treaty of Maastricht

The Treaty of Amsterdam[100] (1997) is of importance for EU environmental policy, though as path-breaking as neither the SEA nor the Treaty of Maastricht (McCormick, 2001). The most important development is that the Treaty of Amsterdam established "balanced and sustainable development" as a principle (Preamble), and as an objective (Title I, Article 2). The Treaty of Maastricht had a mixed use of terminologies, whereas the Treaty of Amsterdam used the exact wording 'sustainable development' and made it the cornerstone of EU environmental policy. Another

[98] For more on EEA, please visit their official website (http://www.eea.europa.eu/about-us/who).
[99] The gathering and dissemination of environmental data is achieved via EIONET (European Environment Information and Observation Network). For more on EIONET, please visit their official website (http://eionet.europa.eu/).
[100] For the full text of the Treaty of Amsterdam, please visit the Eur-Lex website (http://eur-lex.europa.eu/en/treaties/index.htm).

important contribution was the reinforcement of the principle of EPI[101] which led to the "general strengthening of environmental policy concerns vis-à-vis other policy areas of the Community" (Knill and Liefferink, 2007, p.22). The Treaty of Amsterdam also abolished the 'cooperation procedure' [102] introduced by the SEA, which is also important for environmental policy:

> Decisions on new environmental laws under Article 130s had been subject until then to the cooperation procedure, but those on the approximation of laws concerning the internal market under Article 100a had been subject to the codecision procedure, leading to the risk of conflict over which Article should be the legal basis for action on the environment. Amsterdam all but eliminated the cooperation procedure, reducing the risk of disagreements on the legal base.
>
> (McCormick, 2001, p.63)

McCormick (2001, p.63) argues that the process that led to the Treaty of Amsterdam is important foremost not with respect to the "constitutional changes" it brought about but with respect to the "normative changes" that took place:

- The new emphasis placed by the Santer Commission (1995-1999) on consolidating existing activities rather than launching new initiatives.
- Greater awareness within the Commission of the need to ensure coordination among the DGs with an interest in environmental issues.
- Concerns within the Commission over the implementation of environmental laws and the establishment of the EU Network for the Implementation and Enforcement of Environmental Law.
- Prospective EU enlargement to CEECs leading to the launching economic assistance programmes that also have an environmental dimension.
- Shift away from traditional command-and-control approach towards new instruments.
- Commission opting for a more strategic approach to environmental problems and moving towards an integrated approach to environmental management.

(Adapted from McCormick, 2001, pp.63-68).

[101] "Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development" (Treaty of Amsterdam, 1997, Article 6). Here, the importance of this reinforcement lies in the additive phrase of 'policies and activities referred to in Article 3'. Article 3 of the Treaty of Amsterdam lists all the activities that should be undertaken by the EU in order to achieve the objectives of the EU as laid down in Article 2.

[102] 'Cooperation procedure' is a decision-making procedure introduced by the SEA that increased the decision-making powers of the EP. The Treaty of Maastricht further increased EP's decision-making powers by introducing the 'co-decision procedure'. For details of these decision-making procedures, please see Hix, Simon (2005). *The Political System of the European Union*. 2nd Ed. Palgrave Macmillan.

When thought of in relation to the adoption of the ecological modernization policy strategy from the early 1990s onwards, the observations made by McCormick (2001) lend evidence to the EU commitment to EPI and NEPI's, among other important normative developments. After the Treaty of Amsterdam, the Treaty of Nice[103] (2001) and the Treaty of Lisbon[104] (2007) were adopted by the EU. The Treaty of Nice did not have important consequences for the environment. Its basic goal was to prepare the EU for its Eastern enlargement in terms of institutional reform. However, Jordan and Fairbrass (2005) argue that some aspects of the treaty are important for EU environmental policy, such as the discussions regarding environmental taxation. The discussions proved no solution in terms of the decision-making rules regarding taxation but the Treaty of Nice nevertheless incorporated a declaration which stated that the EU should lean more towards "incentives and instruments which are market-oriented and intended to promote sustainable development" (Jordan and Fairbrass, 2005, p.43). This was a reiteration of the commitment to one of the fundamental elements of ecological modernization to achieve sustainable development within the EU, namely NEPIs.

Finally, the failed attempt at establishing a Constitution and the Treaty of Lisbon need to be elaborated to finalize the analysis of the environmental aspects of EU treaties. The Constitution was signed in 2004 among the member states of the EU. However, it failed to come into effect due to the no votes in the French and Dutch referenda in 2005. However, if it had been ratified and came into effect, its major implication for environmental policy "would have been the revision of the system of QMV" (Knill and Liefferink, 2007, p.22). The Constitution was then replaced with the Treaty of Lisbon (2007), whereby the elements that caused to the no-vote in the Constitution were removed. These changes were not substantive. The most important development with the Treaty of Lisbon is the changing of the decision-making procedures within the EU that will come into effect in 2014. Accordingly, the 'ordinary legislative procedure' would become the norm in EU policy-making, which implies the

[103] For the full text of the Treaty of Nice, please visit the Eur-Lex website (http://eur-lex.europa.eu/en/treaties/index.htm).
[104] For the full text of the Treaty of Lisbon, please visit the Eur-Lex website (http://eur-lex.europa.eu/en/treaties/index.htm).

extension of the scope of the co-decision procedure introduced with the Treaty of Maastricht. The results of this change remain to be seen.

Before proceeding with important documents with respect to sustainable development and ecological modernization within the EU in the last decade, some words need to be said on the general characteristics of EU environmental policy after the 1990s. Above all, this period is essential in terms of legalizing the general principles and objectives of EU environmental policy. The adoption of the principle of 'sustainable development' as a frame of reference for EU environmental policy is also crucial for the future direction and goal of EU environmental policy. However, despite the "continual legal and institutional expansion and reinforcement of the basis for environmental policy action", Knill and Liefferink (2007, p.23) argue that there has been "a cooling off of the environmental policy boom" when compared to the 1980s. According to Knill and Liefferink (2007), two reasons lie beneath. First, they argue that the "political significance" of the environment has fallen both at the EU and at the member state level due to economic slowdown, high unemployment, and competitiveness concerns. Related to this, the second development that led to this "cooling off" is the reorientation of the Commission and hence EU environmental policy towards less command-and-control measures and more NEPIs (Knill and Liefferink, 2007, p.23). Therefore, with the slowdown of EU environmental activism, there is a rise in incentive-based, flexible and market-oriented environmental policy-making approaches which can also be observed in the strategies and documents of the EU in the new millennium.

Börzel (2011) argues that there has been a loss of appetite in the EU in ever adopting new and innovative environmental policies due to the implementation problems experienced in the member states. She cites the example of the EIA Directive which forced Germany to reform its entire environmental law, which dates back to the 19$^{th}$ century, and restructure its entire environmental administration. Thus, one single directive has created problems for Germany for more than twenty years. Similarly, the implementation of the 'Urban Waste Water Treatment Directive' has cost the UK four billion pounds (Börzel, 2011). Börzel (2011) further argues that this loss of appetite

coincided with the end of the Cold War and the consequent accession of the Central and Eastern European Countries (CEECs) that placed economic development concerns more on the EU agenda.[105]

In addition to the abovementioned developments and concerns, there is also a clear trend in EU environmental policy after 2005, which Wurzel (2008, p.76) calls "selective activism". In this period, the EU assumed a leading role in international environmental policy with its efforts for the coming into effect of the Kyoto Protocol (in 2005 with the Russian ratification) and the adoption of "the world's first supranational carbon dioxide emissions trading scheme"[106] (operational in 2005) (Wurzel, 2008, p.76). As such, it can be argued that EU activism has intensified in a field whose prescriptions are compatible with the ecological modernization policy strategy. Emissions trading is one of the NEPIs, which is market-based and creates incentives for the producers to pursue less-emitting technologies and economic activities. Hence, it clearly fits in the ecological modernization policy strategy of the EU. Furthermore, the Commission has published a *Green Paper*[107] *on Market-Based Instruments for Environment and Related Policy Purposes*[108] in 2007 arguing that MBIs are "flexible" and "cost-effective" and their use should be further promoted (CEC, 2007, p.2). Therefore, ecological modernization policy strategy is still in effect in EU environmental policy.

#### 2.1.4.6. Lisbon Strategy (2000) and the Sixth Environmental Action Programme (2002-2012)

Towards the end of the 1990s, the increasing pace of globalization, the competitive pressures it has brought about, unemployment and concerns regarding the

[105] Börzel (2011) argues that in the case of Germany, German unification made a major blow to Germany's environmental pace-setting role.
[106] The European Union Emissions Trading Scheme (EU ETS) will be dwelled upon in detail in the following section in assessing ecological modernization within the EU.
[107] Green Paper is the general name given to the publications by the Commission that aim to initiate a discussion with EU institutions and the public regarding policy proposals. A Green Paper might be followed by a White Paper.
[108] For the full text of the Green Paper on Market-Based Instruments for Environment and Related Policy Purposes, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0140:FIN:EN:PDF).

innovative capacity of the EU all culminated in the need to devise a new development strategy that would respond to the abovementioned concerns. Ecological modernization policy strategy incorporated these concerns in the environmental realm, which emphasized the correlation between environment and economy and particularly within this context, the role (environmental) technology and innovation could play in elevating Europe to the top-rank in the world development ladder. Nevertheless, such a vision needed to be developed as a more overarching framework.

This concern formed the basis of the Lisbon Strategy that was declared in 2000, whereby the EU adopted a "new strategic goal" to be achieved by 2010: "to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion" (CoM, 2000, para.5). This goal was to be achieved through research and development, technological innovation, reform of the European social model and macro-economic policy reform. With this strategy, the EU opted for a growth-oriented future, albeit a sustainable one.

Baker (2007) argues that this turn towards a more growth-oriented and competition based economic model has fed the Sixth EAP. Indeed, Baker (2007, p.307) argues that the "Sixth EAP was designed to support the Lisbon Strategy" which according to her "is further evidence" to the dominance of the ecological modernization policy strategy particularly in the Commission. The following excerpt from the Commission Communication regarding the Sixth EAP supports this point:

> If we can support and encourage the development of a greener market place, then business and citizens will respond with technological and management innovations that will spur growth, competitiveness, profitability, and job creation. A progressive environmental policy can thereby contribute to the objective of the Lisbon European Council conclusions of making the EU the world's most competitive knowledge-based economy.
>
> (CEC, 2001a)

The Sixth EAP[109] was adopted in 2002 and covers the period until 2012. It is mainly based on the general principles and priorities of the Fifth EAP, and the ecological modernization policy strategy it has adopted. Nevertheless, there are some new important emphases of the Sixth EAP that are worth analyzing. Connelly and Smith (2003, p.284) argue that it has "a more strategic approach". First, as mentioned above, the Sixth EAP established environmental policy as an important tool to achieve the Lisbon Strategy, which is growth-oriented. Furthermore, the Commission established clear links between the role environmental protection can play and the achievement of the economic growth objectives foreseen in the Lisbon Strategy.

Second, the Sixth EAP set down four priority areas which are climate change, nature and biodiversity, environment and health and quality of life, natural resources and wastes (CEC, 2001a). These issues were also mentioned in the Fifth EAP. However, increased emphasis was placed on these topics with the Sixth EAP. Particularly important here is the fight against climate change. This issue has been one of the policy fields of the EU where the policy instruments associated with ecological modernization were utilized to a great extent, such as tradable permits. More on this will be elaborated in the following section.

Third, in setting the principles and overall aims of the Sixth EAP, specific emphasis is placed on "achieving a decoupling between environmental pressures and economic growth" through the polluter pays, precautionary and rectification of pollution at source principles (CoM, 2002). The decoupling argument is one of the core elements of ecological modernization. The EU made reference to this argument in the Sixth EAP, whereas the Fifth EAP had no reference as such.

Fourth, the Sixth EAP emphasizes the need to bring the private sector and the consumers more into the environmental policy realm with the general aim of 'greening the market' (CoM, 2002). The involvement of business in environmental policy is not a novel theme. Nevertheless, there is increased importance attached to business

[109] For the full text of the Sixth EAP, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:242:0001:0015:EN:PDF).

involvement in the Sixth EAP. An innovative aspect however, regards the inclusion of the citizens as new environmental actors through the informed choices they are supposed to make in the market place in favor of greener products. This emphasis has great resonance with the third genre of ecological modernization theory which among other things, emphasized the importance of consumption in achieving ecological modernization. Therefore, with the importance attached to consumer choices (as could be understood from its extended title Our Future, Our Choice), the Sixth EAP is an important document that further commits the EU to ecological modernization.

Fifth, the Sixth EAP dwells upon the importance of implementation of EU environmental policy, an outstanding deficit revealed by the analysis of the success of the Fifth EAP (Connelly and Smith, 2003, p.284). Therefore, strong emphasis is placed in the Sixth EAP on the better implementation of the *environmental acquis* both in the existing member states and also in the candidate CEECs that would become members soon. Finally, the Sixth EAP makes further iterations regarding the commitment of the EU to EPI and the use of NEPIs that were also stressed in the previous EAPs. The EAPs discussed so far are crucial documents in providing the EU with strategic goals and future frameworks for action in the environmental sphere. With the 1990s, increased emphasis is placed on the achievement of sustainable development. The EU SDS that was declared in 2001 is a reflection of this emphasis.

#### 2.1.4.7. EU Sustainable Development Strategy

The EU SDS[110] is prepared by the Commission as the Helsinki European Council of December 1999 asked the Commission "to prepare a proposal for a long-term strategy dovetailing policies for economically, socially and ecologically sustainable development" which was also deemed to "serve as a Community input for the ten year review of the Rio process scheduled for 2002", namely the Johannesburg Summit (CoM, 1999, para.50). Therefore, the document is aimed to give a 10-year vision to EU sustainable development policies as well as to give the EU a coherent

[110] For the full text of the EU SDS (2001), please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0264:FIN:EN:PDF).

voice in the Johannesburg Summit. It builds on the recognition that the Lisbon Strategy declared in 2000 lacked an environmental vision and there is the need to supplement this strategy with an environmental perspective as also emphasized in the 2001 Stockholm European Council (CEC, 2001b). The EU SDS was agreed in the Göteborg European Council[111] in 2001, which according to Pallemaerts and Azmanova (2006, p.7) was the time when "the political debate on sustainable development in the EU reached its climax".

The EU SDS thus places equal emphasis on the three dimensions of sustainable development attested with the argument "that in the long term, economic growth, social cohesion and environmental protection must go hand in hand" (CEC, 2001b, p.2). However, Wurzel (2008) argues that this might not be reflecting the real situation based on a speech given by the Commission President Barroso:

> The EU's 2001 sustainable development strategy gives equal weight to economic, environmental and social concerns… However, in early 2005, Commission president Manuel Barroso made it clear that the Commission would pay more attention to economic policy than to environmental or social concerns by likening his role as Commission president to a father who has to pay more attention to a sick child than the healthy children. But only a few months later, Commission president Barroso partly changed his attitude about the need to relegate environmental for more pressing economic priorities by supporting a relatively ambitious EU climate-change policy.
>
> (Wurzel, 2008, pp.75-76)

This move is not surprising as the EU is after all an economy-oriented union and there are ample cases where the economic concerns dominate, rather than others. This is also one of the reasons why the EU has opted for the ecological modernization policy strategy to achieve sustainable development. Besides, the turn of the attitude of the Commission President regarding the climate change policy is also related to the potential economic as well as environmental gains that would be realized due to the innovative potential of the subject. This is one of the reasons why the EU has pursued a very active climate change policy after 2005.

[111] For the full text of the Göteborg European Council Presidency Conclusions, please visit the official website of the Commission (http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf).

The EU SDS defines "the main threats to sustainable development" as GhG emissions, "severe threats to public health", "poverty", "ageing of the population", "loss of bio-diversity" and "transport congestion" (CEC, 2001b, p.4). To combat these threats, the EU SDS proposes to adopt "cross-cutting proposals and recommendations to improve the effectiveness of policy and make sustainable development happen", define "headline objectives and specific measures" to achieve sustainable development goals and follow the implementation and progress of the EU SDS (CEC, 2001b, p.5). The document also brought the necessity for the Commission to present an assessment for all its "major legislative proposals", regarding "the potential economic, environmental and social benefits and costs of action or lack of action" of these proposals (CEC, 2001b, p.6).

Furthermore, the EU SDS made ample reference to the core themes of the ecological modernization policy strategy. Market mechanisms for environmental protection were proposed via the pricing of pollution, which would also trigger innovation. Action, therefore, was declared to give priority to MBIs (CEC, 2001b). Development of innovative and clean technologies was yet another reiteration. Action in this field involved the setting up of the next EU Framework Programme with such an understanding, greening the government and also motivating the private sector towards green purchasing. The EU SDS also committed the EU to a multi-stakeholder environmental policy-making which is also a theme of both sustainable development and ecological modernization (CEC, 2001b).

In 2006, the EU adopted a Renewed EU SDS[112] due to the persistence of "unsustainable trends" such as "climate change", "ageing" and "poverty" (CoM, 2006, para.2).[113] The Renewed EU SDS of 2006 built upon the EU SDS of 2001. The challenges identified are mostly the same. However, there are also new emphases. The EU SDS of 2001 identified GhG emissions, severe threats to public health, poverty,

[112] For the full text of the Renewed EU SDS (2006), please visit the official website of the CoM (http://register.consilium.europa.eu/pdf/en/06/st10/st10917.en06.pdf).
[113] The EU monitors the progress of EU SDS via sustainable development indicators which are grouped under ten themes. For more on this issue, please visit the official website of the Eurostat. (http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators).

ageing of population, loss of bio-diversity and transport congestion as the main challenges to achieve sustainability. There are however seven challenges identified in the renewed strategy:

- Climate change and clean energy
- Sustainable transport
- Sustainable consumption and production
- Conservation and management of natural resources
- Public health
- Social inclusion, demography and migration
- Global poverty and sustainable development challenges

(CoM, 2006)

The different emphases in the Renewed EU SDS relates to internal and external developments. Climate change and clean energy, public health, sustainable transport and poverty were themes that were also stressed in the EU SDS of 2001. Yet, in the Renewed EU SDS of 2006, the EU adopts a global vision concerning poverty, based on the commitments made "with regard to internationally agreed goals and targets" (CoM, 2006, p.20).[114] In addition, due to the enlargement of the EU to mainly poorer member states, it has added social inclusion, demography and migration within the EU to one of the seven challenges for sustainable development. Furthermore, the Renewed EU SDS acknowledged the complementarity between the Lisbon Strategy and EU SDS while at the same time emphasizing the importance of the former as it "provides the motor of a more dynamic economy" (CoM, 2006, p.6). Therefore, even though these two goals seem on an equal footing, the aims put forward by the Lisbon Strategy seem to serve as the main focus of the EU.

[114] These goals refer to the commitments made in international meetings such as the UN Millennium Declaration and the WSSD and aim at bridging the gap between the different levels of economic and social development levels globally. Millennium Development Goals, adopted in 2000, for instance commits all the countries in the world to join forces in the endeavor to achieve eight goals by 2015. These goals are the eradication of extreme poverty and hunger; universal primary education; the promotion of gender equality and the empowerment of women; the reduction of child mortality; the improvement of maternal health; fight against HIV/AIDS, malaria and other diseases; environmental sustainability; and the achievement of a global partnership for development. For more on this issue, please visit the official website of the UNDP (http://www.undp.org/mdg/basics.shtml).

The novelty in the Renewed EU SDS of 2006 is the emphasis on sustainable production and consumption, which is clearly indicated as a major challenge. This was also a major theme in the Sixth EAP. Thereby, with the Renewed EU SDS, the EU aimed at "decoupling economic growth from environmental degradation", greening the production process and the market, increasing the "level of green public procurement" in the EU and to increase the EU's "global market share in the field of environmental technologies and eco-innovations" (CoM, 2006, p.12).[115] To achieve this, the Brussels European Council of June 26, 2006 has asked the Commission to propose a European Union Sustainable Consumption and Production Action Plan[116] (EU SCPAP), which was adopted in 2008. Sustainable consumption and production, as also present in the Sixth EAP, is determined to be one of the main routes to achieve a sustainable development path within the EU, whereas the prescriptions are mostly market-oriented with a clear emphasis on decoupling, the role of innovations and technological development.

The Commission has recently proposed a new strategy for Europe that would replace the Lisbon Strategy. The *Europe 2020 – A Strategy for Smart, Sustainable and Inclusive Growth*[117] was hence adopted by the European Council in March 2010. The renewed strategy rests on the following "mutually reinforcing priorities":

- Smart growth: developing an economy based on knowledge and innovation.
- Sustainable growth: promoting a more resource efficient, greener and more competitive economy.
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.

(CEC, 2010a, p.3)

[115] In 2009, the Commission published a review of the Renewed EU SDS (2006) assessing the future prospects and directions of the strategy. Accordingly, among other things, the Commission has foreseen "greater synergy with the Lisbon Strategy for growth and jobs" as well as "a rapid shift to a low-carbon and low-input economy, based on energy and resource-efficient technologies and sustainable transport and shifts towards sustainable consumption behaviour" (CEC, 2009, p.14).
[116] For the full text of the EU SCPAP, please visit the official website of the Commission (http://ec.europa.eu/environment/eussd/pdf/com_2008_397.pdf).
[117] For the full text of the Europe 2020 Strategy, please visit the official website of the Commission (http://europa.eu/press_room/pdf/complet_en_barroso___007_-_europe_2020_-_en_version.pdf).

As can be observed from the above priorities, the main emphases of the Lisbon Strategy are also present in the new strategy. Different from the Lisbon Strategy, the Europe 2020 Strategy puts forward measurable targets. Accordingly, by 2020, the following "EU headline targets" are specified:

- 75% of the population aged 20-64 should be employed.
- 3% of the EU's GDP should be invested in R&D.
- The "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right).
- The share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree.
- 20 million less people should be at risk of poverty.

(CEC, 2010a, p.3)

In terms of priorities, the Europe 2020 Strategy makes reference to 'sustainable growth' where the primary goal is the creation of 'a more resource-efficient, greener and more competitive economy'. Translating this priority to concrete targets, the action put forward is the achievement of the 20/20/20 climate/energy targets.[118] From these priorities and targets, sustainable development policy of the EU seems to be transformed totally into a strategy of sustainable growth where climate change is chosen to be the primary field of action. This development is in coherence with the ecological modernization policy strategy that is dominant in the EU. With the new strategy, it might even be argued that the ecological modernization policy strategy has reached its peak.[119]

So far, the development of EU environmental policy is analyzed with respect to the legal and institutional arrangements and also with respect to the EAPs and other important documents as regards environmental policy. The main goal of this section was not to develop extensive analyses of specific EU policies, but to demonstrate how

[118] 20/20/20 climate energy targets denote the targets put forward by the European Council in 2007 specified as "to reduce greenhouse gas emissions by 20%, rising to 30% if the conditions are right, to increase the share of renewable energy to 20% and to make a 20% improvement in energy efficiency" (CEC, 2010b, p.2).

[119] The Commission defines 'sustainable growth' based on notions such as 'low-carbon economy', 'new green technologies' and 'efficient smart electricity grids'. For more on this issue, please visit the official website of the Commission (http://ec.europa.eu/europe2020/priorities/sustainable-growth/index_en.htm).

the EU adopted the discourse of ecological modernization to achieve sustainable development. The analysis of the discursive component of the EU ecological modernization policy strategy has been completed. In the following section, concrete policy achievements with respect to the EU ecological modernization policy strategy and the Europeanization of ecological modernization will be the main themes.

## 2.2. ASSESSING ECOLOGICAL MODERNIZATION IN THE EU

The EU has committed itself to the achievement of sustainable development from the 1990s onwards and has opted for ecological modernization policy strategy to achieve this goal particularly from the Fifth EAP onwards. As analyzed previously, "the rhetoric of ecological modernisation and weak sustainability is dominant" throughout the Fifth EAP (Connelly and Smith, 2003, p.282), as well as the Sixth EAP and other strategy documents. As such, the proceeding periods witnessed a consolidation of this strategy.

This argument does not imply that environmental goals are neglected in the EU. Environmental policy has been one of the most developed policy areas of the European integration process. In addition to that, the EU pursues an important international role in environmental policy as well as promoting environmental policy in its relations with the third countries. Following the Fifth EAP, however, the EU committed itself to weak sustainable development in designing its environmental policy. This implies that the EU justified and designed its environmental policy along arguments that environmental policy would trigger economic growth, competitiveness and employment. Why it has done so? The answer to this question lies at the very nature of the European integration process.

First, it should be noted once more that ecological modernization is a theory and policy strategy that was developed in the 1980s foremost with respect to theorizing the changes in the environmental policies of the West European countries, particularly Germany and the Netherlands. Its political upholding and popularity lied in the rejection of the zero-sum game between environmental protection and economic growth. Indeed, continual economic growth was crucial and the basic priority of most of the countries in the world. Therefore, the reason why ecological modernization got so much popularity lays foremost in its potential as an "economic strategy":

> It has helped the promotion of eco-efficiency and environmental benefits. Acceptance of the principle has encouraged industry to be more resource-efficient and has allowed environmental

> protection goals to be positively linked with economic development strategies. This was particularly important at the EU level.
>
> (Baker, 2006, p.140)

With this understanding, the EU increasingly rested its environmental policy "on a notion of weak sustainable development; a conception of ecological modernisation" which is not "surprising" (Connelly and Smith, 2003, p.285). In terms of the European integration process, the importance of economic growth is beyond any conflict as the process started and continued primarily with economic goals and aimed to increase prosperity. In addition to this basic feature of the European integration process, one of the reasons that the EU opted for ecological modernization is "the incremental nature of the policy process" within the EU (Baker, 1997, p.101). Baker (1997, pp.101-102) argues that a distinction can be made between environmental policies that strive to bring change "within the context of existing economic, political and social policy" where "incremental adjustment" becomes the case; and environmental policies that demand more "radical" change. She argues that this distinction has explanatory value in analyzing why the EU interpreted sustainable development in its weaker form:

> Incrementalism makes the chances of successful translation of the commitment to sustainable development into actual policy dependent upon the extent to which the required policy changes can be fitted with existing policy commitments. Policy proposals that fit with the strategy of environmental quality management stand a greater chance of acceptance, while policies that fit more closely with the second, more radical, pattern have little, if any, chance of success. The concept of sustainable development has been interpreted by the Union (and its member-states) to fit within the confines of managerial as opposed to radical policy solutions.
>
> (Baker, 1997, p.102)

This weaker interpretation of sustainable development, namely ecological modernization was adopted not only in the EU but in most of the developed countries during the 1990s. Within the EU context, the Commission was particularly the address of the diffusion of this new understanding. The institution with the competence to propose legislation, the Commission gradually justified its environmental initiatives on the economic rationale behind strict environmental policy. This was particularly the

case in the late 1980s until the mid-1990s when the Delors' Cabinet was in charge (Weale *et al.* 2005, p.77). For instance, the argument that strict environmental protection standards would actually yield higher global competitiveness due to the first mover advantage of the country in determining product standards globally, a central economic argument in favor of environmental protection, was espoused by the then DG Environment, Laurens Brinkhorst as early as 1987 (Weale, 1993, p.208).

Furthermore, the relationship between the EU and the business sector is close and the emphasis of the EU and the Commission on the positive relationship between environmental protection and economic growth is a reflection of this close relationship.[120] Baker (2007) argues that the EU formulates its policies in general and environmental policies in particular in a way not to pose any danger for business profitability. In case of environmental policy, this is attested by the adoption of the ecological modernization policy strategy.

> The promotion of ecological modernisation allows the EU to maintain this transaction relation because, by framing the environmental *problematique* as a business opportunity, it allows the centrality of economic interests to be retained.
>
> (Baker, 2007, p.310)

The above transaction relation can be argued to hold also for some member states as well. Member states who have a competitive advantage in the promotion of green technologies try to impact EU environmental policy in that direction which also leads to an adoption and consolidation of ecological modernization policy strategy at the EU level.[121]

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[120] A distinction shall be made at this point with reference to the industries that profit from the promotion of environmental technologies such as the renewable energy and recycling industries and the industries that profit from the current strategies and find change more difficult such as the automobile, steel and cement industries. The former group of industries lobby strongly and push for strong environmental policies at the EU level (e.g. German renewable energy industry) whereas the latter group of industries might resist such efforts such as the EU level efforts for higher efficiency standards for automobiles (e.g. the German automobile industry) (Schreurs, 2011).

[121] Börzel (2011) argues that the air pollution control policy of the EU was very much driven by countries such as Germany who at the time had already developed technologies to reduce carbon dioxide emissions. Such countries have the double advantage against the countries that do not have the carbon dioxide

Baker (2007, p.311) furthermore questions the reason why the EU commits itself to sustainable development at the "declaratory" level, in the presence of the adoption of the ecological modernization policy strategy. She argues that the latter relates to real politics whereas the former is a commitment that gives the EU a legitimating discourse:

> Sustainable development acts as the meta-narrative, framing and legitimising the integration project. In contrast, the promotion of ecological modernisation is the reflection of the reality of organised power and interest group politics in the EU.
>
> (Baker, 2007, p.313)

Therefore, due to the reasons discussed above, the EU adopted the policy strategy of ecological modernization, with direct internalization of all of its core elements. It has also made ecological modernization the strategy to achieve its foremost goal with respect to environmental policy, namely sustainable development. The previous section demonstrated how the ecological modernization discourse is incorporated in and shapes EU environmental policy. This section has multiple goals. First, an assessment of ecological modernization in the EU will be conducted with respect to the non-discursive, policy components of ecological modernization. Therefore, the actual policy success of ecological modernization in the EU will be analyzed. Accordingly, the process of EPI, the increased use of NEPIs and the efforts to promote technological innovation will be elaborated. This assessment is expected to disclose the success of the ecological modernization policy strategy, beyond pure rhetoric. After this analysis, the section will focus on whether and how ecological modernization is Europeanized in the EU. To do this, a brief summary of the literature on Europeanization and policy transfer will be presented. Afterwards, the Europeanization of EU environmental policy will be analyzed with reference to the policy transfer of NEPIs in the EU.

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standards or the technology to reduce carbon dioxide emissions. British firms for instance had to buy German technology to meet EU environmental standards in this field. Therefore, there is an economic advantage for the countries with high environmental standards to push the EU not only to set high standards but also to promote green industry (Börzel, 2011).

### 2.2.1. Policy Success of Ecological Modernization in the EU

The assessment of the policy success of ecological modernization within the EU requires the analysis of the policy components of ecological modernization within the EU. In that sense, the extent to which the EU has succeeded in realizing EPI, the main policy instruments utilized within the EU that fall under the category of NEPIs and the promotion of environmental technological innovations have to be analyzed in distinct subsections in order to get a full picture. During the analysis, the related directives issued by the EU corresponding to these policy spheres will be the main points of reference. Thereby, the policy component of the discursive shift to ecological modernization will be detected.

#### 2.2.1.1. Environmental Policy Integration

EPI is one of the cornerstones of both the sustainable development policy as formulated by the Brundtland Commission and the ecological modernization theory and policy strategy. The need for EPI comes from the fact that environmental problems are either originated or can be solved via policies in the "non-environmental" fields such as industry, transport and energy (OECD, 2009, p.1). The EU committed its environmental policy to EPI as far back as the First EAP (Jordan *et al.* 2008, p.162). However, the centrality of the principle to EU environmental policy and its implementation were consolidated with the later Treaties and strategy documents of the EU, starting from the Third EAP.

The Treaties signed by the EU give each and every policy and principle hitherto in application a 'legal status'. In that fashion, the principle of integrating environmental concerns to all other EU policies was first given a legal status with the Treaty of Maastricht.[122] Article 130r put forward that "environmental protection

[122] SEA Article 130r also made reference to EPI. It stated that "environmental protection requirements shall be a component of the Community's other policies". This however is much less a commitment that Article 130r of the Treaty of Maastricht where 'must' is replaced by 'shall' and where the exact phrase of 'integrated into the definition and implementation' is used. This is the reason why the Treaty of Maastricht is cited for the establishment of EPI in the legal sense rather than the SEA.

requirements must be integrated into the definition and implementation of other Community policies" (TEU, 1992, Article 130r, 2). This commitment was even more consolidated when Article 6 of the Treaty of Amsterdam elevated EPI to a guiding principle of the EU in general while also establishing its links with sustainable development:

> Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development.

(Treaty of Amsterdam, 1997, Article 6)

EPI was also a central component of the Fifth EAP, where five key sectors were determined for the integration of the environment into the policy-making processes in these areas, namely industry, energy, transport, agriculture and tourism. The increase on the emphasis of EPI not just as an environmental policy goal, but as an overarching policy principle coincided with the rise of sustainable development and also ecological modernization within the EU. The adoption of EPI and its penetration into other policy areas rests on the idea of the compatibility between environmental protection and economic development. This is one of the reasons why it found resonance in EU environmental policy:

> In theory at least, the adoption of this principle of integration began to move the E.U. past the point where it saw environmental protection as a necessary supplement to economic growth and toward a situation where effective environmental protection was recognized as an integral part of (if not a prerequisite for) economic development.

(Gouldson and Murphy, 1996, p.15)

One of the reflections on the adoption of EPI is the 1996 Integrated Pollution Prevention and Control (IPPC) Directive.[123] The IPPC Directive stemmed from the fact

[123] For the full text of the original Council Directive 96/61/EC of 24 September 1996 concerning Integrated Pollution Prevention and Control, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0061:EN:HTML) The IPPC Directive has been amended four times. For the most recent codified version, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:024:0008:0029:EN:PDF).

that industrial production is the reason of a large share of total pollution. With the IPPC Directive, rules and procedures were adopted regarding the permits that industrial installations shall obtain.

The accession of three environmental leader states, namely Austria, Finland and Sweden to the EU in 1995 gave EPI a further political boost (Lenschow, 2005). Their activism and support for the Commission and the European Council to pursue a stronger strategy for EPI resulted in the so-called Cardiff Process, where the European Council adopted the Commission Communication, "A Partnership for Integration"[124] (Jordan *et al.* 2008, p.163). The Cardiff Process takes it name from the arguments put forward in the 1998 Cardiff European Council[125] in terms of realizing the Article 6 of the Treaty of Amsterdam and achieving EPI based on the Commission Communication:

> The European Council invites all relevant formations of the Council to establish their own strategies for giving effect to environmental integration and sustainable development within their respective policy areas.
>
> (CoM, 1998)

As such, the Cardiff Process was an attempt to achieve EPI through sectoral integration. Each Council was necessitated to prepare strategies to realize EPI. It has also necessitated to follow-up the progress in EPI in European Council summits (Baker, 2006, p.149). Even though the Cardiff Process started with the highest political support from the highest political level in the EU, namely the European Council, no real success has followed in terms of the realization of EPI (Baker, 2007; Jordan *et al.* 2008). Most importantly, there was no prime body responsible for assessing the progress towards EPI (Jordan *et al.* 2008, p.165). Furthermore, not all of the Councils reacted very effectively to the call from the European Council.

[124] For the full text of the Commission Communication 'Partnership for Integration – A Strategy for Integrating Environment into European Union Policies' (COM 98 (333)), please visit the official website of the Commission (http://ec.europa.eu/environment/docum/pdf/98333en.pdf).
[125] For the full text of the Cardiff European Council Presidency Conclusions, please visit the official website of the CoM (http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/54315.pdf ).

In addition, some of the action plans prepared for EPI clearly emphasized economic rather than environmental goals. As an evidence to the argument that the EU adopted the strategy of ecological modernization to achieve sustainable development and EPI as a component of this overarching goal, Baker (2007, p.308) argues that the sectoral plans prepared as a result of the demand of the Cardiff European Council present the ecological modernization discourse in its most open form. The exemplary case is the plan provided by the Industry Council:

> It is not surprising therefore that the Industrial Council's EPI strategy, while representing a shift towards a more positive attitude towards the environment (win-win), puts strong emphasis on those instruments and policy areas seen as most compatible with competitiveness. These include emphasis on NEPIs such as voluntary action, market-based instruments, eco-efficiency measures and the promotion of environmental management arrangements.
>
> (Baker, 2007, p.308)

This trend is accompanied by the Lisbon process with its emphasis on growth, competitiveness and job creation. Jordan *et al.* (2008) argue that the Lisbon Strategy adopted in 2000 has pushed EPI to the sidelines. The EU SDS adopted in 2001 is also argued to be a further diversion from EPI which according to Jordan and Lenschow (2010, p.149) is the result of the clash between the "normative" aspects of EPI and "political realities". Jordan and Lenschow (2010, p.149) argue that there is a "tension between normative and positive meanings" attached to EPI within the EU. They argue that this tension became characteristic to the efforts to achieve EPI "as the normative import of EPI came up against hard political realities in the sectors" (Jordan and Lenschow, 2010, p.149). The political realities correspond to the economic priorities of each of the sectors that have to integrate environmental concerns into their policies. These realities have become eminent with the 2000s when the EU committed itself more and more to economic growth. Indeed, these realities have also fed the Renewed EU SDS, with its emphasis on the economic importance of the Lisbon Strategy. This has been the case despite the adoption of some of the most important policy tools of EPI throughout these years. When the EPI tools deployed by the EU are analyzed, one can detect the EU commitment to EPI. However, this commitment does not necessarily imply a full implementation of the principle.

One such instrument is “green budgeting”, which has become to be used more in the 1990s particularly after the publication of the Brundtland Report (Wilkinson *et al.* 2008, p.73-74). Green budgeting concerns the role that public agencies, in this case the EU, could play in bringing about sustainable development. Accordingly, budgetary allocations are decided considering the environmental impact of the funded issue at hand. An example to such green budgeting is the EP’s amendment to the draft 1996 budget:

> The Environment Committee’s key amendment to the draft 1996 budget threatened to put into reserve 50 per cent of the funds for the Structural and Cohesion Funds unless DG Regional Policy produced, by a given deadline, an environmental Code of Conduct governing the future use of the funds. This included the requirement for the proper environmental appraisal, monitoring and *ex post* evaluation of the environmental impacts of projects and programmes, and regular reporting to the Parliament and Council.

(Wilkinson *et al.* 2008, p.81)

There are similar budgetary initiatives handled by the EU to realize EPI such as the conditionality of the funds for “regional and agricultural projects” on the “adequate compliance with the Habitat, Nitrates and Birds Directives” (Jordan *et al.* 2008, p.167). Even though such examples can be detected, Wilkinson *et al.* (2008, p.88) argue that due to the “too ad hoc and uncoordinated a manner” in which the EPI is practiced in the EU, “the coherent integration of environmental considerations throughout all elements of the budgetary ‘life cycle’ is not happening”. Therefore, one important instrument of EPI does not fulfill its basic premises due to a general lack of implementation of EPI. The basic reason behind is the political and economic factors that increasingly sidestep environmental concerns and lead the EU to pursue sustainable development policies with an economic bias.

Another important tool of EPI is policy appraisals, namely “*ex ante*” impact assessments (Hertin *et al.* 2008, p.115). There are types of impact assessments, namely EIA, strategic environmental assessment and regulatory impact assessment. Among these, the mostly used ones in the EU are EIA and strategic environmental assessment. EIA has a longer history in environmental policy, as it became to be a tool of

environmental policy starting with the 1960s, however, some deficiencies of EIA led the policy-makers to opt for strategic environmental assessment as the former "project-level assessment" does not provide the adequate means to decrease the environmental damage realized by the project at hand (Hertin *et al.* 2008, p.115). The latter on the other hand, provides the decision makers with a more holistic perspective and "a procedural instrument for the evaluation of all stages of the decision-making cycle" (Bina, 2008, p.134). It does not substitute for but complement EIA (OECD, 2009, p.2). The EIA Directive was adopted in 1985, whereas the Strategic Environmental Assessment Directive was adopted in 2001 and came into force in 2004.[126] Both are taken to be vital components of sustainable development within the EU. Both directives are central to the aim of decreasing the environmental damage of projects, plans and programmes that are cross-cutting many sectors.

However, not all policies of the EU officially require strategic environmental assessment and Jordan *et al.* (2008, p.171) argue that the EU has opted recently for Impact Assessment (IA) rather than strategic environmental assessment. IA started to be used in the 2000s and has the goal of assessing all new policy proposals in the EU to an environmental analysis. This was first proposed by the Göteborg European Council of 2001 for the effective realization of EU SDS where the Council asked the Commission to insert a "sustainability impact assessment" in all of its "major policy proposals" to cover the three dimensions of sustainable development (CoM, 2001, p.5). This was to replace the "Green Star" system developed in the 1990s where proposed policies that have environmental impacts were requested to "go through a process of environmental appraisal", a policy that has never been "systematically implemented" (Hertin *et al.* 2008, p.120). After this request from the European Council, the Commission presented its proposal in 2002, labeled under IA. Jordan *et al.* (2008, p.170) note that the word "sustainability" was "quietly ditched during internal, inter-DG negotiations".

Despite the rhetorical commitment to EPI and the policy tools devised and utilized to implement it at the EU level, there are doubts as to whether EPI is a success

[126] For more on environmental assessment in the EU, please visit the official website of the Commission (http://ec.europa.eu/environment/eia/home.htm).

or at least the main frame of reference for EU environmental policy. The strong commitment to EPI with the Article 6 of the Treaty of Amsterdam brought about high profile activities at the level of the Commission to translate this commitment into concrete policy achievement. However, the Lisbon Strategy and the strategy documents that followed it privileged growth and competitiveness above the environmental dimension of sustainable development. Apart from the efforts of DG Environment, other sectors have made attempts at "neutralizing" Article 6 as they "gradually become more aware of the potential long-term implications" (Jordan *et al.* 2008, p.172). Therefore, both EPI and other strong implications of sustainable development have been sidelined where the new focus laid down in achieving competitiveness through a strategy of ecological modernization.

> In this sense, the debate in the 1990s (which was essentially about integrating the environment into the sectors) has turned around: now, DG Environment finds itself under growing pressure to fight its corner in a three-way battle with those representing the economic and social pillars of sustainability… Whichever way you look at it, the environmental sector has largely failed to get the sectors to 'own' (let alone implement) EPI.
>
> (Jordan *et al.* 2008, p.172)

Therefore, beyond strong rhetoric, EPI seems to have fallen victim to the more 'overarching concerns' of the EU, namely economic growth, competitiveness and job creation. This does not imply that the EU has abandoned environmental concerns all together. However, beginning with the 1990s, environmental action in the EU can only be justified and also implemented where potentially strong economic advantages are possible. This leads the shared concepts of sustainable development and ecological modernization, such as the EPI, to be implemented in their weaker version.

#### 2.2.1.2. New Environmental Policy Instruments in the EU

NEPIs consist of a variety of instruments. They can be market-based such as taxes and tradable permits, VAs or informational and self-regulation devices such as eco-labels and environmental management systems (Jordan *et al.* 2003c; Knill and Liefferink, 2007). NEPIs have been popularized internationally from the 1980s

onwards. OECD prescribed "more effective use of economic instruments" as early as 1984 (OECD, 1984). Within the EU context, the Fifth EAP adopted in 1993 was the most prominent policy document that prescribed the use of NEPIs. The rise of NEPIs has coincided with the demise of the interventionist state, the command-and-control type of regulations and environmental policies. It is also related to "a neo-liberal, economic reform agenda" (Baker and Eckerberg, 2008, p.19). The use of NEPIs also lends evidence to the ascendance of the policy strategy of ecological modernization, which argues for the market to be the venue for effective environmental policy and for more partnership and shared responsibility in environmental policy-making.

Added to these were the criticisms against the traditional regulatory instruments in terms of the implementation problems they were argued to create. As such, NEPIs were argued to both increase implementation effectiveness and the regulatory capacity of the EU accordingly (Knill and Lenschow, 2000). NEPIs are mostly procedural and differ from the traditional legislative measures in the way they provide tailored actions for differing contexts:

> …new instruments are argued to leave Member States more leeway to comply with EU requirements by taking account of domestic context conditions. In contrast to the detailed and rigid forms of top-down instruments that are to be uniformly implemented regardless of the physical, economic or political context, new instruments focus on establishing basic procedures for improving environmental awareness and behaviour while no concrete environmental targets are set.
>
> (Knill and Lenschow, 2000, p.5)

With this rationale in mind, the Commission has argued in the Fifth EAP that the EU should increasingly make use of these new instruments, especially mentioning the implementation deficits of traditional instruments. The Commission has argued that such legislation does not alter "the minds of business executives and consumers" regarding environmental protection (Bailey, 2003, p.42). This basic ecological modernization argument fed the Commission, as a new way to justify environmental policy in the EU.

Jordan *et al.* (2005) argue that the main reasons behind the turn towards NEPIs in the EU are fourfold. Accordingly, these factors are the referendum crisis of the Treaty of Maastricht and the need for the Commission to increase implementation effectiveness of the existing policies, the economic downturn of the 1990s that prioritized "instruments that improved economic competitiveness", the need to enshrine the concerns for "cost-effectiveness" in the design of EU environmental policy and the realization on behalf of the Commission of the "need to broaden responsibility and involve industry more directly" in the design of environmental policy Jordan *et al.* (2005, p.325). These factors all culminated in the increased importance attached to NEPIs in the EU.

#### 2.2.1.2.1. Market-Based Instruments in the EU

Eco-taxes and tradable permits are among the mostly used MBIs in the world. The EU experience with these two instruments has provided different outcomes. The former has been an unsuccessful attempt whereas the latter has shown remarkable success. The reason for the difference between the adoption and implementation of these two instruments is basically related to the nature of the EU polity. The important thing to be stressed however is that the EU aimed at realizing these two types of NEPIs with a general understanding of the compatibility between environmental protection and economic growth, the central thesis of ecological modernization theory.

According to the Commission, there is a strong "economic rationale" for the use of MBIs as they "correct market failures in a cost-effective way" and "have the advantage of using market signals to address the market failures" (CEC, 2007, p.3). Furthermore, the Commission justifies the extended use of MBIs resting on their superiority over traditional mechanisms. Accordingly the Commission argues that the MBIs should be used as:

- They improve price signals, by giving a value to the external costs and benefits of economic activities, so that economic actors take them into account and change their behaviour to reduce negative – and increase positive – environmental and other impacts.
- They allow industry greater flexibility in meeting objectives and thus lower overall compliance costs.

- They give firms an incentive, in the longer term, to pursue technological innovation to further reduce adverse impacts on the environment ("dynamic efficiency").
- They support employment when used in the context of environmental tax or fiscal reform.

(CEC, 2007, p.3)

The arguments put forward by the Commission are a reflection of the policy strategy of ecological modernization. The emphases on the superiority of market over regulation, involving the industry in a positive way, leading them to pursue environmental innovations and the 'double dividend' argument attest to this fact. How this commitment is translated into specific policies needs to be explored.

Eco-taxes were not totally new to specific European countries, as they had been in effect in countries such as France, Denmark, Germany and the Netherlands from the 1970s onwards (Jordan *et al.* 2003d, p.152). With the idea that taxes on environment would both increase the overall quality of the environment, the level of employment and the competitiveness of the EU economy, the Commission proposed to introduce an EU level carbon dioxide/energy tax in 1992. In addition, such a tax was expected to serve as "incentives for energy efficiency" and as a way to overcome the fact that EU member states used electricity with varying carbon amounts (Brohe *et al.* 2009, p.108). Zito (2000, p.91) argues that traditional instruments rest on a perception of a dichotomy between environment and the economy, whereas sustainability argues for the incorporation of environmental costs to the economy. In that sense, he argues that the proposal of the Commission concerning a carbon dioxide/energy tax "was the first major policy instrument to be justified in terms of the principles of 'sustainability', a new way of environmental thinking" (Zito, 2000, p.91).

This proposal met with fierce opposition from the UK and was vetoed as well. Afterwards, the Commission made further moves towards the introduction of an EU-wide tax, however, such attempts have not been successful so far. The main reason is the rule of unanimous decision-making in tax issues that renders the adoption of EU level taxes highly unlikely (Jordan *et al.* 2003d, p.154; CEC, 2007). The reasons why the unanimous decision was not reached were the opposition from the European energy

industries arguing that they would lose competitive edge vis-à-vis other countries as well as the hesitance to give EU tax-raising powers (Brohe *et al.* 2009, p.109).

Due to the difficulty of granting taxation powers to the EU, the Commission has turned its attention towards Environmental Tax Reform (CEC, 2007). The justification for such an attempt is again sought in the discourse of ecological modernization, arguing that shifting taxes on "labor" towards taxes on "resource use or pollution" will not only create a double dividend, but also foster innovation (CEC, 2007, p.5). This general call for harmonization of energy taxation (Jordan *et al.* 2003c, p.8) have previously culminated in the adoption of the 2003 Directive on Energy Taxation[127], six years later it was first proposed by the Commission. However, this directive has not met the expectations of the Commission, which argues for the further revision of the Directive on Energy Taxation (CEC, 2007).

The reason why both an EU level tax and harmonization of taxes among the member states have been so difficult with respect to the adoption of other NEPIs lie in the unanimity decision-making rule in tax issues as well as the unwillingness of the member states to lend greater competence to the EU on tax issues in general. However, it should be noted that the carbon dioxide/energy tax initiatives of the EU have triggered the introduction of such taxes in some of the individual member states.

Another crucial MBI, which is also implemented successfully in the EU, is tradable permits. Emissions trading was first initiated in the US, while the EU was trying to introduce an EU-wide tax for the same purpose of fighting against climate change (Jordan *et al.* 2003d, p.154). After the unsuccessful attempt of creating an EU-wide tax, the "rising concern about the seriousness of climate change and the beginning of carbon trading schemes at the national level", the Commission directed its efforts towards creating and EU-wide emissions trading system that was to focus on "large industrial polluters" (Brohe *et al.* 2009, p.109). The European Union Emissions Trading Scheme (EU ETS) entered into force in 2005 and thus became "the first supra-national

[127] For the full text of the Council Directive 2003/96/EC of 27 October 2003 restructuring the Community Framework for the Taxation of Energy Products and Electricity, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0096:en:HTML).

emissions trading system in the world" (EEA, 2006, p.18). The legal background of the EU ETS is the Directive 2003/87/EC[128]. The EU ETS was actually developed for the EU to meet the requirements agreed under the Kyoto Protocol. However, as the directive did not make any binding reference to the Kyoto Protocol, Brohe *et al.* (2009, p.112) argue that the EU ETS would be in effect even if the Kyoto Protocol did not come into effect. Accordingly, from 2005 onwards, the EU entered into a 'cap-and-trade' system[129]:

> In the cap-and-trade form each installation receives emission allowances at the start of the system and must prove each year that actual emissions have not exceeded allowances, or that additional allowances have been bought. Any surplus allowances can be sold. Hence there is an absolute quantity of allowable emissions (cap).
>
> (EEA, 2006, p.18)

The Commission argues that the EU ETS is a successful attempt to fight against climate change in an efficient way resting on the extent of its coverage geographically as well as with respect to the number of industrial plants.[130] The EU ETS "covers nearly half of the EU's CO2 emissions and 40 per cent of the EU's total GHG emissions" (Brohe, *et al.* 2009, p.112). The EU ETS will expand to other sectors in 2012 and 2013 such as aviation and petrochemicals industries. This MBI has found much greater success, where its flexible nature is one of the greatest reasons. In the first phase of the EU ETS, a carbon market was established among the participants. The Commission admits that the environmental benefits from pricing carbon might not be

[128] For the full text of the Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 Establishing a Scheme for Greenhouse Gas Emission Allowance Trading within the Community and Amending Council Directive 96/61/EC, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:275:0032:0046:en:PDF). This Directive has later been amended by the Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009. For the full text of the amended directive, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0063:0087:EN:PDF).

[129] The alternative system to 'cap-and-trade' is 'baseline-and-credit'. In this system, "emission allowances are defined relative to some business parameter, such as energy generation or consumption" and if related institutions in the system can manage to emit less GhGs than the baseline, they receive in turn "credits that can be sold to those who do not manage to keep to the baseline level" (EEA, 2006, p.18).

[130] For more on the scope and extent of EU ETS, please visit the official website of the Commission (http://ec.europa.eu/clima/policies/ets/index_en.htm).

excessive in this period as some member states and some sectors provided higher emission projections than the actual realizations.[131]

Even though the EU ETS is appreciated by the EU to be the most effective way to combat climate change, its flexible and economic character and the prone nature to fluctuations raises considerable concerns with respect to its environmental merits. The carbon market is supposed to provide incentives for the businesses to decrease polluting activities and invest in green technology. However, this argument actually holds when the price of emitting carbon is high. When there is economic downturn, the price of emitting carbon would decrease and cause a negative environmental impact instead. This was what actually happened in 2009 when economic recession hit Europe.

> If permits are cheap, and everyone has lots, the green incentive crashes into reverse. As recession slashes output, companies pile up permits they don't need and sell them on. The price falls, and anyone who wants to pollute can afford to do so. The result is a system that does nothing at all for climate change but a lot for the bottom lines of mega-polluters such as the steelmaker Corus: industrial assistance in camouflage.
>
> (Glovar, 2009)

Arguably, this industrial bias is one of the reasons why the EU ETS has not received excessive criticism from the industry such as eco-taxes. As it is flexible, and has the window of opportunity to pollute, the industry reacted positively to the scheme. The EU ETS was established with a faith in the market mechanism to provide optimum solutions for the fight against climate change. However, as Glovar (2009) warns, this optimism that the carbon market will drive the industry away from fossil fuels towards renewable energy is valid only if the carbon prices are high:

> Instead, exchanges are in meltdown: a tonne of carbon has dropped to about €8, down from last year's summer peak of €31 and far below the €30-€45 range at which renewables can compete with fossil fuels.
>
> (Glovar, 2009)

[131] Nevertheless, the Commission is optimistic about the following phases and argues that the EU ETS is the best way to combat climate change "at least cost and with minimal competitive distortions" (http://ec.europa.eu/clima/faq/ets/index_en.htm).

The EU opted for an MBI for achieving one of its foremost goals in environmental policy, combating climate change. However, as markets provide non-optimal solutions during some periods, the carbon market also suffers from the same setback. Thus, as markets fluctuate due to economic and political reasons, so does the carbon market. This has proven real by figures of the EU carbon market particularly after 2009, due to economic recession and the failed talks in the CoP 15 meeting in the Copenhagen Climate Change Conference. Nevertheless, it has been deemed a better alternative by the Commission than command-and-control type of instruments due to the reasons discussed above.

The EU ETS lends evidence to the dominance of ecological modernization in the EU rather than a strong conceptualization of sustainable development. The theory and the discourse is straightforward, markets provide better solutions and create incentives. Thus, they are superior. However, when there are fluctuations in the market, the environmental dimension of ecological modernization is kind of swept under the carpet, at least until when the tides are gone.

#### 2.2.1.2.2. Voluntary Agreements and Self-Regulation in the EU

VAs are environmental policy tools that aim at involving the business in environmental protection activities on a willingness basis. This nature makes VAs one of the most important policy tools of the ecological modernization policy strategy as increased industry cooperation is both an assumption and a policy prescription of ecological modernization. The Commission has given full support to the initiation of VAs in its Fifth and Sixth EAPs (Bailey, 2003, p.49), the documents that have firmly established the discourse and policy strategy of ecological modernization within the EU.

VAs stand in between traditional regulation and MBIs discussed above. They involve self-regulation on behalf of the industry. They are not purely market-oriented as the state also has a role to play in setting the environmental targets to be achieved (Rehbinder, 1997). However, the industry is generally free in designing the ways to meet these targets (Bailey, 2003, p.25). Rehbinder (1997) argues that the flexible nature

of VAs and the fact that other industries also participate and thus share the costs of adjustment make them potentially more successful environmental policy instruments compared to command-and-control instruments and MBIs.

The EU has placed particular emphasis on the use of VAs from the 1990s onwards. However, the actual policy success has not been spectacular in terms of EU-wide VAs. Even though VAs have been extensively utilized in the EU member states with the 1990s (EEA, 1997), the EU had only adopted nine VAs until 2001 (Jordan *et al.* 2003d, p.152). The reason of the low number of EU-wide VAs is argued to be "serious concerns about legitimacy, transparency and legal certainty" (Jordan *et al.* 2003c, p.25). Here, two successfully implemented VAs at the EU level will be analyzed, namely the EU Eco-label and Eco-Management and Audit Scheme (EMAS), the two main self-regulation instruments utilized in the EU. Even though eco-label is more informational, they both represent instruments where there is no top-down enforcement and business willingly joins.

The European Eco-label scheme was set up in 1992 with the Council Regulation 880/92/EEU.[132] It was set up to trigger the production and consumption with lower impacts on the environment and also serve as an informational device for the consumers about the "environmental impact of products" (CoM, 1992, Article 1). The reasons to establish such a scheme are various. One straightforward reason is the belief in the Commission that voluntary action is a better way to deal with environmental problems, where various partners join the process with an understanding of 'shared responsibility', as argued in the Fifth EAP.

Apart from that, Wright (2000, pp.97-98) argues that the existence of different national labels and the need to harmonize them; the demands for information on safety of products, particularly after the Chernobyl disaster; and the excessive amounts of "unaccountable private ecolabels" were the main driving factors for the EU to take action. According to the regulation, the products that are given the Eco-label award

[132] For the full text of the Council Regulation (EEC) No 880/92 of 23 March 1992 on a Community Eco-label Award Scheme, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992R0880:EN:HTML).

possess a ‘flower logo’ which shows that these products have met the standards and serves the customers as a sign to track the environmentally friendlier products.

Eco-labels are not legally binding. The EU has established the scheme with a regulation, which implies that all the member states have to transpose this scheme to their national law. However, it has no binding requirements on behalf of the industry. Industry is left to its own choice whether or not to meet the criteria and apply for the award. Hence, “eco-labels...rely on moral suasion” (Jordan *et al.* 2003c, p.26). Furthermore, even if the business joins the process and gets “involved in the preliminary and preparatory phases”, these actors still have the option to “withdraw from the scheme later on” (Wright, 2000, p.97).

The Eco-label scheme exerts “moderate constraints on market actors” (Jordan *et al.* 2003c, p.26). This is one of the reasons that it has proved to be a successful environmental policy tool. Even though it lived through “implementation problems” in the beginning (Wright, 2000, p.97), the speedy increase of the number of firms that obtained the EU Eco-label (CEC, 2011) attests to the fact that the industry finds it less challenging and more suitable for its market goals.

Still, the EU Eco-label scheme is not without its problems. The exclusion of specific sectors such as food, drink and pharmaceuticals, and the lower than expected enthusiasm shown on behalf of the industry to join the scheme are the most important problems. Some of this lies in the “voluntary nature” of the instrument (Wright, 2000, p.106). The aim of this thesis is not to explore the policy processes and implementation problems of specific policies, but rather to show the underlying ideas and rationales behind specific policies. In that sense, the EU Eco-label scheme is one of the best examples of the turn of ecological modernization in the EU in the early 1990s. It can be argued that the Commission’s high hopes regarding its efficacy due to its voluntary nature can at the same time be one of the shortcomings of the instrument. However, still, the important thing is the support given to the Eco-label scheme by the Commission for being a proper environmental policy tool in achieving sustainable

development, which can be understood from the expression: "the flower is blooming" (CEC, 2011).

Another voluntary scheme introduced by the EU is EMAS. Again the voluntary nature of EMAS stems from the fact that industry is not compelled to join. It has been established with the Council Regulation No 1836/93[133] and was available for the industrial sector companies to join since 1995. In 2001 EMAS was extended to all economic sectors with the Regulation (EC) No 761/2001.[134] EMAS is not restricted to EU member states but also covers Norway, Iceland and Liechtenstein, as in the EU ETS. Like the Eco-label scheme, it is issued as a regulation, which means that all the member states in the EU have to transpose this law to their legal system and establish the necessary "administrative structure to support EMAS registrations" (Bouma, 2000, p.119).

EMAS aims at providing incentives for organizations to operate better in the environmental sense and it has been one of the successful NEPIs in the EU.[135] Like all other voluntary schemes, EMAS is expected to increase the environmental performance of the organizations on a willingness basis. One of the chief drivers of the organization's application to EMAS is argued to be the expected increase in the companies' sales due to the informed customers' choices (Bouma, 2000, pp.119-120). However, the possibility of such a drive does not guarantee a company's participation in EMAS. Nevertheless, it raises the chances of participation due to lower adaptational and compliance costs.

[133] For the full text of the Council Regulation (EEC) No 1836/93 of 29 June 1993 allowing Voluntary Participation by Companies in the Industrial Sector in a Community Eco-Management and Audit Scheme, please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31993R1836:EN:HTML).

[134] Until 2001, EMAS was only available for the industrial sector. However, the Regulation (EC) No 761/2001 made EMAS available for all sectors.

[135] The number of EMAS-registered organizations is more than 4400 and around 7600 sites are also within the scheme. The expected things from an organization in order to apply for EMAS are to "adopt an environmental policy", "conduct an environmental review", "establish an effective environmental management system", "carry out an environmental audit", "provide a statement of its environmental performance" and receive after the verification of an EMAS Competent Body, the EMAS logo. For more on this issue, please visit the official website of the Commission (http://ec.europa.eu/environment/emas/about/summary_en.htm).

The EU has established the EMAS within its general sustainable development policy. The EU SDS of 2001, 2006 and the EU SCPAP of 2008 all made reference to the necessity of increasing the use of NEPIs. Particularly the EU SCPAP states that the "core" of the document "is a dynamic framework to improve the energy and environmental performance of products and foster their uptake by consumers" (CEC, 2008, p.2). In that sense, both EMAS and the Eco-label scheme are crucial tools to both motivate the producers and inform the customers for a sustainable consumption and production pattern. This would bring about eco-efficiency, and together with the emphasis on the role of consumption, these are among the core themes of the ecological modernization policy strategy.

The crucial thing here is the argumentation of the Commission for both Eco-label and EMAS resting on the double emphasis on eco-efficiency/environmental technology and the positive environmental and economic results they are expected to bring about. Indeed, the organizations are called to apply for EMAS mostly on the grounds of their potential benefits such as cost reductions due to better resource use and increased efficiency, increase in the market access and better relations with customers.[136] The environmental components of the reasons to join EMAS are mostly sidestepped. This is understandable as the main motive of companies is to make profits. However, the voluntary nature of the tools used leaves them the option also not to take any action, at least until they really have to do so. Therefore, the extended use of NEPIs bears the risk of doing less in terms of the environment due to the privileged position of economic concerns and the voluntary nature of the instruments.

The EU has opted for NEPIs increasingly with the 1990s and drifted away from command-and-control type of instruments. Jordan *et al.* (2003b) argue that the basic distinction between command-and-control type of regulations and NEPIs lies in the role of the regulatory agency, in this case the EU, in specifying both the environmental goal to be achieved and how to achieve that goal. Table 5 below makes a typology of NEPIs with respect to these criteria:

[136] For more on this issue, please visit the official website of the Commission (http://ec.europa.eu/environment/emas/tools/faq_en.htm#_Toc259178058).

**Table 5: A Typology of NEPIs**

| | Regulator specifies the goal to be achieved | Regulator does not specify the goal to be achieved |
|---|---|---|
| Regulator specifies how goal is to be achieved | Command-and-control (regulation) | Technology-based regulatory standards |
| Regulator does not specify how goal is to be achieved | Most negotiated VAs; some MBIs, some regulation (e.g. EQOs) | Most MBIs; some VAs; informational devices |

**Source:** Jordan *et al.* 2003a, p.9 (EQO – environmental quality objective)

The bottom right cell is argued to possess the most of the NEPIs in the EU, such as MBIs, eco-labels and EMAS (Jordan *et al.* 2003a, p.9). It is interesting to observe that the most successful attempts at introducing and applying NEPIs in the EU fall into the category where the regulator (the EU) specifies neither the goal, nor the way to reach the goal. It is consistent with the general market logic, as well as the ecological modernization policy strategy. The industry participates better in the schemes where operational costs and costs of non-compliance are at a minimum.

This said, however, it should be noted that there are differing views as to the actual success of NEPIs in the EU. Criticisms generally focus on the low level of adoption of NEPIs in the EU than foreseen and the low level of implementation of the measures adopted. Wurzel (2008, p.75) argues that even though there is a slowdown of "traditional EU regulations" after the 1990s, the adoption of NEPIs did not represent a remarkable success based on facts such as the non-adoption of an EU-wide eco-tax, low number of EU-wide VAs and the low amount of "corporate and public support" towards the EU Eco-label scheme. He argues that the only area where NEPIs were a success story was the EU ETS (Wurzel, 2008, p.75). Similarly, Knill *et al.* (2008, p.115) argue that "the relative importance of so-called NEPIs" only "slightly increases during the 1990s". From a different perspective, Knill and Liefferink (2007, p.165) argue that NEPIs did not bring substantial changes in terms of "implementation effectiveness" of the policies adopted at the EU level. Lafferty and Meadowcroft (2000, p.452) argue that NEPIs such as MBIs and VAs have not become the main environmental policy tools as "existing regulatory structures and capacities in the environmental domain remain essentially intact".

Jordan *et al.* (2003b) disagree with the above proposition by Lafferty and Meadowcroft. From the empirical evidence provided by their studies over Austria, Australia, Germany, Finland, France, Ireland, the Netherlands and the UK, they argue that "the total number and diversity of NEPIs used in the eight countries has grown significantly, with environmental taxes, VAs and eco-labels proving especially popular" (Jordan *et al.* 2003b, p.201). It should be noted here that even though NEPIs have not totally supplemented traditional regulation, they have established discursive hegemony as well as policy priority with respect to the latter. In addition, the use of NEPIs has grown within the EU and its member states after the 1990s. Therefore, NEPIs are effective and in place even though not as powerful as the discourse of ecological modernization.

All NEPIs, such as EMAS, the Eco-label scheme and the other MBIs utilized in the EU, have a certain focus on creating incentives (carrots or sticks) to lead the companies towards more environmentally friendly technologies and eco-innovation. This emphasis on eco-efficiency and technological innovation is one of the central components of ecological modernization theory and policy strategy. Therefore, to complete the analysis of the policy success of ecological modernization in the EU, the EU's eco-innovation policies and efforts to improve environmental technologies should also be assessed.

#### 2.2.1.3. Role of Technology and Eco-Innovation

Eco-efficiency, eco-innovation, environmental technologies or innovation in general play a central role in the theory and policy strategy of ecological modernization. Prominent ecological modernization scholars such as Jänicke and Jacob (2002) and Huber (2008) for instance place the promotion of environmental technology at the very heart of ecological modernization. Indeed, the theory and policy strategy of ecological modernization is foremost criticized by environmentalist groups and defenders of a stronger version of sustainable development based on its technological optimism and managerialism. This strong devotion to technology in both achieving environmental protection and also economic growth is also observable in the EU, where the policy

strategy of ecological modernization is firmly established. Before proceeding with the EU policies towards eco-innovation, some words need to be said on the general theory of the role of eco-efficiency in environmental policy.

Eco-efficiency and technological innovation is amongst the centerpieces of the ecological modernization theory. There is an excessive emphasis on the environmental and economic benefits to be retrieved from investing in environmental technologies in pursuit of eco-efficiency such as improved resource use, first mover advantage, the possibility to create new industries, increase employment and etc. Huber (2008, p.361) argues that the centrality of "technological innovation" for the theory of ecological modernization is not "a technomaniac attitude":

> Environmental impact may have quite a number of social causes in addition to technology and the sheer size of population, e.g., consumerist attitudes, or lack of environmental awareness. But neither environmental ethics as such, nor regulatory measures nor economic mechanisms, will change the industrial metabolism unless they are geared to the unique point of immediate effect in changing society's metabolism: new *technologies and practices* that change the operative structures and ecological properties of production and consumption, and thus relieve strain on resources and environmental sinks or even contribute to an ecologically benign co-evolution of human society and nature. That is why technology, including technology-enhanced producer and consumer practices, is *as a matter of fact* the pivotal component of ecological modernisation.
>
> (Huber, 2008, p.361)

This argumentation forms one of the underlying reasons behind ecological modernization's appraisal of technology and innovation that increase eco-efficiency. Indeed, Huber (2008) argues that it is the level of increase in eco-efficiency that makes a technological innovation an environmental innovation. Therefore, the end that is wanted to be achieved is an increase in eco-efficiency. Therefore, the so-called 'green technology' is a core element of ecological modernization first in terms of its potential in bringing about a sustained future.

Another aspect, which is also excessively stressed in the theory and policy strategy of ecological modernization, is the economic benefits eco-efficiency is expected to bring about. Jänicke and Lindemann (2010, p.127) state that the realization

that "innovation-oriented environmental policy" could also trigger economic benefits can be traced back to the mid-1970s; such as the 1974 economic strategy prepared by the Japanese Ministry of International Trade and Industry where there were ample references to "environment-friendly and resource-friendly production" and the rising into prominence of green technology in Germany in the 1980s. The economic potential of eco-efficiency has also been captured by important industrial groups such as the WBCSD. According to WBCSD:

> Eco-efficiency is achieved by the delivery of competitively-priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life-cycle to a level at least in line with the earth's estimated carrying capacity. In short, it is concerned with creating more value with less impact.
>
> (WBCSD, 2000, p.4)

Therefore, the ecological and economic arguments all hold that environmental technology and eco-efficiency is crucial in achieving an environmentally sustainable future. The thing that makes the need for eco-efficiency a concrete policy field is the need for 'regulation' to trigger the development of green technology. This has been stressed both by the foremost defenders of such a development such as Huber (2008), Jänicke and Lindemann (2010) as well as the industrial sector who is supposed to take the lead in such a development (WBCSD, 2000). Indeed, Huber (2008, p.361) argues that "the most important pre-condition of eco-innovation is stringent regulation".

The EU is firmly dedicated to the promotion of eco-efficiency.[137] The EU started to place increased emphasis on the development of clean technologies starting with the 1990s. The 1993 White Paper analyzed in the previous section clearly indicated how the development of clean technologies is crucial for economic, environmental and employment goals. One of the concrete policy steps to achieve this goal was the Environmental Technology Action Plan [138] (ETAP) which was adopted by the

[137] The first thing to come across in the environment webpage of the Commission is an explanatory note regarding 'resource efficiency' (08.06.2011). For details, please visit the official website of the Commission (http://ec.europa.eu/environment/index_en.htm).

[138] For the full text of the Communication from the Commission to the Council and the European Parliament – Stimulating Technologies for Sustainable Development: An Environmental Technologies

Commission in 2004. ETAP was established within the general goal of sustainable development and aimed at realizing the potential of technology in bringing environmental and economic gains. Accordingly, the goals set by ETAP were:

- To remove the obstacles so as to tap the full potential of environmental technologies for protecting the environment while contributing to competitiveness and economic growth;
- To ensure that over the coming years the EU takes a leading role in developing and applying environmental technologies;
- To mobilise all stakeholders in support of these objectives.

(CEC, 2004, p.3)

Similar to the case of EPI and NEPIs, the justification of the EU action concerning technological innovation is primarily sought in arguments such as the contribution environmental technology can make for competitiveness and growth, becoming the first-mover and exploring lead market opportunities and achieving all this through the involvement of related parties, which here mainly denotes the involvement of the industry. In addition to these, ETAP proposes to move forward in the four main priority areas determined in the Sixth EAP, namely "climate change, nature and biodiversity, health and quality of life and management of natural resources and wastes" (CEC, 2004, p.5). Furthermore, the Commission sets forward the goals of "getting from research to markets; improving market conditions; and acting globally" (CEC, 2004, p.8). Accordingly, the first goal implies the need to foster innovation and "take inventions out of laboratories and onto the market" (CEC, 2004, p.8). The second goal implies the realization of the full potential of environmental technologies via "positive incentives and an appropriate regulatory framework", as well as "public procurement and voluntary instruments" (CEC, 2004, p.14). Finally, the third goal implies the potential of environmental technologies for the EU "in achieving internationally agreed development goals" (CEC, 2004, p.23).

As such, the EU acts as a facilitator in marketizing environmental innovations and hence provides the industry with the incentive to uptake research and development

Action Plan for the European Union, please visit the official website of the Commission (http://ec.europa.eu/environment/etap/files/com_2004_etap_en.pdf).

and gain profits from it at the same time. The environmental policy tools to trigger such a development are chosen among the NEPIs mostly. The EU subscribes to achieve the necessary regulatory framework as well, in order to level the playing field for the innovative industries and in order for them to feel secure to invest in new technologies, which might be costly in the short term. Finally, the global perspective serves on the one hand to the environmental mission of the EU while at the same time, and maybe more importantly the prospects for the environmental technologies developed within the EU to enter into different markets and hence increase their profit returns. And all this takes place within the background of an emphasis on core ecological modernization arguments such as decoupling, the double dividend and the positive relationship between eco-efficiency and competitiveness.

Efforts to increase eco-efficiency have recently culminated in the efforts to promote renewable energy in the EU to tackle climate change. The 2010 Communication from the Commission "Energy 2020 – A Strategy for Competitive, Sustainable and Secure Energy"[139] attest to the importance attached to the role of environmental technologies at the EU level.[140] It builds upon the targets put forward by the European Council in 2007 to be achieved by 2020, the 20/20/20 climate/energy targets, namely "to reduce greenhouse gas emissions by 20%...to increase the share of renewable energy to 20% and to make a 20% improvement in energy efficiency" (CEC, 2010b, p.2). Furthermore, "energy efficiency" is argued to be "the most cost effective way to reduce emissions" as well as to increase "competitiveness" (CEC, 2010b, p.6).

Therefore, the discourse and the core arguments of the ecological modernization policy strategy can be said to feed the EU approach to environmental technologies and eco-efficiency. Giorgi and Redclift (2000) cite the example of the EU Framework Programmes in fostering environmental technologies and hence ecological modernization within the EU also within the realm of social sciences. The compatibility

[139] For the full text of the Communication from the Commission "Energy 2020 – A Strategy for Competitive, Sustainable and Secure Energy", please visit the Eur-Lex website (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0639:FIN:EN:PDF).
[140] This strategy is within the framework of the EU 2020 Strategy.

of economic and environmental goals has been the major frame of reference for the research undertaken within the EU Framework Programmes.

> The research agenda was steered in this fashion by the discourse on ecological modernization, which assumes that both social and environmental costs can be 'internalized' in products and services. The significance of this for research is that social science is once again enrolled as a means of achieving a 'win-win' outcome.
>
> (Giorgi and Redclift, 2000, p.21)

Giorgi and Redclift (2000, p.22) also argue that this win-win argument built into the research field within the EU "has served to create and provide legitimacy to new and emerging research and the consultancy industry, supported and assisted by the social science community". They remain skeptical however about the policy success of such an orientation.

So far, the policy success of ecological modernization within the EU has been assessed with respect to EPI, NEPIs and the role attached to technological innovations and eco-efficiency. This section will now turn to the Europeanization of ecological modernization with respect to the policy transfer of NEPIs within the EU. NEPIs are selected as the means to analyze the Europeanization of ecological modernization in the EU, as they provide the concrete test tools to see the extent to which policy rhetoric is translated into actual policy achievements.

### 2.2.2. Europeanization of Ecological Modernization in the EU

The transformative process caused by the EU in its member states as well as the impact of single member states on the formation of EU policies is captured by the concept of 'Europeanization'. Therefore, Europeanization is generally conceived of as a two-way process, 'top-down' and 'bottom-up'. The former implies the impact of the EU on the general political and administrative structure of its member states, whereas the latter refers to the impact of domestic conditions, or preferences in the making of EU

level policies. In that sense, there are ample definitions provided for the concept of Europeanization by various scholars working on European integration.

Even though the process of Europeanization can be approached from top-down and bottom-up perspectives, the focus here is on top-down Europeanization. Of particular importance is the extent to which the EU disseminates the discourse and policy strategy of ecological modernization to its member states. The extent of such impact can be assessed through an analysis of the diffusion of NEPIs in the EU via policy transfer. NEPIs are chosen as the test tools to assess the Europeanization of ecological modernization in the EU as they are more observable policy tools and "the impact of the EU is more easy to detect" as a result (Liefferink and Jordan, 2002, p.8).[141] Therefore, after a brief overview of the most prominent definitions and conceptualizations of the Europeanization literature, policy transfer and its explanatory power for the diffusion of NEPIs in the EU will be assessed.

#### 2.2.2.1. Europeanization of Environmental Policy

Europeanization[142] is a contested concept (Olsen, 2002) and has not become a grand theory until now. There are various conceptualizations of Europeanization, adopted by the scholars of European integration (Ladrech, 1994; Risse *et al.* 2001; Radaelli, 2004). There is almost no controversy that the EU impacts upon the "domestic politics, policies and administrative structures" of its members states (Liefferink and Jordan, 2002, p.1). The basic rationale behind the development of the theory of Europeanization is the uncontested belief in the fact that "Europe matters", but as Radaelli (2000, p.1) asks, the crucial question is "how" it matters. This question unveils many ways that Europeanization can take place and come to denote. To answer such a

[141] Europeanization may impact upon different aspects in the member states. Börzel and Risse (2003, p.60) make a distinction between the Europeanization of "policies" (such as standards, instruments, problem-solving approaches, policy narratives and discourses), "politics" (such as processes of interest formation, interest aggregation) and "polity" (such as political institutions, intergovernmental relations). Here, the focus is on the Europeanization of policy instruments. Therefore, Europeanization of politics and polity will not be analyzed. Europeanization is understood as a process whereby the EU diffuses policy tools to its member states by way of using its policy-making and enforcement power. For this analysis, policy tools refer to NEPIs.

[142] A profound analysis of the theory of Europeanization is beyond the limits and aims of this study. Therefore, the study will present some of the basic definitions and arguments as regards Europeanization.

question, the concept needs to be clearly defined. Therefore, it is necessary to present the prominent scholars' definitions for Europeanization in order to get a better understanding of the concept at hand.

One of the earliest attempts to define Europeanization came from Ladrech (1994, p.69) where he defined Europeanization as "an incremental process re-orienting the direction and shape of politics to the degree that EC political and economic dynamics become part of the organizational logic of national politics and policy-making". Another well-known definition is provided by Risse *et al.* (2001, p.3) where Europeanization is argued to be "the emergence and development at the European level of distinct structures of governance, that is, of political, legal and social institutions associated with political problem solving that formalize interactions among the actors, and of policy networks specializing in the creation of authoritative rules". Both of these definitions depict a top-down model of Europeanization and try to capture the impact of the EU on its member states (Börzel and Risse, 2000, p.2).

The definition provided by Risse *et al.* (2001) captures the policy transfer nature of the process of Europeanization. However, a fuller account is provided by Radaelli (2004) where he argues for both top-down and bottom-up research designs and conceptualizations of Europeanization:

> Europeanisation consists of processes of a) construction, b) diffusion and c) institutionalization of formal and informal rules, procedures, policy paradigms, styles, 'ways of doing things' and shared beliefs and norms which are first defined and consolidated in the EU policy process and then incorporated in the logic of domestic (national and subnational) discourse, political structures and public policies.
>
> (Radaelli, 2004, p.3)

Due to the presence of multiple emphases, Radaelli's definition captures the many aspects of Europeanization. It has a perspective on EU level construction of notions such as rules, policy paradigms and styles and also on the way these are diffused and institutionalized in the member states due to EU impact. Due to the fact

that this definition "acknowledges the importance of policy transfer and of diffusion" as a result, it provides "a broad definition of *policy change*" (Ladi, 2005, p.3).

Radaelli (2004, p.11) argues that the process of Europeanization takes place "when the EU becomes a cognitive and normative frame" and when "there is a process of change, either in response to EU pressure or as usage of Europe". Therefore, member states may be compelled to change their policies due to EU pressure or use the EU to realize otherwise unlikely change in their domestic policies. [143] However, Europeanization should not necessarily be thought of as a convergence of member state policies. It might even produce divergent outcomes, which Radaelli (2004, p.5) argues that is even more the case as attested by the "empirical evidence". Therefore, different reflections of the Europeanization process are possible and expected in the member states and this fact does not render the analysis of Europeanization obsolete.

Turning to the Europeanization of environmental policy, it is fair to argue that environmental policy is amongst the mostly Europeanized policy areas, as "more than 80% of existing policies are made at the European level" (Börzel and Risse, 2000, p.3). However, this does not mean that all the policies devised at the EU level are implemented uniformly at the member state level. Therefore, while analyzing the Europeanization of environmental policy, it is neither necessary nor possible to detect a full convergence of national environmental policies. There are however, some common trends.

First, there are some leader states, such as Germany and the Netherlands that wish to upload their policy preferences to the EU level in order to decrease "adjustment costs" as well as obtain "first mover advantages" (Jordan and Liefferink, 2003, p.3). These leader states introduce specific environmental policies nationally and then push it to the EU level, also because of the desire to be the standard-setters in these policies, create new markets, and prevent the firms operating in their countries to flee to countries with lower environmental standards (Schreurs, 2011). On the other hand, there

[143] There are different dimensions or mechanisms of Europeanization, which is beyond the limits and aims of this study. Suffice to say that Europeanization happens when the EU triggers change, either compels the member states to change or provides them with the means to bring about change.

are some laggard states such as Greece and Spain who most of the time download policies from the EU and adapt their systems accordingly.

In addition, most of the CEECs that are new members to the EU are mainly concerned with economic development and thus approach the environmental debate in the traditional sense, arguing that environmental protection is expensive (Schreurs, 2011). Even if the policy experiences of the EU member states cannot be homogenously described as one type, there is nevertheless some ground to talk about common trends in environmental policy, particularly with respect to policy instruments that are transposed to national law. Liefferink and Jordan (2002, p.8) argue that "in almost every Member State the composition of the environmental tool box has been affected by the EU", though in differing ways. Therefore it is possible to talk about policy transfer within the EU, particularly for NEPIs (Jordan *et al.* 2005).

Before proceeding with the policy transfer of NEPIs in the EU, an important point needs to be stressed regarding the policy diffusion of NEPIs generally. Tews *et al.* (2002) and Busch *et al.* (2004) argue that there is a general increase in the adoption of NEPIs among many countries particularly after the 1990s. As most of this shift has happened in the absence of particular international agreements concerning NEPIs, Busch *et al.* (2004, p.1) argue that the global diffusion of NEPIs "could to a large extent be explained by the international diffusion of a new regulatory paradigm".[144] Therefore, the policy diffusion of NEPIs is not only an EU-wide phenomenon, but is the case for most of the industrialized countries in line with the ascendance of the theory and policy strategy of ecological modernization. Nevertheless, the policy transfer of NEPIs within the EU needs further assessment in order to analyze the role the EU plays within this context and how it impacts upon member state utilization of NEPIs. Such an analysis will also yield insights to draw conclusions concerning the impact of the EU on Europeanizing ecological modernization among its member states through the policy transfer of NEPIs.

[144] According to Busch *et al.* (2004, p.2), "policy diffusion" is "the process by which policy innovations are communicated in the international system and adopted voluntarily by an increasing number of countries over time".

### 2.2.2.2. Policy Transfer of New Environmental Policy Instruments

Consistent with the rise of the ecological modernization as a policy strategy, the use of NEPIs have grown in most of the developed countries, Europe in particular. Based on an analysis on the growing use of NEPIs in eight countries (Austria, Australia, Germany, Finland, France, Ireland, the Netherlands and the UK), Jordan *et al.* (2003b) conclude that there is an increase in the use of NEPIs in these countries and the main drivers behind this change are "dissatisfaction with regulation", "perceived superiority of NEPIs", a shift "from government to governance", "influence of the European Union", "growing international competition" and "growing domestic political support" (Jordan *et al.* 2003b, pp.202-205). These factors are more visible in some countries and less in the others. However, the authors argue that the analyzed countries all have increased their employment of NEPIs, whereas regulation has not lost its central place in environmental policy-making. These findings are presented in the figure below (Figure 1).

THE DISTRIBUTION OF NEPIS BY COUNTRY FOR THE LATE 1990S

| | Ecotaxes | Tradable permits | Voluntary agreements | Eco-labels | Regulation |
|---|---|---|---|---|---|
| Australia | Low | Low | Low | Low | Still dominant |
| Austria | Medium | Low | Low/ medium | Medium | Still dominant |
| Finland | High | Low | Medium | High | Still significant |
| France | Medium | Low | Low | High | Still dominant |
| Germany | Medium | Low | High | High | Still dominant |
| Ireland | Low | Low | Low/ medium | Low | Still dominant |
| Netherlands | High | Medium/ | High high | Low | Still significant |
| UK | Medium | High | Medium | Low/medium | Still significant |

**Figure 1: The Distribution of NEPIs by Country for the Late 1990s**

**Source:** Jordan *et al.* 2003b, p.209.

Among the drivers of increased NEPI use among these countries that are EU member states, and the remaining member states of the EU, the impact of the EU needs to be analyzed in particular. Jordan *et al.* (2005) capture the EU impact in triggering the NEPI use in its member states via the concept of policy transfer.[145] Jordan *et al.* (2005) propose five different roles that the EU can play in terms of policy transfer:

- Passive arena: the EU does not make a substantive contribution to the adoption of NEPIs, countries adopt NEPIs through emulation (e.g. Germany's eco-label scheme brought about the adoption of similar schemes in other EU member states even before the EU's adoption of its own Eco-Label scheme).
- Facilitating arena: the EU sets the conditions through which ideas and experience will diffuse more quickly and enhances the creation of networks of EU and member state actors (e.g. the impact of the Dutch environmental officials on the design of the Fifth EAP).
- Harmonization arena: the EU triggers the adoption of NEPIs in its member states with the justification of the proper functioning of the single market and reducing market distortion (e.g. the launch of the EU Eco-Label scheme was justified through the argument that various national eco-labels could lead to market distortions).
- Competitive arena: the EU creates the conditions under which member states try to stay ahead of EU action in order to gain economic advantage and decrease the costs of adjustment (e.g. the adoption of EMAS in the EU was facilitated by the United Kingdom and other member states who had already adopted the British environmental management standard).
- Entrepreneur: particular EU actors, such as the Commission try to set the agenda for the member states, leading them to converge (e.g. the Commission's insistence on the adoption of a common energy taxation and the case of the EU ETS).

(Adapted from Jordan *et al.* 2005, pp.318-320)

Looking at the examples given to each role the EU can potentially play, it is possible to argue that the EU has performed all of these roles during the development of its environmental policy, sometimes several roles at the same time. It is almost uncontestable that the EU causes the Europeanization of national environmental policies. In the case of NEPI use, the EU impact can be described by the convergence of member states' use of environmental policy tools, as evidenced by the increased use of NEPIs.

[145] According to Jordan *et al*. (2005, p.318), policy transfer "focuses on the process by which knowledge (about NEPIs) at a particular time and place is used at another time or place in a different governance setting".

In terms of eco-taxes, the EU has not introduced and EU-wide carbon dioxide/energy tax due to the reasons discussed previously in this section. It nevertheless triggered the introduction of eco-taxes in its member states (Jordan *et al.* 2003c). Busch *et al.* (2004) provide a general graph of the international spread of energy taxes (Figure 2). Even though the study by Busch *et al.* (2004) comprises countries other than EU member states, it is still indicative in terms of the EU impact on the introduction of eco-taxes in particular EU member states. This can be observed from the increase in the number of introductions following the period after the Commission's proposal for a European energy tax.

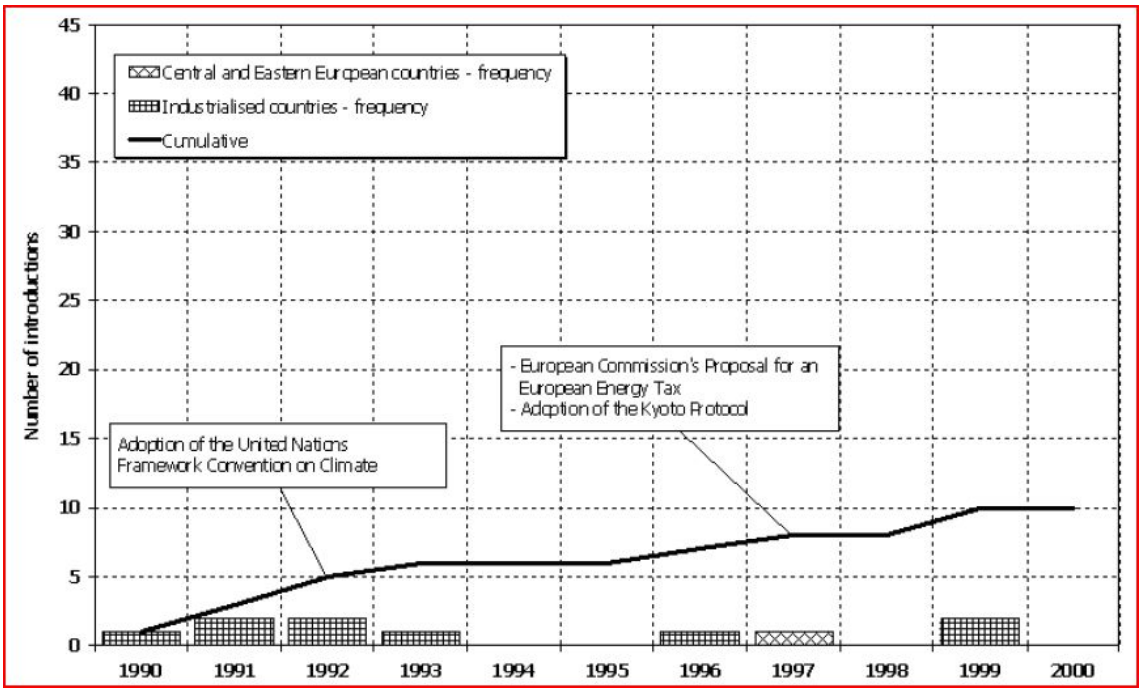


**Figure 2: International Spread of Energy Taxes**

**Source:** Busch *et al.* 2004, p.8.

In the case of the VAs, their adoption in EU member states until 1996 can be observed from the figure below (Figure 3). It can be seen that the number of new VAs has increased dramatically in the second half of the 1990s. Nevertheless, Jordan *et al.* (2003c, p.31) argue that VAs is amongst the areas where policy transfer due to EU impact was lower than other NEPIs "due to national (or supranational) institutional and

constitutional constraints" such as the "institutional and state-society patterns long established" in the EU member states. Nevertheless, it is still possible to observe that the use of environmental agreements and eco-labels have increased in EU member states.

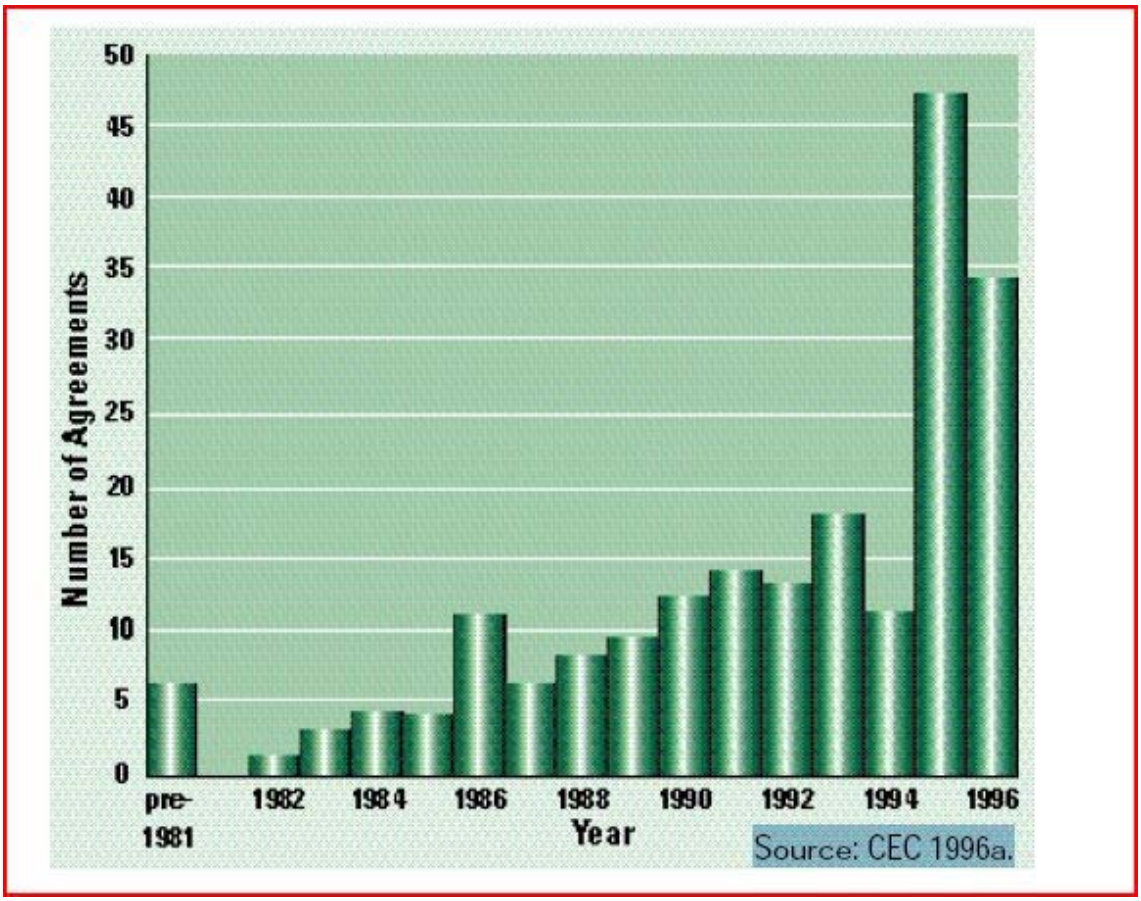


**Figure 3: New Environmental Agreements in EU Member States by Year**

Source: EEA, 1997, p.22

This number has steadily increased in the following periods (Jordan *et al.* 2003b). A similar increase is also observable in the case of eco-labels. Even though most of the EU member states had national eco-label schemes in their countries prior to the introduction of the EU Eco-label scheme and that one of the primary reasons for the EU adoption of an Eco-label scheme was to prevent the market distortions this variety

of national eco-labels could produce, it is still possible to argue that the EU has triggered the use of the Eco-label scheme in its member states. This can be observed from the figures below showing the international spread of eco-labels (Figure 4) and the increase in the number of eco-labels in the EU since the introduction of the EU Eco-Label scheme in 1992 (Figure 5). Both figures depict the impact of the EU Eco-label scheme.

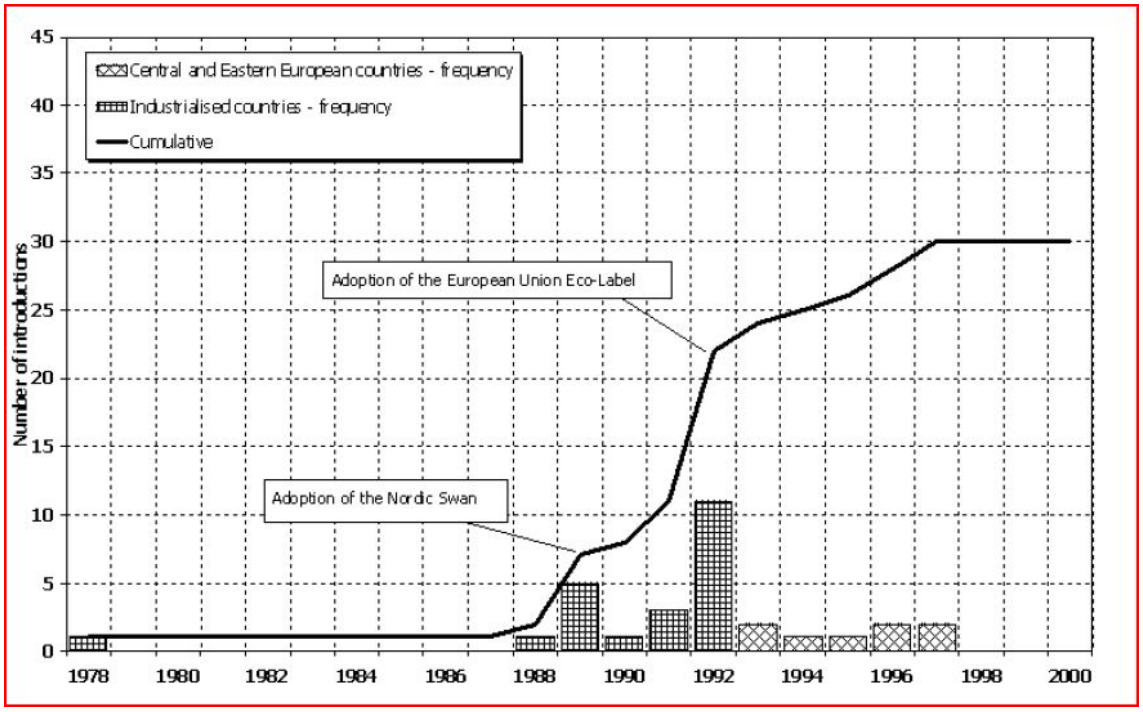


**Figure 4: International Spread of Eco-Labels**

Source: Busch *et al*. 2004, p.7.

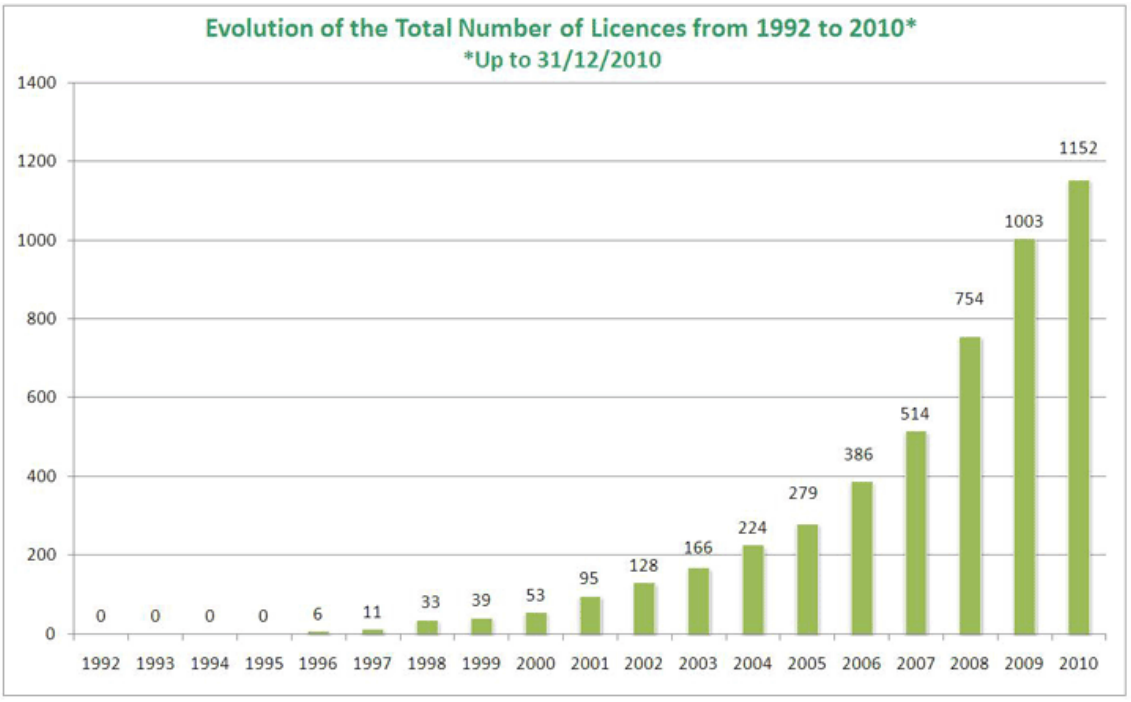


**Figure 5: Evolution of the Number of Eco-label Licences (1992-2010)**

Source: CEC, 2011.

As NEPIs are the cornerstones of the ecological modernization policy strategy, the EU can be argued to facilitate the spread of both ecological modernization discourse and particular policies associated with it among its member states. Through regulations and directives, the EU pushes its member states in the direction of ecological modernization (Schreurs, 2011). There is little doubt that the EU has triggered the use of NEPIs in its member states. Jordan *et al.* (2003c, p.32) argue that even though there is a "clear" EU impact, it is "also rather mixed":

> The EU has indirectly promoted change by forcing some member states to adopt instruments which they would probably not have adopted otherwise…this suggests a strong entrepreneurial influence on the part of the EU with respect to tradable permits, although much less so concerning eco-taxes, ecolabels and voluntary agreements. The result is a process involving largely hybrid policy transfer where there is moderate emulation and the EU puts some constraints on member state options.

(Jordan *et al.* 2003c, pp.32-33)

As the above assessment of the policy success of NEPIs and their policy transfer through the EU impact reveal, even though regulatory instruments remain mostly dominant in EU environmental policy as well as in the national environmental policies of its member states, there is clearly a turn towards the use of NEPIs after the 1990s. This turn lends evidence to the adoption of the policy strategy of ecological modernization in the EU particularly after the Fifth EAP. Clearly, the discursive shift towards ecological modernization is more observable than the actual realization of the core components of ecological modernization. In that sense, it is fair to argue that the EPI has not been realized to the extent that it has been emphasized discursively. Neither have NEPIs totally supplemented traditional regulatory instruments. However, what is important is the political attachment shown by the EU towards the core elements of ecological modernization theory and policy strategy and the continual efforts to achieve the twin goals of environmental protection and economic growth. In that sense, ecological modernization policy strategy can be argued to be in effect also with respect to the policy tools associated with it.

The EU exports and transfers the core elements of the ecological modernization policy strategy to its member states through the mechanisms discussed above. This transfer also takes place in the candidate countries, albeit limitedly and mostly in the form of discursive transformation.[146] The analysis of the transformation of Turkish environmental policy that will be conducted in the following section aims to provide an example to the EU impact in exporting the core elements of ecological modernization to its candidate countries. Accordingly, the following section will assess as to whether there is a turn towards the core discourses and policy elements of ecological modernization in Turkish environmental policy, with a focus on the role of the EU in this turn.

[146] The EU impact is actually beyond its member states and candidate countries. Börzel (2011) cites the example of Israel in this regard. Israel has an association agreement with the EU for access to the single market. However, in order to get market access, the EU requires the Israeli industry to comply with EU environmental standards. As a result, Israel has started to emulate EU environmental standards.

## 2.3. TRACING ECOLOGICAL MODERNIZATION IN TURKISH ENVIRONMENTAL POLICY – ACHIEVEMENTS AND PROSPECTS

Turkey is not a leader or a policy shaper in terms of environmental policy. As a developing country, its overarching goal has mainly been the achievement of economic growth, even at the expense of environmental degradation. This characteristic does not only belong to developing countries. The industrialized world has also created and suffered from the environmental degradation due to its economic growth policies. However, it is fair to argue that the growth pressure experienced by the developing countries is far greater than the developed world. Furthermore, developing countries generally react negatively to the demand by the developed countries for more environmental protection, arguing that this would inhibit their economic policies to achieve growth, decrease poverty and unemployment. In that sense, developing countries generally prioritize economic growth over environmental protection, which leads to an even greater environmental deterioration.

This has also been a recurring theme in the development of international environmental policy from the Stockholm Conference onwards. Developing countries neither wanted to limit their economic activities, nor assume the same responsibility with the industrialized world in the betterment of the current predicament of the world environment. Nevertheless, they developed environmental policies, albeit unwillingly in the beginning, as environmental degradation was global in nature and international responses had to be coordinated. As such, the world witnessed the initiation and later consolidation of global environmental governance.

Turkey also took its part in this development. Environmental policy started to develop in Turkey in the beginning of the 1970s, parallel to the start of international environmental policy and cooperation. Basic reasons behind the environmental degradation in Turkey are similar to the reasons of environmental degradation in the

global sense. However, there are also country specific factors that create environmental problems in Turkey:

> A combination of unregulated industrialization, unplanned urbanization, heavy use of chemicals and pesticides in the agricultural sector, ill-managed tourism activities, energy and mega-irrigation projects with no regard for environmental dynamics, as well as high population growth, uneven development and income distribution, and persistent poverty, have been putting immense pressure over the ecological system of Turkey.
>
> (Adaman and Arsel, 2005, p.3)

From the above overview, it becomes clear how Turkey fits in the pattern of the developing countries in terms of the environmental problems it faces. This said however, Turkey has developed an extensive environmental policy from the 1970s onwards. This process has intensified particularly from the 1990s onwards, due to the requirements put forward by the EU, to which Turkey is striving to join. The Copenhagen Criteria[147] proclaimed in the 1993 Copenhagen European Council clearly indicates the necessary conditions for an applicant state to become a member of the EU. Among these criteria, the adoption of the EU *acquis* on behalf of the applicant state implies the adoption of all the *environmental acquis* of the EU as well.

Turkey has completed the CU with the EU in 1995 and was declared a candidate country to the EU in 1999. Accession negotiations between Turkey and the EU started in 2005. Of 35 chapters in total, 13 chapters have been opened until present[148], the environment chapter being one of them[149]. Therefore, there has been an intensive transformation of Turkish environmental policy from 1995 onwards. Even though Turkish environmental policy has been impacted upon and shaped by both

[147] The criteria put forward by the 1993 Copenhagen European Council for the applicant states to the EU to become full-members are generally referred to as the 'Copenhagen Criteria'. Accordingly, the Copenhagen Criteria are determined to be the "stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities, the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union… ability to take on the obligations of membership including adherence to the aims of political, economic and monetary union" (CoM, 1993b).

[148] For more on EU-Turkey accession negotiations, please visit the official website of the Ministry of Foreign Affairs (MFA) (http://www.mfa.gov.tr/eu-accession-negotiations.en.mfa).

[149] Accession negotiations on the environment chapter started in 2009. For more on this issue, please visit the official website of the MFA (http://www.mfa.gov.tr/relations-with-the-european-union-in-the-field-of-environment.en.mfa).

international and EU level developments, the EU has become a much more effective policy shaper in Turkey due to the process of candidacy.

This section will focus on the ideational and paradigmatic transformations in Turkish environmental policy with respect to the taking hold of the discourse of ecological modernization. Therefore, particular emphasis will be placed on Turkey's sustainable development policies in a way to assess as to whether Turkey pursues a strong or weak sustainable development, particularly at the discursive level. Therefore this section will proceed in a way to capture the development and the transformation of environmental policy in Turkey from the 1970s onwards from the abovementioned perspective. The impact of the EU in this transformation will also be analyzed. The EU shapes both its member and applicant states, though in differing ways. The Europeanization analysis in the previous section presented the theoretical foundations of this impact for the member states. Here, another theoretical analysis of Europeanization will be presented with respect to candidate countries with a focus on 'conditionality' and 'socialization'. This analysis is expected to yield insights to the processes through which the EU transforms the candidate countries. The section will end with an assessment of the prospects for ecological modernization in Turkey.

### 2.3.1. The Development of Turkish Environmental Policy (1973-2000)

Turkish environmental policy started to develop in the 1970s, the period when international concern and action regarding the environment actually began. The development of Turkish environmental policy is generally considered to be a process initiated and pushed by the developments in the international realm, such as the publication of *The Limits to Growth* and the convention of the Stockholm Conference in 1972 (TÇV, 2001; Yıldırım, 2003; Yıldırım and Budak, 2005). It is not possible to talk about Turkish environmental policy on its own right before the publication of the Third FYDP in 1972 by the State Planning Organization (SPO).

Before the Third FYDP, environmental policy was not a full-fledged policy field on its own and featured only with respect to its relation with Turkey's

development and industrialization agenda, without being named an environmental policy. Turkish governments pursued policies that possessed environmental components, such as the management of forests, reclamation of marshy and muddy grounds, development of urban infrastructure and fight against erosion, yet with an understanding to meet the needs of the country on its path toward industrialization (Algan, 2000, pp.225-226). The general lack of environmental awareness, which was also the case for the rest of the world until then, the fact that the negative environmental consequences of rapid industrialization have not become visible yet and the overarching emphasis on economic development were the main reasons why Turkey had not developed an environmental policy (Budak, 2000, p.424). This would change with the advent of the 1970s.

#### 2.3.1.1. The Third Five Year Development Plan (1973-1977)

FYDPs [150] have been the principle documents that shaped Turkish environmental policy from its inception onwards. As a result of the interest on behalf of the Turkish government in constructing an environmental policy after the Stockholm Conference, the Third FYDP[151] that covered the period 1973-1977, for the first time incorporated a specific chapter on environmental problems and thus officially set the ground for the development of Turkish environmental policy. The section devoted to the environment was not excessive and comprised the definitions, content, principles and measures regarding environmental policy. From the section on principles and measures, it immediately becomes clear how the Third FYDP prioritized development over environment.

[150] After the 1960s, the Turkish State decided to adopt development plans in order to accelerate economic, social and cultural development; achieve coordination among different public policies; achieve a coherent social and cultural transformation and intervene rationally in the economic system. Accordingly, SPO was established in 1960 in order to assist and guide the governments in their efforts to determine economic, social and cultural policies and targets as well as for the coordination of activities regarding economic policies. Since the establishment of SPO in 1960, nine FYDPs have been adopted, the first FYDP being adopted in 1963. For more on this issue, please visit the official website of the SPO (http://www.dpt.gov.tr/DPT.portal).

[151] For the full text of the Third FYDP, please visit the official website of the SPO (http://ekutup.dpt.gov.tr/plan/plan3.pdf ).

The Plan argued that the way to achieve a balanced environment-human relationship was economic and social development and that Turkey would not pursue environmental policies that would hinder development (SPO, 1972, para.1931 (1)). Furthermore, the Plan made it clear that Turkey would not assume any responsibilities at the international level that would divert it from its goal of industrialization (SPO, 1972, para.1931 (2)). Therefore, the plan that initiated Turkish environmental policy had a clear bias towards development and placed environmental protection secondary to the goal of economic growth and industrialization. In addition to the above policy orientations, the Third FYDP stressed the necessity to establish a central environmental institution that would assume the coordination among different ministries regarding environmental issues (Mengi and Algan, 2003, p.228). Accordingly, Under-secretariat for Environment was established in 1978.[152]

#### 2.3.1.2. The Fourth Five Year Development Plan (1979-1983)

From the Third FYDP onwards, environment became an important policy field in the development visions that Turkey envisaged. It is possible to argue that there was growing environmental awareness on behalf of the policy elite. The Fourth FYDP[153] (1979-1983) described the environmental problems that Turkey had been facing in much greater detail than the Third FYDP. Furthermore, important environmental principles were for the first time enshrined in the development strategy of Turkey. Accordingly, the Fourth FYDP argued for the consideration of the environment in the process of industrialization, agricultural modernization and urbanization in a way to solve the environmental issues before they are created. In addition, it argued that such an approach would lead to the rational management and protection of nature and natural resources (SPO, 1978, para.1088).

[152] Under-secretariat for Environment was transformed into Environment General Directorate in 1984. It was later upgraded again into Under-secretariat for Environment in 1989 (Torunoğlu, 2005). In 1991, the Ministry of Environment was established. Due to a restructuring of public administration, the Ministry of Environment was integrated into the Ministry of Environment and Forestry in 2003. For more on this issue, please visit the official website of the MEF (www.cevreveorman.gov.tr).

[153] For the full text of the Fourth FYDP, please visit the official website of the SPO (http://ekutup.dpt.gov.tr/plan/plan4.pdf).

Therefore, the Fourth FYDP adopted the principles of EPI and prevention for the first time in an implicit manner.[154] It also established nature as a resource base, which needed to be managed rationally. The integration principle have been put forward both by the Stockholm Declaration of 1972 and by the EU in its First EAP (1973-1976). The prevention principle was also enshrined in the First EAP of the EU. Therefore, it is possible to argue that there is a definitive impact of international environmental developments and particularly the development of EU environmental policy on the construction of Turkish environmental policy from the 1970s onwards, even before Turkey had a prospect of full-membership to the EU.

#### 2.3.1.3. The 1982 Constitution

The first direct constitutional reference to the environment had to wait until the 1982 Constitution[155] of the Turkish Republic. The 1982 Constitution incorporated an article that is directly related to the environment. In that sense, it is an important landmark in the development of Turkish environmental policy. It has given a constitutional status to environmental rights, which is a crucial step in the deepening of environmental concern at the highest political and institutional level.

This inclusion is generally argued to be the result of the heightened international concern over the environment during the period the 1982 Constitution was prepared (Budak, 2000). Hence, the impact of international developments manifested itself in the statement "everyone has the right to live in a healthy, balanced environment" (1982 Constitution, Article 56, para.1). With Article 56, the Turkish State obliged itself as well as its citizens "to improve the natural environment, and to prevent environmental pollution" (1982 Constitution, Article 56, para.2).

[154] FYDPs and other strategy documents that have an environmental perspective are prepared with a participatory approach. The commissions that work for the preparation of these documents are generally constituted by the representatives of bureaucracy, civil society, industry and academicians. This results in an environmental discourse that is generally more progressive than the actual environmental laws that Turkish environmental policy rests upon. Therefore, there is a difference between the discourses in the strategy documents and the legal base provided by Turkish Environmental Law (Budak, 2011).

[155] For the full text of the 1982 Constitution, please visit the official website of the Constitutional Court of the Republic of Turkey (http://www.anayasa.gov.tr/index.php?l=template&id=210&lang=1&c=1).

The inclusion of 'environmental rights' in the 1982 Constitution is of eminence for the development of Turkish environmental policy. However, this does not imply the establishment of a full-fledged environmental policy. Kaboğlu (1992, p.41-42) argues that, since Article 56 is placed under the section 'Social and Economic Rights and Duties', it is subject to the limitation of Article 65 which determines 'The Extent of Social and Economic Duties of the State'. As a result of the emphasis on the capacity of the Turkish State to assume its duties based on its financial capacity as well as considerations regarding the preservation of economic stability, economic concerns have been prioritized over environmental protection. This Article has been amended with the 2001 amendments to the Constitution and the phrase 'considering the preservation of economic stability' has been removed. But for the time the Constitution was prepared, the priority of the Turkish State was in the economic sphere. And it is fair to argue that economic development still holds its priority status in Turkey.

Furthermore, Budak (2000, p.366) argues that the wording of Article 56 reflects an anthropocentric approach to the environment, where environmental rights are defined only for human beings which does not include other living things as well as natural and cultural values. Therefore, it is necessary to stress that the inclusion of environmental rights in the 1982 Constitution shall be viewed as a first step towards the institutionalization of environmental policy. Yet, it does not imply that environmental rights are exercised to the extent that they should be, as they are limited by the financial and economic capacity and the priorities of the Turkish State.

#### 2.3.1.4. 1983 Turkish Environmental Law

Turkey adopted its first environmental law in 1983.[156] The inclusion of environmental rights in the 1982 Constitution, the air pollution experienced in Ankara in that period and the positive engagement of NGOs such as the Environment Foundation of Turkey (TÇV) in pressing for an environmental protection law all culminated in the adoption of the Turkish Environmental Law in 1983 (Budak, 2000,

[156] For the full text of Turkish Environmental Law (1983), please see Türkiye Çevre Sorunları Vakfı (TÇSV) (1987). *Çevre Kanunu'nun Uygulanması*. Önder Matbaa, Ankara, pp.237-248.

p.372). This law has been adopted based on the Article 56 of the 1982 Constitution discussed above (TÇV, 2001, p.96). It has been amended several times, the major amendment being in 2006 where the principle of 'sustainable development' was adopted. The 2006 amendments will be discussed later in this section. Suffice to say that the amendments prior to 2006 have not changed the basic framework of the law (Budak, 2011).[157]

Article 1 lays down the goals of the Turkish Environmental Law. Among them are the protection and improvement of the environment, preservation of land and natural resources and the prevention of pollution in general. Article 1 also states that the necessary measures to achieve environmental goals would be taken in coherence with the economic and social development goals of the Turkish State (TÇSV, 1987, p.237). Therefore, economic development is still at the heart of all policies, as well as environmental policy, which does not come as a surprise given the developing country status of Turkey.

Article 3 lays down the principles guiding Turkish environmental policy. Accordingly, environmental policy-making and implementation would be based on an analysis of their impacts on the development efforts of the Turkish State as well as their costs and benefits. Best available technologies would be used in the design of economic activities and production methods in order to avoid and limit environmental problems. The polluter should pay for the expenses made for the prevention, limitation and fight against pollution, unless the polluters could prove that they have taken all the necessary measures for the prevention of pollution (TÇSV, 1987, p.238).[158]

From the principles of Turkish environmental policy, it becomes clear how economic development goals prevail. Furthermore, the principles resonate with a reactive rather than a proactive approach to environmental policy, attested by the

[157] Budak (2011) further argues that the 2006 amendments have also not changed the framework of the 1983 Turkish Environmental Law to a great extent.

[158] Article 3f that was inserted in Turkish Environmental Law with the 1988 amendments stated that the polluters would pay the costs that are above the lowest possible level of pollution. This limited the scope of the polluter pays principle. This statement was later eliminated with the 2006 amendments to Turkish Environmental Law.

exclusion of the prevention at source and the precautionary principles (Budak, 2000, p.377). Budak (2000, p.377) argues that the exclusion of such principles shows the discrepancy between Turkish and EU environmental policies. Nevertheless, the inclusion of the polluter pays principle might be seen as an approximation to the international and European environmental policy principles and the start of the marketization of the environment in the 1980s. However, the 1983 Turkish Environmental Law states that the polluter would infer no costs once it proves that it has taken the necessary steps, which is far from the broader meaning attached to the concept in EU environmental policy (Budak, 2000, p.380). As such, there is always an open door to pollute and get away with this.

In addition, the introduction of a fine on pollution levels above the 'lowest possible level of pollution' is reminiscent of the economic rationalism prevalent in the first half of the 1980s. Once again, it could be said that Turkish Environmental Law possessed elements and principles that were formulated at the international and European level, albeit rectified according to the development priorities as well as the state-private sector relations in Turkey. Finally, Article 10 of the Turkish Environmental Law necessitates the preparation of an EIA report by all the organizations which might cause environmental problems as a result of the activities they aim to realize (TÇSV, 1987, p.240). This requirement has been adopted by the EU in its Second EAP and was issued as the EIA Directive in 1985. Therefore, Turkey followed the European trends in dealing with environmental pollution and introduced an important element of EPI with the 1983 Turkish Environmental Law.

#### 2.3.1.5. The Fifth Five Year Development Plan (1985-1989)

The Fifth FYDP [159] was prepared after the constitutional and legal developments that took place in the beginning of the 1980s. There was growing environmental awareness on behalf of the Turkish State. Accordingly, the environment section of the Fifth FYDP started with an acknowledgement of the outstanding

[159] For the full text of the Fifth FYDP, please visit the official website of the SPO (http://ekutup.dpt.gov.tr/plan/plan5.pdf).

environmental problems in Turkey, being urbanization, erosion, pollution due to natural disasters and environmental problems brought about by rapid industrialization and agricultural modernization (SPO, 1984, para.807).

Furthermore, the Fifth FYDP brought about a change of approach to environmental policy-making in general. It stated that Turkish environmental policy would no longer only focus on the elimination of persisting pollution, but also on the effective use of natural resources so as to allow future generations to benefit from them (SPO, 1984, para.808). Therefore, Turkish environmental policy was gradually based on the notion of prevention with the Fifth FYDP (Talu, 2007). Budak (2000, p.431) argues that the incorporation of this idea is a move that is even beyond the developments in EU environmental policy, as the EU committed itself to achieve the sustainable use of natural resources with a view to the rights of future generations only with the Fifth EAP, adopted in 1993. The adoption of the principle however does not guarantee its effective implementation. Even if the principle is adopted earlier in Turkey, the performance lags far behind that of the EU's.

Mengi and Algan (2003, p.229) argue that the simultaneity of the preparation processes of the Fifth FYDP and the Brundtland Report had an impact on the Fifth FYDP, as one of the cornerstones of the Brundtland Report and its sustainable development definition is the notion of intragenerational equity that argued for the consideration of future generations in natural resource use. Talu (2006, p.21) states that the SPO has opened the Brundtland Report to debate among public institutions and other related parties and hence initiated the process of modernizing Turkish environmental policy. Therefore, it can be argued that notions associated with 'sustainable development' started to be espoused with the Fifth FYDP. Furthermore, Algan and Mengi (2005, p.97) argue that this was a period "when Turkey became party to a number of international agreements on the environment" as well as intensified its efforts to apply for full-membership to the EU, which culminated in the incorporation of international environmental norms in Turkish environmental policy.

Finally, the Fifth FYDP had a sharper focus concerning the implementation of the principle of EPI. Environment features not only in the section on environmental policy but also in other sections such as energy policy, tourism and regional planning. Regarding energy policy, it is argued the preservation of natural resources and the environment in the whole production and consumption process of energy will guide energy policy (SPO, 1984, para.387 (1)). In addition, there is a commitment to follow the developments in the field of research in renewable energy sources that do not pollute the environment (SPO, 1984, para.387 (5)). In terms of tourism policy, it is stated that activities in this field will be based on a consideration of preserving the ecological balance, and principles of preserving a clean, beautiful and healthy environment (SPO, 1984, para.431 (1)). To cite one more example, regional planning policy also incorporated environmental concerns. The Fifth FYDP stated that the big projects that will impact on the general planning of the region will be analyzed with respect to their impacts on the environment and the region in general (SPO, 1984, para.719). In addition, public agencies and the private sector are obliged to prepare an EIA during the project phase of their planned activities that might have an environmental impact (SPO, 1984, para.738).

However, it is still early to mention a full incorporation of the principle of EPI in the Fifth FYDP. EPI has not been established as a binding principle (Budak, 2000, p.432). In addition, an important element of EPI, the EIA Regulation will only be adopted during the period of the Sixth FYDP, in 1993. Nevertheless, it can be observed that the principle is slowly entering the policy paradigm to be consolidated only later. Therefore, it could be argued that Turkish environmental policy started to become oriented towards the basic notions and principles of sustainable development in the second half of the 1980s with increasing emphases on EPI, effective use of natural resources and the preventive principle.

#### 2.3.1.6. The Sixth Five Year Development Plan (1990-1994)

The developments in the field of international environmental policy and the arrival of the overarching concept of ‘sustainable development’ with the publication of

the Brundtland Report in 1987 left their mark on the Sixth FYDP.[160] Even though the document did not incorporate the exact concept of 'sustainable development', it nevertheless prescribed the realization of some of its basic components. Therefore, notions of sustainable development were introduced into Turkish environmental policy with the Sixth FYDP.

The section on 'environmental problems' contains references that are to be considered within the sustainable development framework. It is stated that the main principles guiding Turkish environmental policy are the preservation of human health and the natural balance, the management of natural resources so as to allow for perpetual economic development and to bequeath a humane environment to future generations (SPO, 1989, para.971). Here, it is striking to observe that even though the basic principles of Turkish environmental policy are in line with the general idea of sustainable development, the word 'perpetual' is used instead of 'sustainable'. This reflects the growth-oriented vision of the Turkish development strategy. In addition, Mazlum (2004, p.645) argues that even though the Sixth FYDP "adopted sustainability as policy goal", it has not put forward specific "political measures and instruments" to achieve sustainable development, which will have to wait until the Seventh FYDP. Therefore, even though Turkish environmental policy is tried to be aligned with international environmental developments, it still possesses the underlying orientation towards economic growth. This is totally understandable and expectable, when it is recalled how the EU used multiple terminologies regarding sustainable development during the same years. The EU inserted the exact concept of 'sustainable development' and established it as a principle and an objective only in 1997 with the Treaty of Amsterdam.

The Fifth FYDP presented a gradual orientation towards the principle of EPI as discussed previously in this section. The Sixth FYDP, however, committed Turkish environmental policy as well as other sectoral policies to the principle. In the section on the general goals and policies of the Sixth FYDP, it is stated that the prevention of the

[160] For the full text of the Sixth FYDP, please visit the official website of the SPO (http://ekutup.dpt.gov.tr/plan/plan6.pdf).

dissipation of human and natural resources and the preservation of the environment would be the basic frames of reference in carrying out economic and social activities (SPO, 1989, para.21). The same approach appears also in the section on sectoral development goals, where in addition to the above concern, it is also stated that the state would support investments that are directed at the cleanup of waste products and residues (SPO, 1989, para.232). Algan (2000, p.228) argues that this is one of the most important components of the Sixth FYDP.

In the section on 'environmental problems', this orientation becomes even clearer. It is stated that the environment would be considered in all economic policies and all the ministries are held responsible for devising and implementing policies regarding the diagnosis and the prevention of the environmentally harmful impacts of their activities (SPO, 1989, para.972). In addition, it is stated that the environmental dimension will be considered in all stages of planning (SPO, 1989, para.975). These statements are clear indications of the consolidation of the principle of EPI in Turkish environmental policy. Furthermore, the EIA Regulation was adopted in 1993, during the period covered under the Sixth EAP. However, discursive commitment does not necessarily imply policy success. Turkish environmental policy is no exception to this. The implementation problems would soon show themselves, as was the case with EU environmental policy. The EIA Regulation lived through implementation difficulties, which will become a theme in the Seventh FYDP.

In addition to the commitment to EPI, intragenerational equity and other related sustainable development notions, the Sixth FYDP also stated that Turkish environmental policy would be guided with the prevention principle (SPO, 1989, para.973) and would make use of the 'best available technologies' in devising environmental standards (SPO, 1989, para.974). These principles are also in direct harmony with the principles of EU environmental policy. Hence, it is possible to argue that with the Sixth FYDP, Turkish environmental policy became more aligned with the international and European developments in environmental policy. Indeed, it is endowed with even more progressive statements compared to the EU in the same years. Budak (2000, p.433) argues that an approach to environmental protection that possesses

the fundamental notions of sustainable development such as the goal to achieve a development path that considers both human health and natural balance, and thus environment-oriented and sustainable, have to wait until the Treaty of Maastricht in 1992 to become inserted into EU *environmental acquis*.

From the 1990s onwards, Turkey entered into a process where EU membership became a national strategy.[161] A rapid transformation of Turkish politics, law, and economic policies followed and integrating to the EU and completing the CU became priority areas. Environmental policy is also a part of this process. This is the reason why the final statement of the section on 'environmental issues' in the Sixth FYDP stated that the efforts that have been initiated to harmonize Turkish environmental policy with EU environmental policy would be continued (SPO, 1989, para.1000). Therefore, from the second half of the 1990s onwards, the developments in Turkish environmental policy should be considered within the framework of Turkey's EU bid.

#### 2.3.1.7. The Seventh Five Year Development Plan (1996-2000)

Seventh FYDP [162] was published within the background of increased orientation towards sustainable development in the international community. The Sixth FYDP had incorporated notions of sustainable development without using the exact word 'sustainable' and opted for the word 'perpetual' instead. The Seventh FYDP on the other hand, made use of the word 'sustainable', though with respect to both 'sustainable development' and 'sustainable growth'. This has clear resemblance to the EU's use of the same mixed terminology until the Treaty of Amsterdam.[163] It can be

[161] Turkey applied for full-membership to the EU in 1987 and was declined in 1989. The Commission opinion for the Turkish full-membership application was negative. The Commission stated that the EU was in a process of deepening, which implies the completion of the single market. It was also stated that Turkey was actually eligible to become a member state only if persisting economic, political and social problems were eliminated (CEC, 1989). After 1989, Turkey directed its efforts to eliminate the aforementioned problems. For a critical analysis of the transformation of Turkish politics and EU-Turkey relations, please see Keyman, E. Fuat and Öniş, Ziya (2007). *Turkish Politics in a Changing World – Global Dynamics and Domestic Transformations*. Istanbul Bilgi University Press.

[162] For the full text of the Seventh FYDP, please visit the official website of the SPO (http://ekutup.dpt.gov.tr/plan/plan7.pdf).

[163] The Treaty of Maastricht made ample reference to the principle of 'sustainability'. Nevertheless, different terminologies were used such as 'sustainable growth' and 'economic and social progress which

argued that similar economic concerns have fed the initial Turkish orientation to the concept and policy of 'sustainable development'. Nevertheless, sustainable development was adopted as an environmental policy orientation with the Seventh FYDP.

The concept of 'sustainable development' features in relation to the integration of the environment into all economic and social policies, with reference to the sustainable use of natural resources, regional development policies, agricultural policies and environmental policy. 'Sustainable growth' on the other hand, features in the general goals of the Turkish Republic to become competitive in the face of increasing globalization. Therefore, when it comes to the general strategic goal of the Turkish Republic in the face of increasing globalization and the necessity to achieve competitiveness on the global scale, the terminology opted for becomes the one that emphasizes growth. Indeed, it is stated that the competitiveness-environmental protection balance will be considered in industrialization policy (SPO, 1995, p.68). It can therefore be fairly argued that the sustainable development policy penetrated into Turkish environmental policy with the Seventh FYDP, albeit in its weaker form. This in turn signals the initiation of an ecological modernization discourse in Turkish environmental policy.

The emphasis on EPI which is characteristic to Turkish environmental policy particularly from the Fourth FYDP onwards continues also in the Seventh FYDP. However, there are also new emphases regarding the contribution environment could make in terms of economic growth, both through the competitive advantages to be gained in international markets through the production of environmentally friendly products as well as the development of 'modern' and 'environmentally friendly' technologies (SPO, 1996, p.68). Here, two important aspects of ecological modernization surface for the first time in Turkish environmental policy, namely the economic potential of environmental protection and the importance of environmental technology and innovation, which attests to the adoption of a weaker interpretation of

is balanced and sustainable'. 'Sustainable development' was only used with respect to developing countries (TEU, 1992).

sustainable development. This again has important resemblance to the EU's embracing of the concept of sustainable development, as argued previously.

Another similarity between the Turkish and EU environmental policies during this period is the emphasis on the implementation deficit. The EU and the Commission in particular focused more on the implementation effectiveness of EU environmental policy with the advent of the 1990s, and NEPIs were introduced and defended as a cure to the problem. Similarly, the Seventh FYDP had a clear emphasis on the ineffective implementation of the environmental policies and principles introduced in the previous FYDPs and discussed the reasons for such a failure (Budak, 2000, p.435).

The Seventh FYDP stated that the poor performance in terms of environmental policy stemmed from the lack of coordination, cooperation and division of labor among the institutions responsible for environmental management, the lack of an environmental finance system, the non-establishment of an environmental database and the lack of the necessary legal background that would allow for an efficient environmental management (SPO, 1996, p.189). The non-implementation of the EIA Regulation is cited as an example to the consequences of such a lack of information, lack of technical capacity of the people to engage in such an assessment as well as the structural problems brought about by the Regulation itself. The non-implementation of the EIA Regulation also attests to the failure of the implementation of the principle of prevention (Budak, 2000, p.436) as well as the failure of the implementation of the principle of EPI.

The Seventh FYDP also criticized the previous approach to environmental policy which was reactive in nature and concerned with pollution abatement. In that sense, it argued that preventive environmental policy had not become well-established. In addition, the Seventh FYDP argued that the 1983 Turkish Environmental Law was incapable of answering current environmental issues. Furthermore, it argued for the necessity to have a dynamic environmental policy that would meet international and EU standards, which are fast developing. In a way to solve these implementation problems, the Seventh FYDP put forward concrete measures to increase implementation

effectiveness and achieve sustainable development. The section on Goals, Principles and Policies regarding environmental policy covers these measures. Here, policy proposals and goals that are directly related to sustainable development and ecological modernization will be analyzed within the scope and aim of this study.

The section starts with an iteration of the commitment to sustainable development as a guiding policy principle. Second, it rejects the approach that sees pollution as an inevitable by-product of industrialization and adopts a preventive approach to environmental policy. Third, it argues that for the purpose of EPI, economic instruments would be used in a way to achieve an incentive-based environmental policy in addition to command-and-control type of regulation. Therefore, from the Seventh FYDP onwards, Turkish environmental policy committed itself to the introduction and use of NEPIs, alongside traditional regulatory instruments. This is crucial as making use of economic instruments is an important element of the ecological modernization policy strategy. It is also stated that an effective environmental management system would be established in order to decrease the environmental impact of all activities and increase the use of environmentally friendly technologies. These policy orientations would later become definite policies, with the foreseen National Environmental Strategy to be prepared thereafter. Finally, it is emphasized that all environmental policies and measures would be developed in harmony with EU norms and international standards. This is the period when the EU also committed itself fully to ecological modernization. Therefore, it is possible to argue that ecological modernization ideas have permeated Turkish environmental policy mostly through the impact of the EU. With a view to achieve all these goals and correct the deficiencies of Turkish environmental policy, a National Environmental Action Plan (NEAP) has been published by the SPO in 1998.

#### 2.3.1.8. National Environmental Action Plan (1998)

NEAP[164] (1998) is a strategy plan prepared by the SPO with the support of the WB to cure the deficiencies in Turkish environmental policy mentioned in the Seventh

[164] For the full text of the NEAP, please visit the official website of the SPO (http://ekutup.dpt.gov.tr/cevre/eylempla/ucep.html).

FYDP. It aims to integrate development and environment issues and also provide feedback to the Eighth FYDP (SPO, 1998). It is a response to the necessity for the parties to the Agenda 21, adopted in the Rio Summit, to devise a national environmental program (TÇV, 2001). NEAP is not primarily dedicated to the achievement of sustainable development. However, it takes "sustainable development as the conceptual framework" (Mazlum, 2004, p.646). As a program and a strategy to cure the implementation deficits of environmental policy, as argued in the Seventh FYDP, it mainly focuses on institutional issues, which according to Mazlum (2004, p.647) is what prevents it from being "a comprehensive strategy".

Even though it is not legally binding, the NEAP is important both in the sense that it incorporates concrete policy and action proposals (Talu, 2006, p.21) and also that it is the first action program focusing on a specific topic (Yıldırım and Budak, 2005, p.199). Yıldırım and Budak (2005, p.199) argue that the NEAP has similarities with the EU's Fifth EAP in terms of priority areas, proposed actions and the selected terminology. In addition, the fact that the preparation phase of the NEAP included the active participation of a variety of interested parties attests to the inclination of Turkish environmental policy towards more participatory forms of policy-making.

The general aims of the NEAP are to increase the "quality of life" and environmental "awareness", to establish an effective system of environmental "management" and to achieve "development" with all its "economic, social and cultural" aspects (SPO, 1998, pp.2-3). In addition to these, the NEAP has established five strategic goals directly related to the environment:

- Reduce or prevent pollution
- Improve access to basic environmental infrastructure and services
- Encourage sustainable resource use
- Support sustainable environmental practices
- Minimize vulnerability to environmental hazards.

(SPO, 1998, p.59)

In addition, it has also been stated that the NEAP has been prepared with some guiding principles. These principles resonate well with both the Fifth EAP of the EU and the ecological modernization policy strategy adopted thereby. Accordingly, the first of these principles concerns the increase of participation in environmental policy-making. Here, the aim is to involve as many actors as possible in the policy process so that the end result, i.e. the policy issue at hand, would be agreed and thus find more chance to be effectively implemented by all the related parties. Second, the NEAP is based on the principles of 'consensus' and 'commitment'. Here again, the implicit goal is to achieve such policies that are agreed by all the related parties. Furthermore, it concerns the move away from 'oppressive measures' towards 'voluntary commitment'. Hence, the NEAP, like the Fifth EAP of the EU, stresses the need to achieve the voluntary participation of the interested parties in environmental policies and thus secure effective implementation. This notion is a core element of the ecological modernization policy strategy, which finds existence in the extended use of NEPIs such as VAs.

Third, the combination of 'efficiency' and 'economic rationality' is deemed crucial by the NEAP. The inefficiency in resource use is seen as one of the main reasons of 'environmental problems' and low levels of 'economic productivity'. As a result, the NEAP argues for the necessity of 'behavioral change' in order to achieve 'win-win' solutions. Here again, the principle argument of ecological modernization is espoused by the NEAP. Environmental policy is in a sense downgraded to the efficient use of resources and this is argued to be a way to achieve economic goals alongside environmental protection.

Fourth, the NEAP adopts the principle of pursuing priority policies that will incorporate the involvement of the related parties and also the 'internalization of concerns for protecting and managing the environment'. Generally speaking, such behavioral change is expected to take place once the interested parties are convinced to the benefits of such an orientation. The justification, generally adopted in these cases, is the economic as well as environmental gains to be achieved. Finally, the NEAP adopts the principle of decentralization in the process of decision-making and implementation.

This principle resonates with the subsidiarity principle that guides EU environmental policy.

The action programme put forward by the NEAP that prescribes measures to increase the effectiveness of the environmental management system also lends evidence to the general hold of the ecological modernization discourse in Turkish environmental policy. Among its prescriptions are:

- The increased use of economic and financial instruments (e.g. removal of environmentally harmful subsidies and the increased use of economic instruments such as emission fees, marketable permits)
- Institutional reform (e.g. increase the effectiveness of the EIA regulation)
- Legislative arrangements (e.g. increase participation)
- Planning (e.g. environmental policy integration in national, regional and local plans)
- Inventory and research

(Adapted from SPO, 1998, p.61)

As can be seen from the above sample of action priorities, the NEAP aligns itself with the view that environmental problems can be solved through the introduction of the appropriate tool mix (in this case NEPIs), integrating the environment into other policies, institutional and legislative arrangements and increasing the knowledge and research concerning the environment. These orientations clearly manifest a weak interpretation of sustainable development. Nemli (2004, p.15) argues that the NEAP lags even behind the Seventh FYDP, due to the mixture of terminologies in the NEAP regarding sustainable development, which according to her is an evidence to the fact that 'sustainable development' has not been fully understood. The reason for this is the lack of the societal and ecological components of sustainable development, which is also observed in EU environmental policy from the 1990s onwards. Environmental problems are taken to be management problems and there is no reference to the need or desire to limit economic growth.

Therefore, from the end of the 1990s onwards, Turkish environmental policy started to embrace notions associated with the ecological modernization policy strategy, such as increased emphasis on EPI, effective environmental management and the

increased use of NEPIs and the discursive shift towards win-win arguments. The impact of the EU in this transformation is important as Turkish environmental policy has the overarching goal of alignment with EU environmental policy from the Sixth FYDP onwards. This impact would become even more visible with the completion of the CU in 1995 and the proclamation of Turkey's candidacy to the EU in 1999. Before proceeding with the developments in Turkish environmental policy from the 2000 onwards, few words need to be spoken on the general characteristics of Turkish environmental policy in the period 1973-2000.

#### 2.3.1.9. Assessing Turkish Environmental Policy (1973-2000)

The period 1973-2000 witnessed the emergence of Turkish environmental policy, the increased awareness of the Turkish public towards environmental issues and legal developments with respect to the environment (Arat, 2000, p.173). When the development of Turkish environmental policy from 1973 until 2000 is analyzed, it is possible to argue that this development has been a reflection of the developments in the international and European spheres. This characteristic is not only attributable to Turkish environmental policy, but is general to all the countries in the world. With the arrival of modern environmentalism in the 1960s and the heightened international emphasis on the issue in the 1970s, all countries in the world started to develop environmental policies.

However, it should be noted that Turkey is not a country that became an 'actor' in this process, such as the industrialized countries. This owes mainly to the fact that Turkey was a developing country that had to prioritize economic growth in the 1970s. At the time international environmental policy started to take root, there were deep cleavages between the interests of the developed and developing countries regarding environmental policy, some of which are still the case. The incompatibility between economic growth and environmental protection was the main frame of reference back then, not only for developing countries but also for the developed world. Therefore, this 'dichotomy' led the developing countries to the defensive in terms of their right to develop even at the expense of environmental degradation.

From the end of the 1980s onwards however, this 'dichotomy' between environmental protection and economic growth left its place to the 'compatibility' between these two goals, particularly with the arrival of the policy of 'sustainable development'. The concept gained enormous ground all around the world and was perceived as a life jacket particularly for the nations that did not want to quit economic growth. Turkey is not an exception to this trend. Furthermore, the 1990s were the times when Turkey directed its efforts to become a full-member to the EU. Thus, it can be observed that from the 1990s onwards, Turkish environmental policy started to imitate EU environmental policy and incorporate elements of sustainable development.

EU environmental policy rests on a weak interpretation of sustainable development. Similarly, Turkish environmental policy also adopted a weak interpretation of sustainable development from the inception of the policy framework onwards.[165] This is demonstrated by the analysis of the Seventh FYDP and the NEAP and their emphasis on win-win scenarios, EPI, use of NEPIs, technological innovation and competitiveness. This turn towards sustainable development and ecological modernization in Turkish environmental policy is mostly discursive.

Mazlum (2004, pp.645-646) argues that the FYDPs have not been successful in incorporating sustainable development notions in Turkish environmental policy in general, based on the lack of success in EPI and the fact that "environmental objectives remained disentangled from macro policy objectives". She also argues that what the FYDPs have succeeded in was to "convey the idea" of sustainable development (Mazlum, 2004, p.646). Therefore, the turn towards sustainable development is generally discursive and comprises components of ecological modernization rather than a strong interpretation of sustainable development. This is evidenced by "the persistent focus on economic development without fully integrating the three pillars of sustainability within the planning processes" (Mazlum, 2004, p.648). This orientation

[165] Recalling the analysis in the previous sections, it is necessary to note that this is a general trend in international environmental policy. However, the EU's adoption of weak sustainable development is more important for the transformation of Turkish environmental policy as the EU impacts to a great extent upon policies in Turkey due to the association relation between the parties since 1963. This impact would be more visible from 1995 onwards.

towards ecological modernization continues throughout the 2000s. As such, it is praised by some scholars as a way to achieve a sustainable future through an efficient use of resources, establishment of environmentally friendly technologies, increased use of renewable energy and an increase in environmental awareness (Tuna, 2006, p.38).

Turkish environmental policy has been oriented towards and impacted upon by EU environmental policy to a great extent, particularly after the 1990s. This process intensified after the completion of the CU in 1995 and the proclamation of candidacy to the EU in 1999. Therefore, before proceeding with the developments in Turkish environmental policy after the 2000s, a brief outlook to EU-Turkey relations will be presented. In addition, the Europeanization process that takes place beyond the member-states of the EU will be briefly analyzed. This analysis is expected to yield insights regarding the ways the EU impacts on the policies of the candidate countries.

### 2.3.2. EU – Turkey Relations and Europeanization beyond the EU

Turkey is one of the first countries that have established a relationship with the EU. The formal relationship between Turkey and the EU started with the association application of Turkey to the EU in 1959, which resulted in the signing of the Ankara Agreement[166] in 1963. Nevertheless, the directional move of Turkey to the Western Bloc in general and Europe in particular can be traced back to its establishment in 1923. The relations between the two parties entered into an intensified period after the mid-1990s with the completion of the CU in 1995 and the proclamation of candidacy in 1999.

#### 2.3.2.1. EU – Turkey Relations from the Ankara Agreement onwards

The association relation established between Turkey and the EEC foresaw an integrative period between the parties, with an aim to decrease the economic discrepancies between the two so as to increase the economic development and the

[166] For the full text of the Ankara Agreement, please visit the official website of the Secretariat General for EU Affairs (http://www.abgs.gov.tr/index.php?p=117&l=2).

welfare level as well as the level of employment both in Turkey and within the EEC (Ankara Agreement, 1963, Article 2). In addition, the Ankara Agreement stated that the parties would consider possibilities for Turkey's full-membership to the Community once all the obligations arising from the Association Agreement are fulfilled (Ankara Agreement, 1963, Article 28). EU-Turkey relations intensified with the signing of the 'Customs Union Agreement' in 1995, which signified the completion of the process set forward in the Ankara Agreement. After the completion of the CU, Turkey raised its expectations to be declared a candidate for full-membership.[167] The completion of the CU meant an extensive harmonization of Turkish and EU law. Accordingly, Turkey aligned its commercial, competition, customs and other related body of law with that of the EU's prior to and after the completion of the CU. The same holds for the transposition of EU *environmental acquis* into Turkish national law particularly after 1995, even in the absence of any definitive prospect of full-membership.

Therefore, it is possible to argue that the main impact of the EU on Turkish environmental policy can be observed in the aftermath of 1995, as the transpositions prior to 1995 were selective in nature and international organizations were more active in shaping Turkish environmental policy (Budak, 2011). The CU was an important step "in accelerating the process of trade liberalization in Turkey and exposing Turkish industry to greater external competition" (Keyman and Öniş, 2007, p.126). Within this framework, Turkey intensified the process of harmonizing its environmental law with that of the EU's to prevent environmental standards from standing as NTBs against the free movement of goods between Turkey and the EU (Budak, 2011).[168]

The lacking prospect of full-membership arrived with the proclamation of candidacy in 1999. Turkey entered into a huge reform process particularly after the

[167] After a disappointment in the Luxembourg European Council in 1997, whereby the CEECs were declared candidates and Turkey was not, Turkey was finally declared a candidate country in the 1999 Helsinki European Council.

[168] Budak (2011) argues that the speedy transposition of EU environmental directives after 1995 has often resulted in contradictory outcomes, such as the adoption of regulations with no legal basis in Turkish Environmental Law.

publication of the first Accession Partnership Document for Turkey in 2001.[169] Environment features as a major policy field in the documents prepared by the EU during the process of candidacy and accession negotiations, such as the Progress Reports and Accession Partnership Documents. Even though implementation problems are continually stressed, the alignment of Turkish environmental policy with that of the EU's continues at a high pace after 1999.[170]

The accession negotiations between Turkey and the EU started in 2005 and the environment chapter started to be negotiated in 2009. Thus, the transformation of Turkish environmental policy in line with EU environmental policy still continues. In addition to the transposition of specific laws[171], the ideational transformation of Turkish environmental policy in line with the EU environmental policy ideas and discourses also continues at an increasing pace after the mid-1990s. This transformation will be analyzed after a brief look to the Europeanization literature beyond EU member states, with an aim to highlight the general patterns of such transformation.

#### 2.3.2.2. Europeanization beyond the EU

The EU transforms not only its member states but also the candidate countries, albeit to a lesser extent. The Copenhagen Criteria proclaimed in 1993 set the basic parameters of this transformation that takes place in the political, economic and legal realms. Europeanization and enlargement has become one of the major topics in the

[169] The primary document to guide the applicant in terms of meeting the criteria for full-membership is the Accession Partnership Document prepared by the Commission. The first Accession Partnership Document for Turkey was prepared in 2001. As the applicant country proceeds with the goals put forward by the EU, Accession Partnership Document needs to be revised. Hence, it is a dynamic document. Accordingly, it has been revised three times for Turkey in 2003, 2006 and 2008 respectively. The primary document to assess the country's progress in achieving the goals put forward by the EU is the Progress Report prepared by the Commission every year. It is the basis of the Accession Partnership Document. The applicant country on the other hand prepares a National Program corresponding to the Accession Partnership Document, indicating when and how the goals put forward by the EU would be met. If the applicant country is decided to be eligible for starting accession negotiations, the EU prepares a Negotiating Framework which indicates the principles, substance and procedure of the negotiations that are to take place. The overall framework guiding all these documents is the Copenhagen Criteria.

[170] Turkey joined the EEA and EIONET in 2003 (İzci, 2005, p.92).

[171] Specific environmental policies will not be analyzed, unless they have a direct explanatory relation to the underlying ideas and discourses in the introduction of such policy. This has also been the basic analytical framework in the analysis of EU environmental policy conducted in the previous sections.

European integration process, particularly due to the accession of the CEECs. However, there has not been much research on the impact of the EU on candidate countries until recently (Sedelmeier, 2011). The impact of the EU upon the candidate states can be approached from different theoretical perspectives (Schimmelfennig, 2009). Even though all these approaches provide insights to the Europeanization process in candidate states, the main mechanisms are "conditionality and socialization" (Schimmelfennig, 2009, p.8):

> *Conditionality* is based on the direct, sanctioning impact of the EU on the target government and subsumes the intergovernmental channel of external incentives, the compulsory impact and the compliance mode of governance. In the conditionality mode, the EU provides non-member governments with incentives such as financial aid, market access or institutional ties on the condition that they follow the EU's demands. By contrast, *socialization* comprises all EU efforts to 'teach' EU policies – as well as the ideas and norms behind them – to outsiders, to persuade outsiders that these policies are appropriate and, as a consequence, to motivate them to adopt EU policies.
>
> (Schimmelfennig, 2009, p.8)

Even though both of these mechanisms are fundamental to the Europeanization of candidate countries, 'conditionality' is the dominant mechanism at work as regards the compliance with the *acquis* criterion. The EU is more "coercive" in terms of influencing the "domestic policy making processes" of the candidate countries than it is for its member states, owing to the "asymmetrical relationship" between the EU and the candidate countries (Grabbe, 2003, p.303). The EU is the party with more to offer and more to demand accordingly; whereas the candidates have a little margin for bargaining and also less to offer to the EU.

Another difference in terms of candidate countries' and member states' processes of Europeanization "is the uncertainty built into the accession processes" (Grabbe, 2003, p.303). Candidates do not exactly know when and to what extent they fulfill the obligations put forward by the EU. They also do not have complete information as to whether their efforts and reforms suffice for the EU full-membership. Therefore, there is greater room for the EU to lead the candidates "towards greater convergence" with the existing EU polity (Grabbe, 2003, p.306). As a result,

conditionality becomes one of the most important mechanisms that bring about Europeanization in the candidate countries.[172]

Even though a powerful instrument, it should be noted that conditionality "uses 'carrots' rather than 'sticks'" (Schimmelfennig, 2009, p.12). Candidate countries are offered certain benefits conditioned upon the achievement of certain levels of progress. In addition, conditionality is successful only when the candidate country is committed to EU integration. It is important how the general political culture positions itself vis-à-vis Europe and European norms. This is reminiscent of Radaelli's argument that adaptational pressure and misfit do not totally assess the impact of Europeanization and "intervening variables" should be taken into account (Radaelli, 2003, p.46). Grabbe (2003, p.318) agrees with Radaelli (2003) that adaptational pressure does not suffice to analyze Europeanization in candidate countries and other intervening variables should be taken into account, such as "the asymmetry of the relationship with the European Union" and "the uncertainty built into the accession process".

In terms of environmental policy, 'conditionality' implies the transposition of all EU *environmental acquis* into the candidate countries' body of law. In that sense, the proclamation of Turkey's candidacy to the EU made Turkish environmental policy even more oriented towards EU environmental policy. This orientation can be observed generally after the 1990s onwards. However, it became more visible with the 2000s.

### 2.3.3. Developments in Turkish Environmental Policy after 2000

Turkish environmental policy did not present any substantial changes in orientation after 2000 and developed in harmony with the general policy orientations of the pre-2000 period. The commitment to sustainable development continued in the strategy documents published by the Turkish State. In addition, integration to the EU continued to be a persistent topic in the path Turkey is supposed to take in every policy field, including environmental policy. Nevertheless, there are some new emphases in

[172] Grabbe (2003, p.308) argues that conditionality "extends the reach of EU influence considerably more deeply into domestic policy making in CEE than it has done in the member states".

Turkish environmental policy after the 2000s. What needs to be specifically assessed is how the policy of sustainable development is interpreted during this period. For this analysis, a chronological view to the developments after the 2000s will be presented with respect to the FYDPs and other strategy documents.

#### 2.3.3.1. Eighth Five Year Development Plan (2001-2005)

The Eighth FYDP[173] is the plan adopted after the proclamation of candidacy to the EU. Accordingly, the adoption of the *acquis* and meeting the criteria for full-membership are among the foremost emphases of the Eighth FYDP. In terms of environmental policy, the goal to achieve sustainable development has been given ample reference. In the section where the successes and failures prior to the Eighth FYDP have been assessed, it has been stated that so far, neither sustainable development nor EPI could be achieved (SPO, 2000, para.159). A mixture of terminologies is also a characteristic of this plan, as both 'sustainable development' and 'sustainable growth' are used throughout the Eighth FYDP. In general however, it should be noted that the Eighth FYDP does not add much to the already established understanding of sustainable development in Turkish environmental policy (Mengi and Algan, 2003).

The Eighth FYDP is different from the other FYDPs as it also incorporates a Long-Term Strategy covering the years 2001-2023. Among the important aspects of this strategy, the first thing to be noted is its emphasis on the crucial economic and social transformations taking place globally and the opportunities they could provide. It has been argued that Turkey would benefit from such developments only through the adoption of a long-term strategy. Accordingly, the emphasis is put among other things on the necessity to become a knowledge-based society. This orientation is exactly parallel to the Lisbon Strategy adopted by the EU in 2000, where the EU aimed "to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social

[173] For the full text of the Eighth FYDP please visit the official website of the SPO (http://ekutup.dpt.gov.tr/plan/plan8.pdf).

cohesion" (CoM, 2000, para.5). Therefore, it can be observed that the same goal is also adopted by Turkey who intensified its efforts to join the EU. Another important point is the average 7% economic growth rate envisaged for the period 2001-2023 (SPO, 2000, para.169). Such a commitment to a high level of economic growth brings the question as to whether this growth could be sustainable.

In the Goals, Principles and Policies section of the Eighth FYDP, it is stated that Turkey will accelerate its efforts towards meeting the criteria for EU full-membership, the adoption of the *acquis* among these. The idea behind the emphasis on the integration with the EU is argued to be the necessity to achieve a continuous development path, decrease poverty as well as to increase the competitiveness of Turkey in the global sense. Another important goal stated in the Eighth FYDP is the necessity of taking the state out of the market via privatization, and hence keep up with the global trends at the time, namely deregulation and liberalization. This overarching goal has also manifested itself in the approach towards the environment. It has been stated in the Eighth FYDP that one of the ways to achieve a competitive industrial base is to achieve production that is suitable to environmental norms (SPO, 2000, para.189). Hence, the general goals, principles and policies prescribed by the Eighth FYDP are directly parallel with the globalization, liberalization and competitiveness trends present in the world generally during this period in the political, economic and ideological sense.

Within this background, the section on environmental policy is expected to present a similar understanding. It begins with an assessment of the previous failure of the Turkish State to cope with the increased amount of environmental problems, to achieve sustainable development, to integrate the environment into other policies and to establish an information system regarding the environment. It also states that the EIA Regulation has not been implemented successfully. Accordingly, the Eighth FYDP argues that the goals put forward in the NEAP should be implemented and also updated. The way to solve the abovementioned problems is again argued to be the improvement of environmental management and the use of economic instruments particularly to

achieve the integration of environment into other policies. In addition, it is noted that environmentally friendly technologies will be prioritized and encouraged.

The Eighth FYDP, like its predecessors, rests on a weak notion of sustainable development with primary emphases on economic development, EPI, NEPIs and the promotion of environmental technology. Thus, it can be argued that the ecological modernization discourse is further consolidated in Turkish environmental policy with the Eighth FYDP. Evidence to the above argument comes also from the consumer rights section of the Eighth FYDP. It should be recalled that one important element of the ecological modernization theory and policy strategy, particularly in the 2000s, was the emphasis put on consumption in terms of achieving a sustainable development path. This was the main theme also in the Sixth EAP of the EU. Parallel to these developments, it can be observed that the same understanding is also present in the Eighth FYDP. The Seventh FYDP argued for the necessity to protect consumers from environmental risks. The Eighth FYDP went further and aimed to make consumers more environmentally aware, so that they could choose environmentally friendly products in the market (SPO, 2000, para.1075). On the other side of the coin, the producers would be encouraged to use environmentally friendly technologies in their production processes (SPO, 2000, para.1077). Therefore, with the Eighth FYDP, the importance of consumer choices enters into the vocabulary of Turkish environmental policy, which is a clear indication of the further consolidation of the ecological modernization discourse.

#### 2.3.3.2. The Ninth Development Plan (2007-2013)

Turkey started accession negotiations with the EU in the period following the publication of the Eighth FYDP. The transposition of the EU *acquis* into Turkish law intensified in every field as Turkey directed all its efforts to achieve a rapid harmonization with EU law and to meet other demands from the EU. In that sense, the period after 2005 witnessed the incorporation of a full-fledged EU perspective into all the strategy documents, policies and government actions in Turkey.

The Ninth Development Plan (DP) (2007-2013) is an example of such an effort.[174] The first thing to be noted about this plan is its time span. The previous eight FYDPs were prepared for five year periods. The Ninth DP's time span however, is aligned with the time span of the EU's Instrument for Pre-Accession Aid, which puts forth all the financial assistance the EU will deliver to the candidate countries. Therefore, the Ninth DP's structure, approach and period have been determined in order to be in harmony with the EUs legal, institutional and financial approaches (Talu, 2006, p.23). This is also the reason why it has been named as a 'development plan' instead of a 'five year development plan', as it was the case for the previous eight FYDPs.

Similar to the Eighth FYDP, The Ninth DP has a clear focus on the necessity to meet the demands of the period it has been prepared, characterized by a speedy transformation and increased competition. In that sense, Turkey is directed to become a country that grows in a stable fashion, is competitive in the global sense, is transformed into a knowledge-based society and has completed the harmonization process with the EU. Different from the Eighth FYDP, however, the Ninth DP presents the development visions not in terms of sectoral policies, but in terms of general growth axes (Talu, 2007). Accordingly, five growth axes are determined in the Ninth DP, being the increase in competitive power, increase in employment, improvement of human capital and social solidarity, achievement of regional development and improvement of the quality and efficiency in public services (SPO, 2006). Furthermore, the plan makes it clear that the basic principles that the development policies in Turkey will rest upon would include, among other things, the complementarity between a competitive market, efficient public management and a democratic civil society. Relatedly, it is stated that the state should leave the market and focus on its roles concerning policy-making, regulation and supervision.

Talu (2007) argues that all the fundamental principles laid down in the Ninth DP comprise the elements of sustainable development and the choice of envisioning the plan in terms of growth axes indicates that a holistic approach is developed. However,

[174] For the full text of the Ninth DP, please visit the official website of the SPO (http://ekutup.dpt.gov.tr/plan/plan9.pdf).

the environmental dimension of sustainable development is less compared to the previous FYDPs, as environmental problems are mostly dealt with under the section of the development of urban infrastructure, which is located under the growth axis dealing with the increase in competitive power (Talu, 2006). Hence, economic objectives are still superior to environmental objectives. Accordingly, it is possible to deduce that environmental protection would be subsumed under competition requirements (Talu, 2006, p.26). This trend is visible in international, EU and Turkish environmental policies from the 1990s onwards and it has intensified in the 2000s in the face of increased globalization and global pressure for more competitiveness. Therefore, the weak sustainable development approach and the ecological modernization policy strategy can be argued to be the main focus of also the Ninth DP.

The section on environmental protection presents similar characteristics. The foremost emphasis is on the sustainable use of natural resources. This emphasis is related to the perceived need to achieve continuous economic growth in order to meet the needs of the upcoming era of globalization and heightened competition. The section on the environment also acknowledges that even though much has been done in terms of harmonization with the EU *acquis*, the expensive nature of the transformation process necessitates long time and a large amount of financial resources, which accordingly requires the participation of the private sector in this process. In addition, it has been noted that environmental management systems would be established in a way to achieve sustainable development. It has also been stated that the international obligations regarding the environment would be met in line with the principles of sustainable development and common but differentiated responsibilities. The document reiterates the polluter pays principle. It states that the specific conditions of Turkey will be considered in realizing legal changes within the EU harmonization process concerning environmental standards and management. In addition, the private sector will be encouraged to invest in the environment (SPO, 2006).

There are also other emphases, however, the underlying logic becomes clear from the above analysis. Turkey prioritizes economic growth and competitiveness over environmental protection and thus interprets sustainable development according to this

general orientation. Therefore, the Ninth DP presents a continuation of the general perspective change in the Eighth FYDP such as the increased importance attached to becoming a knowledge-based society and increasing competitiveness. As mentioned previously, these goals are among the fundamental orientations of EU politics in general and EU environmental policy in particular during the same period, attested by the adoption of the Lisbon Strategy and the Sixth EAP. This in turn, lends evidence to the dominance of weak sustainable development and ecological modernization in international, European and Turkish environmental policies from the 1990s onwards.

#### 2.3.3.3. 2006 Amendments to Turkish Environmental Law

The most recent amendment to Turkish Environmental Law has been made in 2006.[175] Thereby, the principle of sustainable development has been enshrined in Turkish Environmental Law. There are two references to the principle of sustainability. The first one is 'sustainable environment', which incorporates the intragenerational equity emphasis of the Brundtland Report. The second one is 'sustainable development', which emphasizes the balance between environmental, economic and social goals that will allow the present and future generations to live in a healthy environment (MEF, 2006b, Article 2). As such, it can be argued that the adoption of 'sustainable development' as a guiding principle of Turkish environmental policy in the legal sense, acknowledges the importance of economic and social goals along with, and arguably even more, than environmental goals.

Another emphasis is with respect to participatory environmental policy-making. Article 3e states that the right to participation is a fundamental element of both environmental policy-making and the practice of environmental rights (MEF, 2006b). Article 3f makes reference to environmentally friendly technologies and commits Turkish environmental policy to their extended use (MEF, 2006b). Article 3f also makes a commitment to the principle of prevention at source. Article 3g states that the incentives provided for environmental protection and the prevention of pollution will

[175] For the full text of the amended Turkish Environmental Law (2006), please visit the official website of the MEF (http://www2.cevreorman.gov.tr/yasa/kanun.asp).

mainly be handled by economic instruments and market-based mechanisms such as emission fees and emissions trading (MEF, 2006b). All these newly enshrined principles resonate well with the core elements of the ecological modernization policy strategy at the discursive level. However, there are no further references to MBIs or VAs.

Furthermore, the 2006 amendments exempted the searching activities of petrol, geothermal resources and mines from necessarily obtaining an EIA (MEF, 2006b, Article 10).[176] This according to Talu (2006, p.28) attests to the downgrading of environmental sustainability vis-à-vis economic and social sustainability. Finally, with the 2006 amendments, it has been stated that the time-limit for the ones who are affected from the damage to the environment to request compensation is five years (MEF, 2006b, Article 28). This is clearly a statement that overlooks the nature of many of the environmental problems and prioritizes the interests of the polluters. Such a short time span for demanding compensation is no cure for example to the damage given by nuclear activities that surface and become visible even after 20 years. As a result, it is possible to deduce that the 2006 amendments to the existing environmental law did not bring about a heightened importance to environmental sustainability. Economic and social development still dominates Turkish environmental policy even though a constitutional commitment to sustainable development is enshrined into Turkish Environmental Law. Furthermore, ecological modernization discourse is dominant in the environmental principles section, with respect to the importance of participation, the role of technology and the use of NEPIs. Yet, no basis for concrete policy action in the field of NEPIs has been defined.

#### 2.3.3.4. EU Integrated Environmental Approximation Strategy (2006)

The final strategy document to be analyzed is the EU Integrated Environmental Approximation Strategy[177] (UCES), prepared by the Ministry of Environment and

[176] This exemption has later been lifted by the Council of State after a plea by the Chamber of Environmental Engineers.
[177] For the full text of UCES, please visit the official website of the MEF (http://www.did-cevreorman.gov.tr/indir/UCES_ENG.pdf).

Forestry (MEF) in 2006. The document is prepared in order to adopt the EU *environmental acquis* and implement it effectively. It has been prepared with a participatory approach incorporating the contributions from the private sector and the NGOs. The main principles adopted by the strategy reveal the basic notions of sustainable development. Accordingly, the "fundamental principles" of UCES are:

- The right to live in a healthy and balanced environment
- Environmental policy integration between the sectors
- Polluter pays
- Prevention at source
- Protection of natural resources
- Sustainable development
- Cooperation between private and public sector
- Increasing environmental consciousness and public participation

(Adapted from MEF, 2006a, pp.7-8)

After setting up these main principles, which are by no means novel to Turkish environmental policy, UCES continues with the actions that are deemed necessary to be taken in order to achieve the goals mentioned in the beginning, namely the adoption of the EU *environmental acquis* and its effective implementation. The document then continues with the assessment and future direction of the harmonization process with EU *environmental acquis* on a sectoral basis. As such, there has been no change in the ideas behind environmental policy-making in Turkey. The necessity for Turkey to economically and socially develop, the requirements to comply with the EU *environmental acquis* and solve implementation problems, the necessity to involve the private sector and the aim to achieve EPI[178] are repeatedly emphasized. Therefore, weak sustainable development and ecological modernization are still the dominant ideas and policy paradigms in Turkish environmental policy.

In terms of NEPIs, it has been recognized that Turkey lacks a tax on "emission and discharge", and this is argued to be the lack of implementation of the polluter pays principle (MEF, 2006a, p.56). In terms of the EMAS and EU Eco-label Schemes, UCES

[178] It has been stated that "the application of The Environmental Impact Assessment is mostly realized" (MEF, 2006a, p.55).

states that these were not mentioned in the 2003 National Plan prepared by Turkey to meet the demands of the Accession Partnership listing the priority areas of harmonization. It is furthermore stated that the efforts regarding these issues will be designed in the following periods. Therefore, in terms of policy orientations and the underlying logic of environmental policy-making, another important element of ecological modernization policy strategy, namely NEPIs, are supported if not yet fully implemented.

The analysis of the FYDPs and other strategy documents reveal that Turkish environmental policy has been introduced and developed mainly as a result of the developments in international and particularly European environmental policy. The EU influence intensified in the latter half of the 1990s, with the completion of the CU and the proclamation of candidacy. In addition, sustainable development has become the main frame of reference for Turkish environmental policy from the Seventh FYDP onwards. However, parallel to the trends in the international sphere and particularly to the paradigmatic transformation of EU environmental policy, and due to the fact that Turkey is a developing country, weak sustainable development has become the main environmental policy paradigm in Turkey. In other words, ecological modernization discourse has taken hold in Turkish environmental policy, even if it is not yet fully transformed into concrete policies as in the case of EU environmental policy. Nevertheless, the prospects for the policy success of ecological modernization in Turkey will be briefly assessed, in order to project on the future direction of Turkish environmental policy.

### 2.3.4. Assessing the Prospects for Ecological Modernization in Turkey

Turkish environmental policy developed from the 1970s onwards, parallel to the development of environmental policy all around the world during the same period. The reasons to this parallel development have been analyzed throughout this section. Turkey has not been an active policy-shaper in terms of environmental policy and has mostly shaped its environmental policy paradigm and particular policies as a result of

the developments in the international and European spheres. The EU has been extremely influential in this sense, due to the Turkish endeavor to join the EU particularly after the 1990s. This has led the Turkish environmental policy paradigm to be shaped by the EU. EU environmental policy rests on a weak notion of sustainable development and ecological modernization. Accordingly, Turkish environmental policy has also been rested on a discourse of weak sustainable development and ecological modernization. This has been attested by an analysis of the FYDPs and strategy documents prepared by the Turkish State that give Turkish environmental policy its main direction.

This discursive transformation has rather proceeded in an ad hoc manner. It has also not been translated into concrete policy achievements yet.[179] Turkey is not in a state of modernization that presents the elements of the transformation that ecological modernization theory or reflexive modernization theory step in to explain. Accordingly, the development of Turkish environmental policy is not analyzed through the lenses of ecological modernization as a theory of social change. This has not been done for EU environmental policy as well. As argued before, ecological modernization has been more successful as a discourse and policy strategy than as a theory of social change. Thus, the analysis with respect to EU environmental policy also rested on the discursive and policy components of ecological modernization rather than theoretical analysis.

The dominance of ecological modernization discourse in Turkish environmental policy is observable, and is probable to shape any environmental policy efforts in the near future. One difference between the analysis of ecological modernization with respect to the EU and Turkish cases concerns the assessment of the policy success of ecological modernization. For Turkey, the analysis is done primarily in the discursive sphere as it is no unknown fact that Turkey has been living through implementation problems in terms of environmental policy due to a lack of institutional

[179] Turkey lacks the level of political modernization that is necessary for a full implementation of ecological modernization, such as a well-developed and politically active civil society. However, ecological modernization policy strategy has not been realized to its full potential even in the EU, which comprises the necessary level of political modernization for a fuller implementation of ecological modernization.

capacity, informational services as well as financial means to implement an effective environmental policy. Furthermore, some crucial instruments of the ecological modernization policy strategy, such as EMAS and Eco-label are not yet transposed into Turkish Environmental Law. It is nevertheless necessary to make a brief analysis as to the potential policy success of ecological modernization in Turkey, similar to the analysis conducted with respect to the policy success of ecological modernization in the EU in the previous section, based on the core components of ecological modernization policy strategy, namely EPI, NEPIs, and the emphasis on the role of technology.

In terms of EPI, the importance of integrating environmental concerns into all policies has been a recurrent theme in Turkish environmental policy from the Fourth FYDP onwards. The incorporation of the necessity to prepare an EIA report for the projects that have environmental consequences into 1983 Turkish Environmental Law gave the principle a political boost. The Fifth and Sixth FYDPs further committed Turkish environmental policy to achieve EPI as it was stated by these documents that EPI was one of the most crucial means to achieve environmental protection. The principle started to be considered as a part of Turkey's endeavors to achieve sustainable development from the Seventh FYDP onwards, as the Seventh FYDP adopted the policy of sustainable development. Even though heightened emphasis is placed on EPI in Turkish environmental policy from the 1980s onwards, policy success has not followed. This has been admitted in the Eighth FYDP.

As demonstrated in the previous section, similar implementation shortcomings have also been pertinent to EU efforts to achieve EPI. The reason for such a failure is mainly the prioritization of economic goals over environmental ones. This has been even more the case since the 2000s with the adoption of the Lisbon Strategy. The same analysis also holds for Turkey. Turkey is a developing country, which both discursively and policy-wise commits itself to economic development and prioritizes this goal over any other policy issue. Therefore, similar to the EU case, the discursive commitment to EPI in Turkey has not resulted in a successful implementation of the principle. This has been most visible in the implementation process of the EIA Regulation in Turkey.

Turkey adopted the EIA Regulation in 1993, ten years after the adoption of the 1983 Turkish Environmental Law. The implementation of the EIA Regulation lived through many difficulties and has not been realized to the full extent even until now. The main reason behind this failure is basically the prominence of economic development goals in Turkey that lead to the side-stepping of environmental considerations. In addition, lack of institutional capacity is also one of the reasons for such a failure. The main problem with the implementation of the EIA Regulation has been the lack of institutions that are competent to produce EIA Reports. This issue was later dealt with by the MEF, which laid down the necessary conditions for the competent authorities that could produce EIA reports. The first communication from the MEF dealing with this issue was issued in 1999[180], six years after the adoption of the EIA Regulation (Yücel, 2001).[181] However, it is still not possible to argue that the EIA Regulation is implemented in Turkey in a way that would allow for a full realization of sustainable development. Most of the EIA applications have been approved by the competent authorities, which leads to the conclusion that the EIA process functions not like an elimination but like a justification process (Budak, 2011).[182]

Policy success in terms of NEPIs has also not been prominent in Turkey. The first direct reference to the necessity to make more use of NEPIs in Turkish environmental policy is in the Seventh FYDP. The Seventh FYDP argues for the necessity to make more use of economic instruments in environmental policy, alongside traditional regulations, in order to create incentives for the polluters not to pollute. In addition, the NEAP also makes reference to the importance of the voluntary participation of the private sector, which is seen as crucial for environmental policy implementation effectiveness. Indeed, the NEAP argues that most environmental problems can be solved with the selection of appropriate environmental tools (SPO,

[180] For the full text of the communication laying down the necessary conditions for the competent authorities that will produce EIA reports, please visit the official website of the TÇV (http://www.cevre.org.tr/Tcm/Tebligler/cevresel%20etki%20degerlendirmesi%20yeterlilik.htm).
[181] The most recent communication laying down the necessary conditions for the competent authorities was issued in 2009.
[182] In the period 1993-2010, the number of projects that received a positive EIA report is 2055, whereas the number of projects that received a negative EIA report is only 32. For more on this issue, please visit the official website of the Directorate General for EIA Authorization and Audit (http://www.cedgm.gov.tr/CED/AnaSayfa/CEDIstatistikleri.aspx?sflang=tr).

1998, p.13). Nevertheless, the NEAP also emphasizes the primacy of "regulatory mechanisms" for environmental policy (SPO, 1998, p.13). The Eighth FYDP also mentions the importance of NEPIs, particularly with respect to their potential in achieving EPI. The basic justification for the extended use of NEPIs, which is similar to the EU's arguments from the 1990s onwards, is the argument that the incentive-based, flexible and voluntary tools would motivate the private sector to cooperate in environmental policy implementation.

NEPIs have risen to prominence in EU environmental policy, at least at the discursive level. However, they have not supplemented traditional environmental policy tools so far. Nevertheless, their share and importance have been rising steadily. Even though the EU has not been able to adopt a Carbon Tax so far, it has introduced EU ETS as well as voluntary schemes such as EMAS and Eco-label. Turkey, on the other hand, does not still have a legal basis for the introduction of most of the NEPIs. There are no taxes or charges in effect in Turkey on "emission and discharge" and neither has it adopted the EMAS or Eco-label Scheme, as stated by the UCES (MEF, 2006a, p.56). Therefore discursive commitment to NEPIs has not been yet translated into concrete policies in Turkey.

Even though Turkish Environmental Law does not contain the voluntary schemes such as EMAS and Eco-label, there are Regulations that are adopted by the Turkish State that prescribe the use of VAs in the implementation processes of some of the policies. This contradiction stems from the fact that Turkey adopts most of the EU environmental regulations and directives due to its harmonization efforts. The EU prescribes the use of VAs and other NEPIs in the design of its regulations and directives and these prescriptions are directly translated into Turkish environmental policy as regulations. Hence, a discrepancy arises between Turkish Environmental Law, which is still based on a command-and-control understanding, and the adopted regulations and directives that legally have to be based on Turkish Environmental Law (Budak, 2011). One example to such discrepancy is the Regulation Regarding the Increase in Efficiency

in the Use of Energy Sources and Energy[183], adopted in 2008, which prescribes the use of VAs in the implementation of this regulation.[184]

Therefore, it is possible to argue that despite rhetorical commitment to NEPIs, policy success is not promising. Even though the same comment also holds for EU environmental policy, Turkey lags behind even further with the non-existence of a legal basis for the use of NEPIs. However, it is possible to argue that there is a potential for policy success of NEPIs in Turkish environmental policy once they are given a legal status. The reason for this lies foremost with respect to the inclination of the private sector to comply with policies that are flexible, market-based and voluntary rather than command-and-control type of policies that are top-down and rigid.

Finally with respect to the emphasis on technological innovations in bringing about environmental and economic benefits, there are references to the issue mainly since the Seventh FYDP (1995). This development can also be argued to have followed the EU trends as the EU makes reference to the role of technology from the beginning of the 1990s onwards. The Seventh FYDP stressed the economic gains to be achieved via the development of environmental technologies and innovation and prescribed the adoption of environmentally friendly technologies. The Eighth FYDP also had a sharp focus related to the role of technology. It is stated that the Turkish development route will encourage and prioritize environmentally friendly technologies. Even though Turkey's research and development record is not very promising, the prioritization of the development of environmental technologies and innovation still provides prospects for the future of Turkish environmental policy.

[183] For the full text of the Regulation Regarding the Increase in Efficiency in the Use of Energy Sources and Energy, please visit the official website of the Ministry of Energy and Natural Resources (http://www.enerji.gov.tr/mevzuat/5627/Enerji_Kaynaklarinin_ve_Enerjinin_Kullaniminda_Verimliligin_Artirilmasina_Dair_Yonetmelik.pdf).

[184] Turkish export companies subscribe to ISO 14001, which is also an environmental management system devised by the International Organization for Standardization. Furthermore, there are two companies that have obtained the EU Eco-label by applying to the competent authorities in the EU. In addition, there are efforts to establish a well-functioning voluntary carbon market in Turkey. There is also a waste and recycling market established by The Union of Chambers and Commodity Exchanges of Turkey (TOBB). These developments however, do not challenge the fact that Turkish Environmental Law is still based on a command-and-control philosophy in terms of environmental policy instruments.

Thus, it is possible to conclude that the elements of ecological modernization in Turkish environmental policy are mainly to be sought in the discursive sphere. Hence, the discourse of ecological modernization is ahead of actual policy success. This predicament can also be observed in EU environmental policy. However, Turkey's policy success with respect to ecological modernization lags behind the EU. The reasons for this can be captured by Jänicke's (1992) analysis for the potential of environmental policy success in a given country. Jänicke (1992, p.53) analyzed the impact of different institutional settings on the environmental policy success of countries and argued that success is most likely if the country has a "capacity for modernization". In the remainder of this section, this analysis will be projected to the case of Turkey.

Jänicke (1992) argues that the countries that have a capacity for modernization are likely to perform better in environmental policy. The components that bring about such a capacity are "innovative capacity", "strategic capacity", "consensual capacity", and the "economic performance" of a country (Jänicke, 1992, p.53).[185] "Innovative capacity" is argued to be "the sum of all opportunities for the advancement of innovations and representatives of new interests" (Jänicke, 1992, p.53). Turkey is a country that is discursively committed to the improvements in technology, a theme iterated in the FYDPs as well as other strategy documents. However, real policy success does not follow. The rank of Turkey in terms of the power of competitiveness with respect to technology was 54 in 2002, whereas it became 53 in 2005 (SPO, 2006, p.19). In addition, the share of research and development in total gross domestic product is still below 1% (SPO, 2006, p.29). Even though the Turkish State provides tax incentives to research and development facilities, the prospects are still not so clear.

In terms of the opportunities for the representatives of new interests, the most important sector to be considered is the energy sector. Turkey is a country which has to import energy (Koyun, 2007). There is a considerable electricity demand and shortage and the bulk of the expenditure in Turkey in terms of energy, namely 82%, is to be

[185] Thought in the light of the Turkish case, it is fair to argue that Turkey does not have the most favorable conditions with respect to the components above.

directed to electricity expenditure until 2010 (Kaygusuz and Arsel, 2005, p.159). Sources of electricity generation in Turkey are thermal power plants and hydropower plants (Koyun, 2007). Turkey also possesses a great potential in renewable energy sources such as wind, biomass, geothermal and solar, however, this potential has not been realized so far as Turkish governments have focused mainly on "hydro-power and nuclear power", rather than exploit alternative energy resources (Kaygusuz and Arsel, p.160). The reasons for this insistency can be explained by the inclination towards "large-scale, ambitious projects", due to the dominance of the "developmentalist position" in Turkey (Kaygusuz and Arsel, 2005, p.161) as well as by "lack of financial resources", "lack of awareness and knowledge" and "bureaucracy" that discourages foreign investment (Koyun, 2007, p.5).[186]

In addition to these, another factor that could explain this orientation towards conventional forms of electricity generation is the lack of 'strategic capacity'. According to Jänicke (1992, p.53), "strategic capacity" denotes "a country's political ability to co-ordinate and, over an extended period, to implement long-term objectives". It is possible to argue that in Turkey, the instability in the political arena has long hindered the Turkish State from devising and implementing long-term strategic goals. The inefficient bureaucratic apparatus has also been a factor in such a shortcoming. Since 2002, the Justice and Development Party has been ruling Turkey as a single party government. Throughout this period and also along with the EU integration process, many reforms have been realized in terms of improving Turkish governance. Nevertheless, the controversial political climate pertinent to Turkish politics still hinders the adoption of long-term strategic goals.

Taking it from here, it is possible to argue that Turkey has not been performing well in terms of 'consensual capacity'. Jänicke (1992, p.53) argues that "consensual capacity" denotes "the ability of a country to achieve negotiated solutions within the framework of a co-operative political style". In that sense, both within the parliament and party-politics in general, and also in terms of the involvement of civil society,

[186] Added to these, Budak (2011) argues that the Turkish State perceives nuclear energy as one of the cornerstones of becoming a developed country.

Turkey has not achieved a consensual policy environment until now. Divided along secular-religious, ethnic and ideological cleavages, Turkish politics has always been a platform of harsh debates and unfruitful outcomes. In addition, even though civil society has developed to a great extent from the 1980s onwards and has shaken "the state-centric Turkish modernity and its organic vision of society" (Keyman, 2005, p.47), there are still problems as to the reach of civil society in the political arena and its impact upon policies.

Finally, in terms of economic performance, Jänicke (1992, p.53) argues that there might be contradictory results. The reason for this is the general fact that industrialized countries performing well economically have greater environmental degradation but also more means to deal with them, such as technological innovations as well as the low number of workers in the industry and more in service sectors that are more environmentally friendly. It is necessary to note that Turkey has not reached the level of industrialization Jänicke talks about, implying mainly the West European developed countries. However, it is also necessary to state that as a country investing most of its resources in economic development, Turkey also started to invest in the environmental field. Even though both the MEF and the municipalities are active in the field of environmental protection, it is still early to argue that Turkey has huge prospects for technological innovation to reverse environmental degradation. Nevertheless, there are important technological initiatives particularly in the field of energy, such as hydroelectric and solar power plants. In addition, environmentally friendly and clean technologies are imported from developed countries, which is a process that has started recently. Therefore, Turkey started to invest more in environmental technologies parallel to the increase in its economic development level.

From the above analysis, Turkey can be argued to be performing badly in terms of its capacity for modernization. A similar analysis is also conducted by Arsel (2005) where he argues that Turkey is still presenting characteristics of first modernization, even though it has started to incorporate elements of reflexive modernization particularly after the 1980s. Furthermore, Arsel (2005) argues that the process taking

place in Turkey should be regarded as "reflexive developmentalism", where elements of both first and second (reflexive) modernism are observable:

> For any environmental movement to be successful in Turkey, it has to clearly articulate its commitment to a type of developmental agenda that continues to serve the goal of national progress. In many instances, this necessity prohibits the direct criticism of the need for continued economic growth…The challenge of the environmental movement in Turkey, therefore, is the creation of an agenda of 'reflexive developmentalism' that wears its emancipatory commitment to economic growth on its sleeve while arguing for more environmentally sensitive practices.
>
> (Arsel, 2005, p.31)

Drawing on this statement and placing ecological modernization in the general context of reflexivity, Arsel (2005) argues that ecological modernization does not have a big explanatory power regarding the process of change taking place in Turkey. Such criticisms are generally directed against ecological modernization as a theory of social change, as analyzed previously. It has also been noted that even though ecological modernization is criticized regarding its theoretical remits, it has become the dominant discourse and policy strategy behind contemporary environmental policies. Similarly, even though Turkey does not present elements of reflexive modernization or a complete restructuring into a more ecologically aware society, ecological modernization discourse has been firmly established in Turkish environmental policy.

Recalling the typology provided by Christoff (1996), the analysis conducted above based on Jänicke's 'capacity for modernization' and Arsel's comments on 'reflexive developmentalism' can be argued to both rest on a notion of "strong" ecological modernization, characterized by "ecological", "institutional" and "deliberative" properties (Christoff, 1996, p.490). However, even in the most developed countries in Western Europe, ecological modernization has been observed in its "weak" form, characterized by "economistic", "technological", "technocratic" and "neo-corporatist" properties (Christoff, 1996, p.490). According to Dryzek (1997, p.152), ecological modernization is experienced "in its weak and techno-corporatist senses" even in the forerunner countries.

Therefore, even though Turkey lacks the components of the 'capacity for modernization' put forward by Jänicke and has to achieve a balance between development and reflexive modernization as Arsel contends, it is still possible to argue that Turkey has discursively incorporated and has the chance to implement an ecological modernization policy strategy in its weak form. This seems to be a fair route to be taken by a developing country such as Turkey, particularly when it is recalled that even the most progressive states in terms of environmental policy have opted for a weaker version of ecological modernization rather than structural change.

# CONCLUSION

Environmental policy has risen from almost non-existence to a high priority policy issue with the advent of the 1960s. Almost no country or international institution possessed an environmental perspective until then, in the sense that they did in the aftermath of the 1960s. The alarming levels of pollution and environmental degradation that characterized the upcoming era rendered the ignorance of environmental problems impossible. The rising awareness concerning the fact that the hitherto adopted economic growth policies were not ecologically sustainable started to shape the policy visions of initially primarily the developed countries, to be internationalized only later. In other words, almost all countries in the world started to accept that capitalism was not ecologically sustainable unless a balance was achieved between the innate motives for expansion and maximization of profits in capitalism and the limits nature posed against such drives. The diminishing resource base of the world, increasing population, increased level of pollution and the harmful effects of technology on the environmental predicament rendered the nature, hence capitalism and economic growth unsustainable. They also necessitated concerted action as most environmental problems were cross-boundary in nature and respected no national borders.

1960s also represent the arrival of modern environmentalism. The publication of influential books such as the *Silent Spring* (1962) increased public awareness regarding the environmental problems created due to unquestioned belief in technology. In the 1970s, the 'doomsday literature' contributed to the establishment of the environmental critique, pointing at the consequences of uncontrolled economic growth. Landmark publications such as *The Limits to Growth* (1972) and *A Blueprint for Survival* (1972) stressed that limitless economic growth that takes no environmental considerations into account cannot be sustained.

National and international efforts flourished in order to give effective responses to rising environmental problems in the face of these circumstances. Initial responses were informed by the belief that existing ideational orientations about the political,

economic and social structures of modern society need not be dramatically changed. Therefore, governments aimed at containing environmental issues via the existing structure of state machinery during the 1970s. The underlying logic behind these early responses was the incompatibility of economic growth and environmental protection. Environmental protection and economic growth were understood as mutually exclusive set of goals. This is attested both by the environmentalism of the period as well as by the policies devised to cure the environmental problems. As such, the policy responses of the 1970s aimed to achieve a balance between economic growth and prosperity and the demands of the attentive public and environmentalism of the period for more environmental protection.

International organizations such as the UN also approached the issue initially within the confines of the existing social structures of modern society and prescribed the right level of environmental protection to its member countries that would not hinder economic growth. This was not an easy target to attain on behalf of the UN, particularly in the face of the developing countries' objections against assuming the same level of responsibility with the developed world in the creation of environmental problems and limiting their economic growth for the betterment of the environmental predicament. Even though the zero-growth arguments of the time put forward by influential reports such as *The Limits to Growth* (1972) disturbed the development visions of all the countries in the world, the developing countries were more reactive to the idea of limiting growth and perceived this as a roadblock put forward by the developed world. This divided the developed and the developing world into two camps during the first international attempt to circle environmental problems. The Stockholm Conference of 1972 hence made clear at least two things: first, the developing countries' claims to economic development could not be ignored; second, the developed world had to take more responsibility in the betterment of the environmental predicament.

In the face of rising environmental concerns and the clash of interests between the developed and the developing world, it soon became obvious that a solution had to be found to insert environmental policy within the general framework of the societal system. There was also the necessity to persuade the private sector in the goods of

environmental protection as most of the environmental problems were created due to the economic activities of the sectors such as agriculture and industry and service sectors such as tourism and transportation. In addition, the complexity, increased time and space dimension and the catastrophic consequences of the environmental problems of the 1980s such as the Chernobyl, necessitated a new approach to environmental policy. Environmental concern and action had to be placed in the very heart of the economic, social and political spheres so that it would no more be peripheral to the general route of societal development. Accordingly, a way was sought that would not stop economic growth, but make it more environmentally friendly and talk the developing world into taking actions to prevent the environment from further degrading. The UN became the principle platform to devise the right course of action and to find ways out of the aforementioned difficulties in achieving concerted action.

These necessities were behind the design of the formula of 'sustainable development' by WCED. Sustainable development is a vague and contested concept. It requires a manual for interpretation and a roadmap for implementation. The official definition provided by the Brundtland Report describes sustainable development as the development that meets the needs of the current generations without taking this right away from future generations. In definition, sustainable development is also rested upon three 'equally important' pillars, namely ecology, society and economy. It has an emphasis on limiting growth, though not on ultimate limits or zero-growth strategies. It is a formula devised in order to continue with economic growth within environmental limits.

With the introduction of sustainable development, environmental policy became a crucial policy field as it was no longer a sectoral policy issue but one of the fundamental elements of political economy, the basis of a new ecological rationality. International environmental cooperation intensified after the publication of the Brundtland Report. The convention of the Earth Summit (1992) has been a remarkable step in terms of increased interest and activism regarding environment and development issues at the international level. The agreements and conventions adopted at the Earth Summit (1992) signified the emergence of global environmental governance. In the

following period, this governance has been furthered and consolidated by the Earth Summit II (1997), the Johannesburg Summit (2002) and the entry into force of the Kyoto Protocol (2005).

The vagueness of the official sustainable development definition is, as Baker and Eckerberg (2008) states, what makes it a "conceptual shell". This vagueness is also a fundamental reason why sustainable development has been adopted by many and became the motto and the policy frame of almost all actors related to environmental policy. There are ample views as to what it actually denotes. Different interpretations rest upon different paradigms. With the power to shape national and international environmental policy, most governments have interpreted sustainable development in a way to sideline the ecological and social components of the concept and the normative principles associated with it as well as eliminate the emphasis on limiting economic growth. This tendency has also been furthered by the international organizations such as the UN, OECD, IMF, and the WB. As such, the development of global environmental governance via the UN Summits, international conventions and also the contributions of other international institutions followed a track that leaned towards a particular understanding of sustainable development through time. These developments fed the process whereby ecological modernization became the dominant way of interpreting and implementing sustainable development.

Ecological modernization is one but the dominant way of interpreting sustainable development. Ecological modernization denotes several things. First it is a social theory that tries to capture the transformation of modern society from the 1970s onwards to a more ecologically aware one, one that comprises an ecological rationality. However, it has been more successful as a discourse and policy strategy rather than a theory of social change. From the 1990s onwards, it was utilized as a discourse and policy strategy mainly in the developed countries for effective environmental policy. It was originated in the forerunner countries such as Germany and the Netherlands. However, soon, it established its hegemony in the design of environmental policies at the level of the most developed countries and international organizations with an environmental mission.

Ecological modernization shares with sustainable development the belief in the prospects environmental protection has in bringing about a stronger and more competitive economy. This is generally known as the win-win scenario. In addition, it also shares with sustainable development the need to achieve EPI and introduce NEPIs that are argued to function more effectively than traditional command-and-control type of regulations. Like sustainable development, ecological modernization also rests upon the preventive approach to environmental policy and the precautionary and polluter-pays principles.

However, there are points where sustainable development and ecological modernization diverge as two policy paradigms. Ecological modernization does not comprise the emphasis on the necessity of limiting economic growth and the aim to achieve intergenerational and intragenerational equity. Furthermore, both EPI and NEPIs within ecological modernization are rested upon a managerial understanding of environmental policy. In addition, whereas sustainable development places utmost importance to the role of participation to achieve social change, ecological modernization emphasizes eco-efficiency and the role of science in environmental and economic policy. Therefore, even though these two policies have a lot in common in terms of policy responses and terminology, ecological modernization is much more 'down to earth' and aims mainly to 'green capitalism', rather than realize the normative dimensions and principles associated with sustainable development. This is why it has been called 'weak sustainable development'.

The fundamental elements of ecological modernization discourse and policy strategy are fourfold. First, the basic discursive component of ecological modernization is the 'win-win' argument. It rest upon the notion that environmental protection is the basis of a stronger economy, and hence these two goals are compatible. The refusal of a zero-sum relationship between environmental protection and economic growth is also the basis of sustainable development. Different from sustainable development, ecological modernization stresses that environmental protection brings about more economic growth and competitiveness. Hence, it is argued to be a prerequisite for further economic growth, through a 'decoupling' of economic growth from

environmental deterioration. Furthermore, eco-efficiency and the creation of lead-markets in environmental products are argued to bring about increased competitiveness globally. Finally, the 'double dividend' argument stresses the possibility to create both a clean environment and an increase in employment at the same time, which is also central to the win-win discourse of ecological modernization.

Second, EPI is central to ecological modernization as it denotes the basis of the new ecological rationality. Accordingly, environmental policy should and indeed does stand at the very heart of all policies. Through EPI, ecological rationality is transmitted to the functioning of all the societal system. Third, ecological modernization strongly rests on the introduction of NEPIs for an effective environmental policy rather than traditional regulations. The creation of incentives for the polluter not to pollute through economic, flexible and voluntary mechanisms is argued to be crucial for implementation effectiveness. NEPIs are also argued to provide incentives for the industry to invest in green technologies. Therefore, ecological modernization policy strategy becomes most visible in the increased importance attached to NEPIs and their increased level of adoption as a consequence. Finally, ecological modernization emphasizes the role of science, technology and eco-efficiency in bringing about the desired environmental and economic ends. Indeed, ecological modernization is most often cited, and criticized, with respect to its 'technological optimism'. This owes to the fact that ecological modernization as a policy strategy rests upon the belief that technology and eco-efficiency are the basic routes to follow for a 'sustainable' and 'eco-modern' future.

Ecological modernization appealed to governments, international organizations and the private sector as a policy strategy that saw environmental problems as mainly efficiency issues that could be solved with the appropriate tools. OECD was particularly influential in the popularization of such an idea. With the introduction of the polluter-pays principle in the early 1980s, the continual emphasis on the compatibility and interrelatedness of environmental protection and economic growth and the role of technology in this reinforcing relationship, OECD functioned as a platform to popularize ecological modernization discourse and policy strategy among its members.

The introduction of sustainable development soon after such OECD involvement in environmental issues led sustainable development and ecological modernization policy strategy to develop as twin-sisters from their introduction onwards. Therefore, it became possible to side both with sustainable development and its weak interpretation, namely ecological modernization, even if their differences rendered them contradictory from time to time. Indeed, ecological modernization became the dominant way of understanding sustainable development and pursuing policies that are associated with it.

Ecological modernization theory originated in West Europe, mainly in Germany and the Netherlands, and has been developed by West European scholars since then based mainly on the environmental policy experiences of West European countries. These countries have not only adopted ecological modernization discourse and policy strategy, but also impacted upon the adoption of the same strategy at the EU level. EU has a well-developed *environmental acquis*. It represents an important number of countries and candidate states. It disseminates its environmental policy preferences to the rest of the world with which it trades. It is also very active in giving direction to international environmental policy. The regional and global importance of the EU in the environmental field makes it a good case to analyze the association of sustainable development with ecological modernization and for arguing that ecological modernization has become the dominant way of interpreting sustainable development. Indeed, the analysis of EU environmental policy reveals how the EU has adopted the policy strategy of ecological modernization without naming it as such.

EU environmental policy started to develop in 1972, with the convention of the Paris Summit. After the summit, the Commission was endowed with the task of preparing EAPs in order to lay down the principles and future direction of EU environmental policy. EU established a legal basis for environmental policy with the SEA (1986). Until then however, it had produced most of its crucial environmental principles and policies. The environmental activism of the EU until the SEA reflected the goal to achieve a full-functioning internal market, respond to growing environmental awareness, fulfill the commitment to raise the living standards of the people and devise concerted action to solve cross-boundary environmental problems.

From 1987 onwards however, a different understanding and justification of environmental policy started to be the case. This new strategy became most visible with the Fifth EAP (1993) where elements of ecological modernization were firmly enshrined in EU environmental policy and were used to justify extended EU activism in environmental issues.

From the 1990s onwards, ecological modernization discourse and policy strategy became central to all EU environmental policy efforts. This was attested by the ideas and policy orientations behind crucial EU documents, directly or indirectly related to environmental policy, published after the 1990s. With the advent of the 2000s, the importance attached to achieving competitiveness and economic growth made this strategy even more detectable in EU environmental policy. Increasingly, environmental policy started to be justified with the economic gains it would bring about. Thus, the discursive components of ecological modernization became the overarching elements of EU sustainable development policy. As such, the EU officially committed itself to sustainable development while opting for ecological modernization as a discourse and policy strategy to achieve it.

The nature of the European integration process renders the adoption of the ecological modernization policy strategy easier than stronger interpretations of sustainable development. European integration is foremost an economic integration project. Even though the EU has acquired political, social and cultural dimensions in the course of its development, economic growth has always been central to the process of integration. Therefore, economic growth is not a target that could be discarded by the EU. Ecological modernization provides the EU with the means and the justification to act in the environmental sphere without contradicting its *raison d'état*, as it is not only an environmental but also and mainly an economic policy strategy. Therefore, justifying strict environmental policy by emphasizing its potential to foster economic growth is completely understandable on behalf of the EU. In addition, the "incremental nature" of the EU policy process, as Baker (1997) argues, gives more chance of success to policies that are in harmony with the existing policy orientations, such as the growth-oriented economic policy of the EU, rather than structural change.

This discursive orientation to ecological modernization is also visible in terms of the policy components of ecological modernization in EU environmental policy. The analysis of the efforts to realize EPI, introduce NEPIs and promote eco-efficiency at the EU level demonstrates the extent to which EU environmental policy is shaped by the ecological modernization policy strategy. The Cardiff process, the putting into effect of the EU ETS and the introduction of voluntary schemes such as EMAS and EU Eco-label, and the adoption of ETAP all provide empirical background to the above argument. Even though the policy success of ecological modernization is not as remarkable as the discursive hegemony of the concept in shaping EU environmental policy, there is ample room to argue that ecological modernization policy strategy is as much in effect as the discourse.

The EU not only adopts but also Europeanizes ecological modernization. An analysis of the policy transfer of NEPIs in EU member states attests to the Europeanization of ecological modernization policy strategy. Apart from the leader states such as Germany and the Netherlands that generally upload their environmental policy preferences to the EU level, NEPIs have become more common in most of the EU countries after the 1990s, though not supplementing but complementing traditional regulatory instruments. Therefore, the turn of EU environmental policy towards ecological modernization discourse and policy strategy from the 1990s onwards has impacted upon the environmental policies of its member states and thus Europeanized the ecological modernization policy strategy in these countries.

The EU exports ecological modernization ideas and policies also to its candidate states through conditionality and socialization. An analysis of Turkish environmental policy with respect to the taking hold of ecological modernization discourse lends evidence to the above argument. Even though both international and EU level developments have left their imprint in Turkish environmental policy, the EU has been the principle actor in this process. This owes to the association relation between Turkey and the EU from the 1963 onwards and most prominently to the completion of the CU in 1995 and the proclamation of Turkish candidacy in 1999. Therefore, since the end of the 1990s, Turkey aligns its environmental policy with that of the EU's and

imports the ideas that lie beneath the formulation of EU environmental policies. As such, Turkish environmental policy is increasingly rested upon the ideas that shaped EU environmental policy, namely ecological modernization. This transformation is mostly visible in the discursive sphere as the transposition of specific EU environmental policies is a process in progress.

There are arguments as to whether Turkey possesses the 'capacity for modernization' that would allow for a successful implementation of the ecological modernization policy strategy. Analyzed in this light, it is necessary to admit that Turkey lacks most of the elements that constitute this capacity. However, even in the countries that possess the 'capacity for modernization', ecological modernization is adopted and practiced in the narrow and weaker sense. Therefore, there is no reason to assume that Turkey would not succeed in adopting and implementing at least a 'weak' version of ecological modernization policy strategy. An increased adoption of the NEPIs and the promotion of eco-efficiency are by no means unlikely in Turkey, particularly in the face of the ample reference given to their importance in the environmental policy documents, and also the increasing pace of economic growth Turkey has achieved recently.

This study demonstrated how powerful a discourse ecological modernization is. It also presented how it has become the dominant policy strategy to achieve sustainable development. Ecological modernization originated in West Europe. Initially, the theory rested upon the analysis of the industrial and ecological transformations taking place in the environmentally progressive states such as Germany and the Netherlands. Nevertheless, ecological modernization did not stay within the confines of these West European countries. It established its discursive hegemony after the 1990s in the global, regional and national sense and became to be used as the dominant policy strategy. An analysis of international, European and Turkish environmental policies, particularly after the 1990s, attests to this dominance.

For some, ecological modernization denotes the transformation of the modern industrial society whereas for others, it is just a 'greening' of capitalism. Both of these

positions have explanatory value. Ecological modernization has penetrated into the structure of the modern industrial society, has transformed it and thus greened capitalism. Nevertheless, ecological modernization has been more influential as a policy strategy rather than as a theory that describes and prescribes social transformations. As a result, it has proved to be more instrumental in 'greening' capitalism rather than transforming modern industrial society.

A critical analysis of ecological modernization reveals how the normative aspects and principles associated with sustainable development are assimilated into the win-win scenario and how the 'economic' is prioritized at the expense of the 'ecological' and 'societal'. Such a perspective also reveals how an overemphasis on the efficacy of flexible instruments and eco-efficiency downgrades environmental policy to a managerial issue. As such it is fair to argue that ecological modernization is foremost an attempt to green capitalism rather than challenge its environmental contradictions. This notwithstanding, ecological modernization policy strategy should also be approached from an angle that questions the likelihood or chances of success of a strong interpretation of sustainable development given the present world economic and political predicament. It should be asked as to whether ecological modernization is a lesser evil. This is by no means to argue that it is preferable to a stronger interpretation of sustainable development. It is rather to argue that pursuing ecological modernization is nevertheless preferable to doing nothing for a sustainable society.

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