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SOME ASPECTS OF ENVIRONMENTAL POLICY IN EUROPEAN UNION

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Abstract: *This paper will touch upon the main aspects of the European Union Environment Policy (EUEP) under the sixth Environment Action Program (EAP). First, the discussion will be focused on the EAP topics- with the following priorities: climate changes, nature and its biodiversity, environment and health, resources and solid waste. The implementation of the EAP will be analyzed by looking at the following topics and strategic courses of action: air, sea, solid waste, urbanization, natural resources, pesticides, and soil. Some selected environmental action plans and programs contained in the 6th EAP will be challenged in the context of the latest economic trends and tendencies in the World. Particular attention will be given to new challenges for EUEP in terms of environmental implications of further enlargement of the EU.*

Key words: *environment/ action program/ legislature*

INTRODUCTION

The EU is one of the initiators of the idea of the United Nations Environment Program UNEP to be established. Besides, the EU is a signatory and an active participant in the Kyoto Protocol on Climate Change. Moreover, the EU is a Party to numerous international environmental treaties. Within the EU a comprehensive system of high level environmental protection has been established, including emissions into the air and water, assessment and management of environmental noise, waste management, conservation of natural habitats, management of chemicals and industrial accidents. Such Community environmental policy orientation is formulated in its Sixth Environment Action Program.

In general, the EU's environmental policy is based on the „polluter pays" concept and the management and control of pollution at source. The ultimate goal of sustainable development in the EU is established in accordance with a global trend: "to achieve a form of development that meets the needs of present generations without compromising the ability of future generations to meet their own needs".

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ENVIRONMENTAL POLICY CONSIDERATION

The environmental policy of EU can be analyzed through its six environmental action programs, which covered different periods of time, as follows: First EAP (1973–1976); Second EAP (1977–1981); Third EAP (1982–1986); Fourth EAP (1987–1992); Fifth EAP (1993–2000). The Sixth Environmental Action Program, covering period 2002–2012, consists of seven thematic strategies.

The 6th EAP identifies four priority areas:

- Climate change
- Nature and biodiversity
- Environment and health
- Natural resources and waste.

Its implementation led to the development of seven Thematic Strategies in the following fields: air, marine, waste, urban, natural resources, pesticides, and soil (F. Vollenbroek, June 2004). The Thematic Strategies constitute the framework for action at EU level in each of the concerned priorities.

The concept of seven Thematic Strategies encompassing a priority promotes full integration of environmental protection requirements within the whole Community. The policies and actions provide the environmental component of the Community's strategy for sustainable development. The link is made between environment and European objectives for growth, competitiveness and employment.

According to the concept of the 6th EAP, it was required to perform a mid-term review. Formally, it was accomplished through several actions. This included a Member State consultation, an expert panel meeting, input from social partners, business associations, and eco-innovation industry. In addition, an on-line public consultation was held too. The EU Commission, the EU Parliament, the Council,

and the EU Economic and Social Committee, and the Committee of the Regions issued a communication on the mid-term review of the 6th EAP. It was pointed out that each of the priority areas identified by the 6th EAP pose outstanding challenges that need to be addressed.

The climate change was recognized as an extraordinary challenge directly linked to greenhouse gas emission. There are three main issues within this priority.

1. The first one is making shift towards a low carbon economy. In order to materialize this issue, the EU energy consumption has to be reduced by 20%, including a political commitment which will cover more sectors, especially aviation.
2. The EU is responsible for around 14% of the world's greenhouse gas emission. Therefore, much greater reductions of greenhouse gas emission will be needed at a global level and this is why the second issue is „climate diplomacy".
3. Adaptation to climate change is the third issue.

The cornerstone of policy related to the protection of Europe's nature and biodiversity is NATURA 2000. In that context, as response to one of the most important reasons for global biodiversity loss, the EU will have to increase efforts to stop deforestation (illegal logging) worldwide. Also, the next global issue where the EU expressed interest to continue working with Member States has been given prominence in order to introduce the eco-system based management for the worlds' fisheries and to eliminate destructive fishing practices (bottom-trawling; moratorium on commercial whaling).

There are several parts of the EU's EAP related to harmful effects on health such as: the Water Framework Directives, the Regulation on the Registration of Chemicals, Directive on ambient air quality, and Directive on pesticides.

Finally, the last EAP priority is dealing with better natural resources and waste management. The social and economic development in EU should take place within the carrying capacity of different ecosystems. In order to preserve the primary resources, various waste management technologies with spatial focus on recycling should be practiced on a daily basis.

Air

The Strategy sets specific long-term objectives of air quality, for 2020, as follows: 47% reduction in loss of life expectancy as a result of exposure to particulate matter; 10% reduction in acute mortalities from exposure to ozone; reduction in

excess acid deposition of 74% and 39% in forest areas and surface freshwater areas respectively. To achieve these objectives, SO2 emissions will need to decrease by 82%, NOx emissions by 60%, volatile organic compounds (VOCs) by 51%, ammonia by 27%, and primary PM (particles emitted directly into the air) by 59%.

Implementing the Strategy for air will entail an incremental additional cost compared with spending on existing measures. This additional cost is likely to amount to EUR 7.1 billion per annum from 2020. In terms of health, the savings that will be made as a result of the Strategy are estimated at EUR 42 billion per annum. The number of premature deaths should fall from 370,000 in 2000 to 230,000 in 2020 (compared with 293,000 in 2020 without the Strategy).

Marine

The Marine strategy Directive takes a regional approach to ensure international collaboration on marine protection, framed around two closed seas, the Baltic and the Mediterranean, as well as two open marine water bodies: the Arctic Sea and the North East Atlantic Ocean. The Directive would include as follows: conducting an initial assessment, determination of good environmental status, establishing environmental targets; and drawing up a monitoring program. National programs, encompassing specific measures would have to be approved by the EU Commission.

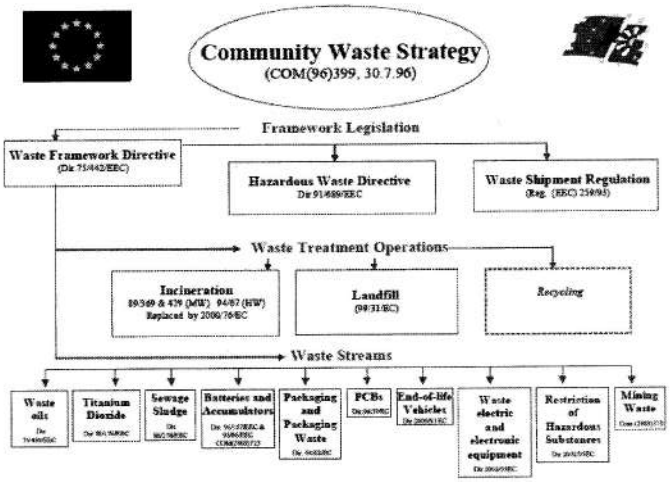
Waste

This thematic strategy has several objectives which are to be pursued by the following activities:

- developing a set of quantitative and qualitative reduction targets covering all relevant waste, to be achieved at Community level by 2010.
- encourage ecologically sound and sustainable product design;
- raising awareness of the public's potential contribution on waste reduction;
- the formulation of operational measures to encourage waste prevention, e.g. stimulating re-use and recovery, the phasing out of certain substances and materials through product-related measures;
- developing further indicators in the field of waste management;

These activities are illustrated in more technical details at the block schematic representation below (Fig. 1). It was prepared by the European Economic and Social Committee.

Figure 1. Technical annex to the thematic Strategy on the prevention and recycling of waste



Source: Waste Prevention and Recycling Strategy, (2005)., European Commission

Urban Environment

The Thematic Strategy on the Urban Environment is one of the key actions outlined in the Sixth Community Environment Action Program. Approximately 80% of Europeans live in urban areas. Therefore, they share typical urban problems such as: poor air quality, high levels of traffic and congestion, very high levels of ambient noise, poor-quality built environment, greenhouse gas emission, urban sprawl, and waste and sewage disposal. In practice, an integrated approach across Community polices and Local Agenda 21 proposed the following actions: the reduction of link between economic growth and passenger transport demand; the need for an increased share in public transport, rail, inland waterways, walking and cycling modes; the need to tackle rising volumes of traffic and to bring about a significant decoupling of transport growth and GDP growth; the need to promote the use of low emission vehicles in public transports; and the consideration of urban environment indicators.

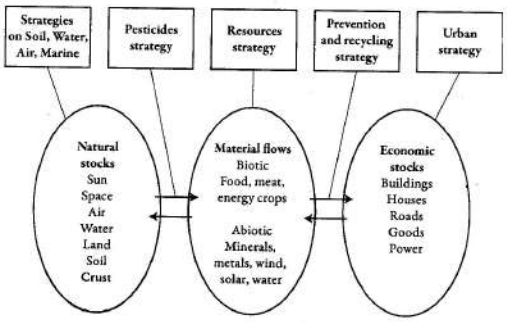
In addition to the formal document of the 6th EAP, there is a research approach to the same topic entitled: Trends and indicators for monitoring the EU thematic strategy on sustainable development of urban Environment (TISSUE) (Häkkinen, 2007, Publications 643). The aspects of development of sustainable urban environment were considered through urban design, transport, construction, and management. The sustainable urban design is a process whereby all actors create the most important urban values such as: secure and healthy place to live and work in; a vibrant and balanced economy that promotes urban regeneration; new developments which should be accessible by public transportation; low energy housing; enhanced respect and care for the existing cultural heritage and communities. Urban transport should achieve the following objectives: use of private cars powered by renewable or alternative fuels; well developed network of public transport; ensuring non-motorized ways of transportation (walking and cycling). The sustainable construction encompasses materials which are resource efficient, in particular with respect to energy.

Finally, the sustainable urban management seeks to minimize the negative impacts of urban areas on pristine ecosystems.

Natural Resources

There is a multiple interactive relationship between all seven thematic strategies (see Figure 2).

Figure 2. The Natural Resources Strategy as a central strategy



Source: F. Vollenbroek, DG ENV, (June 2004)

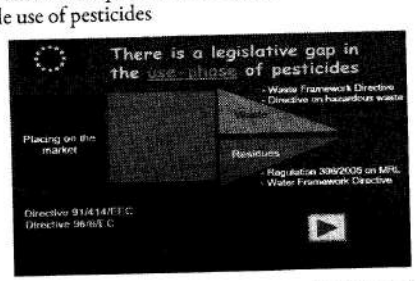
Generally speaking, the current trend in the use of the natural resources in EU should be shifted toward sustainable use. In order to achieve this, we need to gather information on the relation between the resource use and the environmental impact, and create incentives to reduce environmental impacts.

It would be interesting to contrast some controversial issues in the context of natural resources. Proven world reserves of non-renewable resources are large. It is difficult, if not almost impossible, to estimate the reserves of various minerals, particularly oil and gas in remote places of Asia (Siberia). Technology improvements have enabled locating and extracting greater proportions of these resources. In contrast to that, due to the whole spectrum of different reasons (economic, strategic, political etc.), the future trend in energy use is shifting toward renewable sources. The current situation in the world market shows that the decline of mineral prices and the scarcity of mineral resources is not at stake.

Pesticides

The general aim of this thematic strategy is to reduce risk to human health and environment, while some specific objectives are: sustainable use directive, statistic regulation, and machinery directive. The elements of sustainable use comprises: EU members' national action plans; training for users, distributors, and advisers; sprayer testing; promotion of integrated approaches (non-chemical control). It is necessary to point out a big discrepancy between the use and ban of pesticides; particularly those proven to be harmful for health (see Figure 3).

Figure 3. Actual situation in pesticide's use which leads toward a thematic strategy on the sustainable use of pesticides



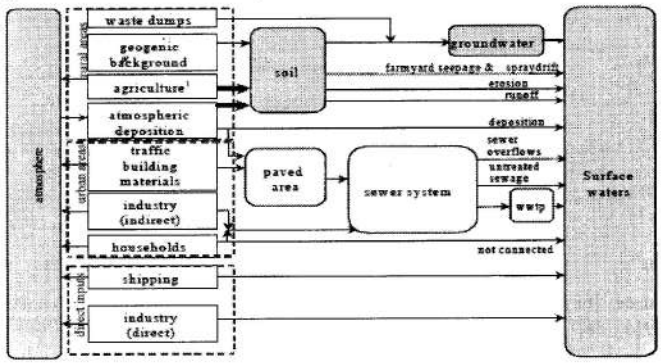
Source: Anne-Cécile Cotillion, (19-20 October 2006) THEMATIC STRATEGY ON THE SUSTAINABLE USE OF PESTICIDES, European Commission DG Environment, Unit B.3

Pesticide use should be regulated by statistical analysis based on the empirical model taking into account economic, social, and environmental costs and benefits of the application of any pesticide. One would expect that a certain pesticide would be canceled for use on a crop if the value of the vector of risks associated with use exceeded the weighted sum of benefits of use. The machinery must be designed and constructed to ensure that pesticide is deposited on target areas, to minimize losses to other areas and to prevent the drift of pesticide into the environment. Where appropriate, an even distribution and homogeneous deposition must be ensured.

Soil

All kinds of diffuse and point sources pollution of different ecosystems are originated in soil. In other words, a proper land use and management is required in order to prevent pollution in general (see Figure 4). The Soil Thematic Strategy is developed working through a five different approaches: soil erosion, organic matter and biodiversity, contamination and land management, monitoring, as well as establishing research directions.

Figure 4. The soil as a source of pollutions



Source: European Union Soil Thematic Strategy Working Group on Soil Erosion, (March 2004)

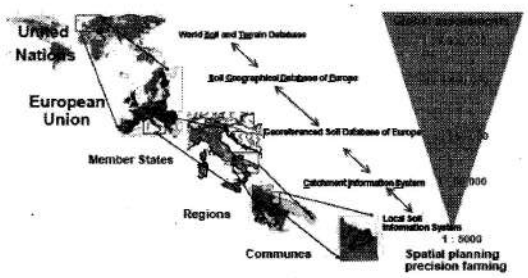
Agriculture is one of the main drivers of unnatural soil erosion, since many farming practices are soil-unfriendly and almost half of the European territory is intensive-

ly farmed, often in an unsustainable way. In addition, in the more disadvantaged areas (new EU members), the land abandonment is the main driver, potentially leading to desertification if the soil productivity and erosion tolerance are low, and the bioclimatic conditions do not allow a speedy recovery of vegetation.

Contamination is one of the main threats to soil, as identified in the EU soil communication (COM(2002) 179 final). Prevention of soil contamination has strong links with policies on chemical substances and with environmental protection policies for water and air.

Monitoring of soil was originally conducted in countries of the European Union. The database has recently been extended to Central European and Scandinavian countries. It currently covers Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Macedonia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Serbia, Sweden, Switzerland, and the United Kingdom. The concept of EU soil monitoring presented as a part of the global monitoring system is depicted in Figure 5.

Figure 5. EU soil monitoring as a part of the Global monitoring system



Source: The Sixth Community Environment Action Program, Brussels, 30.4..2007 COM (2007) 225 final report

The research in the soil needs to address threats posed by soil erosion, flooding, compaction and landslides. This requires an improved conceptual framework that integrates the different drivers and impacts, and which can be used to develop advanced assessment, monitoring, modeling, conservation and remediation approaches for management and prevention of the above mentioned threats.

INSTEAD OF CONCLUSIONS

It was pointed out in the conclusions of final report, that in terms of achieving the objectives of the 6th EAP, the Thematic Strategies are too dispersed. In other words, there are too many strategic directions. Therefore, the Strategies lack clear and concrete targets, as well as mandatory instruments. Furthermore, limited monitoring was projected. Finally, the whole concept of strategies is not well linked with financial resources.

It would be useful to write clear guidelines which would help new and upcoming members of EU to develop a more effective Environmental Policy.

NEKI ASPEKTI ZAKONODAVSTVA ZAŠTITE OKOLINE U EVROPSKOJ UNIJI

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Rezime: *U ovom radu su diskutovani glavni aspekti propisa u Zaštiti životne sredin Evropske Unije, koji su sadržani u Šestom Akcionom Programu za zastitu životne sredine.*

Najpre je diskusija usredsredjena na prioritetne pravce Programa : klimatske promene, priroda i biodiverzitet, životna sredina i zdravlje, prirodni resursi i otpad. Primena Programa je razmatrana kroz sledece tematske strateske pravce: vazduh, more, cvrst otpad, urbana sredina., prirodni resursi, pesticidi, zemljiste. Neke odabrane aktivnosti 6-og EAP-a su preispitivane u kontekstu najnovijih ekonomskih kretanja u svetu.

Ključne reči: *životna sredina/Akcioni program EU/ /Community acquis*

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