
Implementing Environmental Policies in EU – Action Plans and Programs

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The main objectives of the EU environmental policy are environmental and public health protection, prudent and rational use of natural resources, and promoting international actions to solve the regional and global environmental problems. The EU policies implementation is performed by using specific tools as legislation, - notably Directives setting environmental quality standards (levels of pollution), rules for industrial procedures (emission standards, design and operational standards), products standards (concentration or emission limits for a product) - environmental protection action plans, and financial aid programs. This paper reviews some of the most important policies and actions promoted at European level in order to protect the environment and ensuring sustainable development.

Keywords: *environmental policies, sustainable development, action plans, green public procurement, eco-label*

Introduction

Promoting the sustainable production and consumption models is a core concern for the environmental policies. In the EU a series of instruments aiming to promoting low-impact environmental practices were developed, and a number of advances were recorded in terms of decoupling environmental degradation and natural resource use for economic growth.

However, patterns of consumption show some adverse developments, especially in terms of energy consumption.

Policies and actions for a sustainable development

The Action Plan for Sustainable Consumption and Production (SCP) and Sustainable Industrial Policy (SIP) proposes a coherent framework for addressing production and consumption practices and a review of current production and consumption across all Member States, to contribute on the improving of the environmental performance of products, increasing demand for goods and more sustainable production technologies, as well as stimulating innovation. The action plan has been accompanied by proposals to reform the directives on eco-design, labels indicating the energy consumption, as well as proposals to revise the Ecolabel and EMAS regulations.

The action plan aims at ensuring EU continued leadership in environmental performance by:

- Creating a new sustainable product policy, in order to improve the environmental performance of products on the market and help consumers to buy more eco-friendly products
- Encouraging eco-innovation so that EU businesses adapt to the markets of the future
- Supporting the competitiveness of eco-industries
- Contributing to a low carbon economy internationally

The Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy details to the following list of actions:

- Ecodesign standards for a wider range of products
- Improved energy and environmental labeling
- Incentives rewarding eco-friendly products, including green public procurement
- Work with retailers
- Support to environmental industries
- Promotion of sustainable industry internationally

Environmental Technologies Action Plan (ETAP) consists into promoting environmental technologies to reduce pressure on natural resources and improving the quality of life along with economic growth. Environmental technologies refers to those technologies, products, services, utilities, management and organizational systems whose production or application / use involves reducing the negative environmental impact, compared with relevant alternatives.

Launched in 2004, the plan provides actions that should be taken at European level by the Member States and the parties concerned, in order to promote environmental technologies, technologies that will be used to reduce the pressure on natural resources and to improve the quality of life along with economic growth.

ETAP objectives are:

- Transfer of technology from research stage to market availability
 - research, innovation and dissemination
 - technology platforms
 - validation / certification of environmental technologies
- Improving market conditions
 - environmental Management Systems
 - mobilization of funding sources
 - economic instruments
 - green Public Procurement
 - information, education and training
- Global Action
 - support for developing eco-technologies and promoting foreign investment

The environmental technologies are technologies that protect the environment, are less polluting, use resources in a sustainable manner, recycle a greater proportion of generated waste and by-products, and circulates the waste in a more acceptable manner for the environment, compared with the technologies they replace.

As defined by the ETAP, the environmental technologies include clean technologies, representing all the technologies whose uses are less environmentally harmful than their relevant alternatives:

- pollution control technologies (emission control, waste management etc.).

- obtaining products and services less polluting and with less resource usage (fuel cell)
- ways to manage the resources more efficiently (water supply, energy saving technologies)

In order to develop a database on environmental technologies at the European level, "The environmental technology atlas" has been created, which aims to support private companies and public organizations that must find new sources of environmental technologies in Europe, with remarks about the location and information on companies, knowledge centre's and major technology installations.

The Atlas is a new web-based geographic service to assist the public to locate environmental technology and eco-efficient innovation players in the world. It is a gateway to relevant information but it does not replace the original data sources.

- **Categories** - three types of environmental technology information in Europe:
 1. Knowledge centre is dealing with eco-innovation and technology R&D,
 2. Manufacturing companies and
 3. Main technology installations
- **Types** - for each category
 1. Resource management
 2. Pollution management
 3. Monitoring and forecasting
 4. Integrated approaches

The atlas is a support to the Environmental Technology Action Plan (ETAP). It further contributes to Action 4 concerning the development of existing directories and databases on environmental technologies.

The data currently accessible comes from a wide range of national business directories, yellow pages, online databases, and Chamber of Commerce member lists.

Atlas beneficiaries are producers, knowledge providers and innovators. It also contributes to raising awareness more generally about the fast growing and widespread role of environmental technology products and services in our society thus leading to their greater use and uptake.



Figure 1: The environmental technology atlas
Source: http://technologies.ew.eea.europa.eu/atlas_map

Integrated Product Policy (IPP) seeks to minimize the impact that some products are causing to the environment throughout their life cycle (natural resources, engineering, manufacturing, assembling, distribution, marketing, waste disposal). Thus, IPP aims to stimulate the life cycle of each phase in order to improve the environmental performance.

In the European Commission Final Report on Integrated Product Policy, it is considered that the desired actions related to IPP fall into two broad categories: short-term and medium-term actions.

The table below the most important actions tube taken, grouped into these categories.

Table 1: Integrated Product Policy Timeframe for Action

Source: European Commission Final Report on Integrated Product Policy

Short-term actions	Medium-term actions
Publish a paper on IPP	Instigate and lead an IPP best practice network
Create a policy-makers round table	Explore sector-specific best practice schemes and tailored support for SMEs

Short-term actions	Medium-term actions
Open consultation with industry	Review prohibitions policies
Organize and convene an IPP conference	Extend systematic management to all no dissipative waste streams
Integrate a product focus into all relevant EU policy (start now, and	Increase the emphasis of green product R&D
Develop links between product policy and EMAS	Initiate an EU eco-design scheme
Conduct a study into competitiveness and trade implications of IPP. Ensure	Integrate environmental factors into EU public procurement policy
Support relevant electronic trading initiatives	Develop EU fund to support green procurement
Develop a differentiated product information policy	Encourage the development of product-focused fiscal measures
Analyse best practices for conveying information to consumers	Target retailers and consider an EMAS-type
Study the business opportunities and environmental benefits of leasing and	Apply extended responsibility on a case by case basis

Green Public Procurement (GPP) was recommended as a mean of promoting sustainable production and consumption patterns at the World Summit on Sustainable Development, Johannesburg, 2002. The Council recommendations to improve the environmental performance of the public procurement by the Member States consist in integrating the environmental issues in the purchasing of goods and services, along with the competitive policy and other relevant policies and its obligations. In this regard, there is a series of measures proposed:

- Establishing a proper policy framework to incorporate the environmental criteria in the policies for purchasing goods and services;

- Using financial, budgetary and accounting measures, to ensure that the public acquisition policies take into account the environmental costs of products and services;
- Providing information, training and technical assistance to those involved in the acquisition process, including those who establish the performance criteria, and those who use the products and services;
- Developing tools that facilitate the green acquisitions at all levels;
- Dissemination of necessary information to encourage green public acquisition decisions, and the results and benefits arising from their adoption;
- Establishing procedures to identify the products and services that meet the objectives of green acquisition policies;
- Encouraging the development of indicators for measuring and monitoring the progress in the use of green public acquisition;
- Analysis and evaluation of public acquisition policies so that they are economically efficient and effective in terms of the environmental elements;

To support the stakeholders (public authorities, private companies, suppliers of goods and services, contractors), the European Commission prepared a "Manual for green procurement", which explains how to introduce the environmental considerations into public procurement procedures.

The EU has encouraged the Member States to develop action plans that will be available to the public.

The EU Public Procurement Regulations stipulates the possibilities to use the environmental considerations in the development of the awarding criteria and in the performance clauses of the contracts. Thus, authorities can use, but are not required in this regard, the appropriate specifications as defined by eco-labels. Requirements on labels must be defined and adopted on the basis of scientific information through a procedure in which stakeholders are involved (consumers, manufacturers, distributors and environmental organizations) and the label should be accessible and available to all interested parties.

To support the use of green public procurement, the European Council adopted a regulation requiring public authorities to make

procurement of products labeled "Energy Star", representing the energy-efficient products, thereby helping to meet the environmental objectives in energy policy.

Using the tool to implement green purchasing in Europe was helped by the fact that a large number of consumers are aware of the environmental issues, and companies have realized the economic benefits of using clean technologies. The impact can be considered significant, given the size of transactions that involve the acquisitions. Thus, public procurement made in the territory of the 25 Member States is totaling approximately 1500 billion euros, 16% of the union's gross domestic product.

The benefits of using the green public procurement. According to a European Commission research report, European public authorities spend over 1 000 billion on goods, services and works. Over 2.8 million computers are purchased each year by public authorities in the European Union. Thus, the purchase of more efficient energy models would reduce the energy bill and the emissions of greenhouse gases by over 830,000 tons of CO₂. Moreover, buying green energy would contribute a quarter to meet the obligations under the Kyoto Protocol, the use of efficient toilets and sanitary facilities would reduce water consumption by 200 million tons, equivalent to 0.6% of total households the European Union level.

Green procurement covers areas such as the purchasing of computers and energy-efficient buildings, office products made from wood from sustainable managed forests, recycled paper, electric cars, public ecological transport, organic food canteens, electricity from renewable energy sources and air conditioning systems that meet the most advanced technical solutions for environmental protection.

Besides the direct impact of the green public procurement, one of the advantages is the possibility to influence the market by example. For some sectors, the impact could be significant because the public institutions form an important part of the market.

Public procurement – The ecological label. Eco-labels have been developed to promote products, which have a low environmental impact, and to convey to consumers the information on the environmental characteristics of products and services.

The eco-label is made for the products / services that meet a series of environmental requirements relating to: air quality, water quality and soil protection, waste management and control, saving energy, natural resource management, prevention of global warming, protection of the ozone layer, environmental security, biodiversity and noise. Eco-label criteria are not based on a single parameter, but on the studies that analyze the environmental impact of a product or service throughout its life cycle.

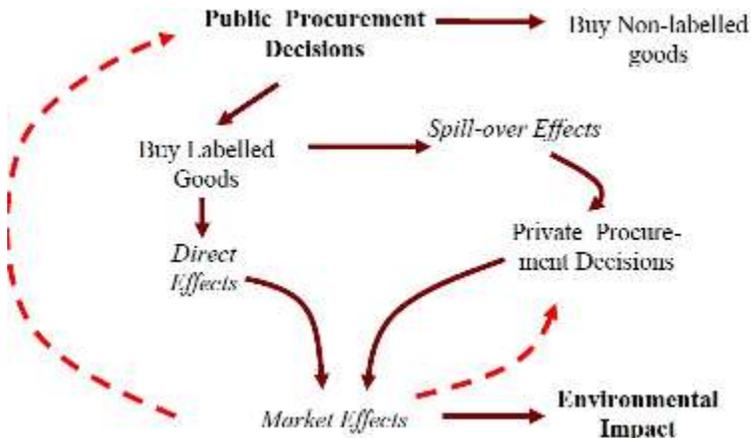


Figure 2: Pathways from GPP to Environmental Impacts / Benefits

Source: Green Public Procurement and Product Performance Requirements - European Topic Centre on Resource and Waste Management

Public sector - private sector. According to the position adopted by the European Commission, public and private procurement are likely different - but both can significantly influence the practice of purchasing products and green technologies.

The major policy initiatives include the Energy Star Regulation and a communication on public procurement on how to improve the environmental conditions, which proposes to the member states to meet a binding target of 50% green public procurement, from 2010.

The market introduction of clean and efficient vehicles can be supported by green public procurement. One approach would be to internalise the external costs associated with operation of the vehicles to be purchased, using as an award criteria, in addition to vehicle prices, the cost

of energy consumption and emissions of CO₂ and pollutant emissions, which occur throughout the life of the vehicle. Including costs for the life of the vehicle in the award decision would draw attention to the operating costs. This would give a competitive advantage to those vehicles cleaner and more energy efficient and at the same time it would minimize the overall cost. Thus, the public sector could provide an example of "sustainable economical policy" that will be adopted by other market participants.

Some authorities have improved their environmental performance for the public transport and taxis car park, buying cleaner vehicles and offering economic incentives to the private operators. The public financial support for the new alternative fuel distribution infrastructure is decisive in several cities. The Commission already provides support for the development of joint green procurement schemes by public authorities across the EU through pilot projects.

In general, green procurement is considered to have a higher cost. A study showed that, if the total cost of the product throughout the entire life cycle is taken into account, some of them might even be cheaper than the non-ecological products.

CLOSING REMARKS

The European Union applies some of the most advanced environmental standards in the world, which were developed over the years to address a multitude of issues. The main goals of EU environmental policies and actions are the fight against climate change, the biodiversity conservation, reducing health problems caused by pollution and more responsible use of natural resources. Sustainable development is one of the main ways of achieving these objectives, as it is the appropriate framework for economic development in terms of environmental protection.

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