COMMISSION OF THE EUROPEAN COMMUNITIES



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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Integrated Product PolicyBuilding on Environmental Life-Cycle Thinking

1. Introduction

One of the European Union's fundamental objectives is sustainable development. This means meeting the needs of the present generation without compromising those of future generations. This objective was reinforced at the Gothenburg European Council in 2001, where an environmental dimension was added to the Lisbon process, in the form of a strategy for Sustainable Development.¹

This strategy identified several actions in the environmental field, following the priority themes in the 6th Environmental Action Programme.² In the area of managing natural resources more responsibly the European Council agreed, "that the EU Integrated Product Policy aimed at reducing resource use and the environmental impact of waste should be implemented in co-operation with business".

The Commission has developed the EU Integrated Product Policy (IPP) in cooperation with stakeholders and with the aid of studies.³ IPP was first discussed with stakeholders at a conference in 1998. The following year, IPP was considered at the Weimar Informal Meeting of Environment Ministers. The Presidency conclusions from the meeting welcomed the Commission's intention to adopt a Green Paper and emphasised that improving the market conditions for greener products on the European market would also help to strengthen the competitiveness of European industries. The Commission adopted the Green Paper in February 2001 and launched a stakeholder consultation exercise on its contents (see Annex I for more information).

These consultations showed that IPP clearly has a role to play in contributing to sustainable development. This Communication will re-iterate why a product dimension to environmental policy is needed. In section 2 it will explain the IPP approach before setting out, in section 3, the guiding principles of the EU's IPP strategy. The remaining sections outline what the Commission will do to further the uptake of the IPP approach.

2. WHY IS A PRODUCT DIMENSION TO ENVIRONMENTAL POLICY NEEDED?

During the last few years, the Commission has begun to rethink policies relating to the environmental impacts of products. All products and services⁴ have an environmental impact⁵, whether during their production, use or disposal. The exact nature of this impact is complex and difficult to quantify but the potential magnitude of the problem is clear.⁶ At the same time continued economic growth and

Presidency Conclusions of Gothenburg European Council 15th and 16th June 2001, paragraphs 19-32, http://ue.eu.int/pressData/en/ec/00200-r1.en1.pdf

Decision 1600/2002/EC of the European Parliament and of the Council laying down the Sixth Community Environment Action Programme, OJ L 242, 10.9.2002, p. 1-15

For example, http://europa.eu.int/comm/environment/ipp/ippsum.pdf

The rest of this Communication will, for simplicity, only refer to products, although it should be understood that services are included within the general scope too – see Section 4.

Environmental impacts should be taken to include those on human health.

For example, one product, the car, is responsible for roughly 80 % of the European Union's CO₂ emissions from the transport sector, the sector from which emissions have been rising fastest. At the same time the number of cars per inhabitant is also increasing – by 14 % between 1990 and 1999 –

prosperity is significantly influenced by the production and use of products. The challenge is to combine improving life styles and well-being — which are often directly influenced by products - with environmental protection. In other words, winwin situations need to be found where environmental improvements and better product performance go hand in hand and where environmental improvements support long-term industrial competitiveness. This is what IPP seeks to achieve.

Up to now, product-related environmental policies have tended to focus on large point sources of pollution, such as industrial emissions or waste management issues. Often these have been successful. Now, however, it is becoming clear that they need to be complemented by a policy that looks at the whole of a product's lifecycle, including the use phase. This should ensure that environmental impacts throughout the life-cycle are addressed in an integrated way – and so are not just shifted from one part of the life-cycle to another. It should also mean that environmental impacts are addressed at the point in the life-cycle where they will best and most cost-effectively reduce the overall environmental impacts and resource use. To be successful, the policy also has to take into account several characteristics of products that make them diffuse objects for pollution reduction measures.

First, **their overall quantity is increasing**. Greater disposable income⁷ means that more products can be afforded. For example, where before a household would have one, fixed-line, telephone, now it often has several extensions throughout the house. The average household size is also decreasing, which may often lead to greater duplication of certain household products⁸. This means that there are larger numbers of the same products and that these are becoming more diffuse. Any product policy should therefore aim to reduce the environmental impacts of increased quantities of products.

Secondly, **the variety of products and services is increasing**. Basic products now come in many different versions. For example, there are different types of television screens – (cathodic, LCD or plasma). Any product policy has therefore to be flexible in order to address many different product variations simultaneously.

Thirdly, **innovation constantly creates new types of products**. For example, over the last 20 years there has been a shift from record players to compact disc players and now the advent of DVD players may well supplant them. Innovation cycles for components can often be even shorter. The rapid development of more powerful computer processors is testament to this. A product policy has to use this creativity for the benefit of the environment as well as the economy.

Fourthly, **products are traded globally**. Both the Single Market and the multilateral reduction of trade and investment barriers have contributed to a more global

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using up more resources in their manufacture, more space for parking and roads, and creating more waste disposal problems. All this is despite significant reductions in the emissions per car and considerable efforts by the industry concerned, such as the voluntary agreement to reduce CO_2 emissions by 25 % by 2008. Moreover, for other pollutants there have been extremely significant reductions over recent decades.

Between 1980 and 1997 consumer spending has increased by 46 % in real terms, shifting from basic needs, such as food and housing, towards more discretionary items, such as transport, fuel and recreation. (EEA Fact Sheet 2001 – YIR01HH04)

Between 1980 and 1995 the average household size in the EU fell from 2.82 people to 2.49. This trend is likely to continue. EEA Fact Sheet 2001 – YIR01HH03

economy in which goods from many countries are traded internationally. The diverse origin of the products available in our shops has become significantly more diverse. A product policy has to take account of the global nature of trade and be in compliance with relevant international agreements, such as World Trade Organisation rules.

Fifthly, **products are becoming more complex**. This means that product expertise is increasingly concentrated in the hands of those who are responsible for their design. It is very difficult for regulators, let alone the general public, to have any realistic idea of what technical changes are achievable. For this reason any product policy needs to ensure that producers and designers become more responsible for ensuring that their products fulfil agreed criteria on health, safety and the environment.

Sixthly, the product can be designed perfectly, but inappropriate use and disposal will cause significant environmental impacts. Although products can be designed to cause as little environmental impact as possible, consumers may still use them in an environmentally unfriendly way. For example, the use of energy-saving light bulbs brings considerable environmental benefits, but these can only be fully realised if they are switched off when not in use. Similarly, if products are disposed of inadequately, perhaps by fly tipping, then product design can not be considered responsible for the ensuing environmental damage.

Lastly, **products now involve a greater variety of actors throughout their life-cycle**. Their increasing complexity and the processes of globalisation mean that many different actors are involved with a product throughout its life-cycle. Product policy needs to be capable of addressing many different actors. It also has to take account of the fact that a product may be assembled, marketed or used many miles apart under different sets of societal values. It is therefore difficult for an actor at one stage in the product's life-cycle to have a clear idea of what potential problems there are in others. The conditions under which our products are produced may be unknown. Therefore policy should contribute to improving information flows along the supply-chain.

All of these factors underline the need to introduce a product dimension to environmental policy. It should look at products in a holistic way, involve as many actors as possible and leave to them the responsibility for the choices they make. This should provide a powerful supplement to existing product-related measures. The IPP approach seeks to address this challenge, while supporting the EU's wider economic and social objectives, as set out in the Lisbon Strategy, and complying with international treaty obligations. The IPP approach is explained in the following section.

3. THE IPP APPROACH

The IPP approach, which has been developed gradually over the last decade, is now generally recognised as being a potentially very effective way to address the environmental dimension of products. This approach is based on five key principles:

- Life-Cycle Thinking⁹ it considers a product's life-cycle and aims for a reduction of its cumulative environmental impacts from the "cradle to the grave". In so doing it also aims to prevent individual parts of the life-cycle from being addressed in a way that just results in the environmental burden being shifted to another part. By looking at the whole of a product's life-cycle in an integrated way, IPP also promotes policy coherence. It encourages measures to reduce environmental impacts at the point in the life-cycle where they are likely to be most effective in reducing environmental impact and saving costs for business and society.
- Working with the market setting incentives so that the market moves in a more sustainable direction by encouraging the supply and demand of greener products. This will reward those companies that are innovative, forward-thinking and committed to sustainable development.
- Stakeholder Involvement it aims to encourage all those who come into contact with the product (i.e. industry, consumers and government) to act on their sphere of influence and to encourage co-operation between the different stakeholders. Industry can look at how to better integrate environmental aspects in the design of products while consumers can assess how they can purchase greener products and how they can better use and dispose of them. Governments can set the economic and legal framework conditions for entire national economies and also act directly on markets, for instance by purchasing greener products.
- Continuous Improvement improvements can often be made to decrease a product's environmental impacts across its life-cycle, whether in design, manufacture, use or disposal, taking into account the parameters set by the market. IPP aims for a continuous improvement in these rather than setting a precise threshold to be attained¹¹. As a result, companies can set their own pace and can focus on the most cost efficient improvements.
- A Variety of Policy Instruments the IPP approach requires a number of different instruments because there are such a variety of products available and different stakeholders involved. These instruments range from voluntary initiatives to regulations and from the local to the international scale. Within IPP, the tendency is clearly to work with voluntary approaches, although mandatory measures might also be required. The determining factor is the effectiveness of the tool to achieve the desired result with regard to sustainable development.

4. THE EU IPP STRATEGY

As stated in section 1, the EU IPP is an integral part of the EU's Sustainable Development Strategy. Its primary aim is to reduce the environmental impacts from

As opposed to Life Cycle Assessment (LCA) which is different and involves the quantification and assessment of the environmental impacts of a product throughout its life-cycle, albeit, for practical reasons, in narrowly defined boundaries.

Here, and throughout this text, greener products are defined as those that have lower environmental impacts throughout their life-cycle when compared to similar products fulfilling the same function.

This is not to say that legislative thresholds can not be useful in stimulating continuous improvement. They are just less flexible, which, in some cases, may well be desirable.

products throughout their life-cycle, harnessing, where possible, a market driven approach, within which competitiveness concerns are integrated. Indeed, the competitiveness of business will be enhanced by the increased policy coherence that IPP will facilitate, both within the life-cycle and between different policy instruments. Experience with some environmental management tools shows, that rising environmental awareness in companies can go hand in hand with cost reductions. Furthermore, in an increasingly competitive world, environmental performance can also be a factor giving companies or their products a competitive edge. Indeed, some companies use their environmental performance as a marketing instrument. IPP will help these companies, not least by giving some of them more visibility.

At the present time methodologies for assessing the environmental impacts of a product across its life-cycle exist. The experiences gained through initially applying IPP to the environmental aspects of products will be an invaluable knowledge base from which to build towards broader sustainability impacts.

Clearly, IPP will be further developed taking other policies closely into account. There is already a substantial and significant body of legislation, such as that regulating the characteristics of and trade in products, for example in the framework of the internal market, or competition policy. In principle, IPP will complement current legislation by triggering, on a voluntary basis, further improvements in those products whose characteristics do not necessarily require legislation.

When putting the present Communication into operation, full account will be taken of the Community's obligations under international law, in particular as regards trade, as well as the principles governing other EC policies. In addition, any new legal proposals from the Commission will also be subject to the Commission's rules on Impact Assessment¹². This will ensure that they represent a balanced approach towards the three pillars of sustainable development. The development of IPP will also build on experiences with existing environmental tools, such as environmental management systems and environmental labelling.

To achieve its objective, the policy will perform three key roles.

Firstly it will **contribute** to addressing the environmental challenges identified in both the Sustainable Development Strategy and the Sixth Environment Action Programme. Without a product dimension the chances of meeting them will be smaller. IPP will also be a key part of the implementing measures for the forthcoming Thematic Strategy on the Sustainable Use of Resources and that on Prevention and Recycling of Waste. It is also closely linked to the forthcoming Environmental Technologies Action Programme. Internationally, IPP will also constitute a major input to the ten-year framework of programmes on sustainable production and consumption agreed at the World Summit on Sustainable Development in Johannesburg in September 2002. ¹³

As set down in COM(2002) 276 final of 5.6.2002, the Communication from the Commission on Impact Assessment

Paragraph 14 of the WSSD – Johannesburg Plan of Implementation and paragraph 8 of the General Affairs and External Relations Council's conclusions of 30.10.2002

Secondly, it will **supplement** existing product-related policies, by providing a wider, "life-cycle", conceptual framework in which the ramifications for any other environmental problems can be considered. In doing so it will take account of the fact that we are not starting with a blank slate, as some product-related policy areas have already integrated life-cycle thinking to some degree, such as the Farm to Fork concept in the field of agriculture and food safety.

Thirdly, and most importantly, it will strengthen the **co-ordination and coherence** between existing and future environment-related product policy instruments. This will help to exploit the potential synergies between them fully and to encourage their integrated development. In addition, through integrating the life-cycle approach, it will make product-related environmental policy measures more effective by highlighting the necessary trade-offs and, once political decisions are taken, co-ordinating their implementation. This strengthened co-ordination will benefit both business competitiveness and the environment.

Achieving this objective will take time. The Commission will focus on two, interrelated, actions to move towards it:

- establishing the framework conditions for the continuous environmental improvement of all products throughout the production, use and disposal phases of their life-cycle;
- developing a focus on products with the greatest potential for environmental improvement.

This Communication outlines the steps that the Commission will take to implement these actions. However, the active co-operation of all other stakeholders, through looking to improve their environmental performance, is essential for IPP to succeed. For this reason the policy will continue to be developed in co-operation with stakeholders. An indicative list of what the Commission considers to be the roles and responsibilities of Member States¹⁴ and other stakeholders can be found in Annex II.

To get IPP started, the Commission will begin by focusing on products¹⁵, rather than services. This does not mean that services are excluded from the scope of IPP. It is just a reflection of the fact that life-cycle thinking is more advanced for products than for services and that there is a more developed body of Community legislation. It will therefore be easier for the Commission to bring the policy to life in this area.

5. ESTABLISHING THE FRAMEWORK CONDITIONS FOR CONTINUOUS ENVIRONMENTAL IMPROVEMENT

Many different policy tools already exist that are either already being used, not least by industry, to green products or could be re-focused to do so. It is obvious that not all of them are suitable for all products.. These tools will be examined in the following section.

Where Member States are referred to in this paper it should also be understood to apply to Acceding and Candidate Countries.

This Communication does not seek to alter any of the existing legal definitions of what constitutes a product, a producer, a type of product or such like.

5.1. Tools for Creating the Right Economic and Legal Framework

Continual environmental improvement requires incentives for producers to make new product generations greener than their predecessors on the basis of life-cycle thinking and taking into account the parameters set by the market. It also requires incentives for consumers to buy these. An effective IPP requires the economic and legal framework to be conducive to greening products and to their purchase, ideally with minimum government intervention. The Commission's role here is to ensure that the instruments for which it is competent promote movement in this direction. Policy tools that are suitable for this purpose are described in Box 1.

Box 1

a) Taxes and Subsidies

Getting the prices right¹⁶, through internalising environmental externalities into the price of a product so that its environmental impacts are accurately reflected in the price, is the Commission's long-term goal. Price signals give incentives for the continuous environmental improvement of products throughout the life-cycle. They facilitate and reinforce measures, such as greener public procurement and product design obligations, by improving the economic rewards for green design and production. They also provide consumers with important information and encourage them to buy products with lower environmental impacts. The Commission has already made several proposals on energy-related taxes at the European level¹⁷. The 1997 proposal to restructure the Community framework for the taxation of energy products has now obtained unanimous political support in the Council. It will extend the EU minimum tax rates to all energy products and thus provide the Member States with a more coherent framework for using energy taxation as an instrument for pursuing their environmental and other policy objectives. The Commission will continue to promote and encourage the use of fiscal measures, such as environmentally-related taxes and incentives, at the appropriate local, national or Community level. 18

However, in the light of the stakeholder comments received, in particular from Member States, the Commission will not develop initiatives to apply reduced VAT rates to products bearing the EU eco-label for the time being. ¹⁹. For other types of tax, Member States, where appropriate, should promote and encourage the use of the aforementioned fiscal measures to favour greener products.

Additionally, in the framework of the Sixth Environmental Action Programme, the Commission will work on a list of criteria which allow environmentally negative subsidies to be recorded²⁰. This will provide a reliable basis for their elimination. The Commission has also established guidelines on state aid for environmental purposes,

This means trying to ensure that the price paid by a consumer for a product includes the costs of all the environmental impacts that it creates.

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The Commission proposal of 2002 to amend Directives 92/81/EEC and 92/82/EEC to introduce special tax arrangements for diesel fuel used for commercial purposes and to align the excise duties on petrol and diesel fuel is still being negotiated in Council.

As required by Article 3(4), third indent of Decision 1600/2002/EC of the European Parliament and Council of 22nd July 2002 laying down the Sixth Community Environment Action Programme, OJ L 242, 10.9.2002, p1-15. Naturally this must be done in accordance with the relevant internal market legislation.

This analysis will also take account of the results of the experiment of applying reduced VAT rates to labour intensive services.

Related work has started in the framework of the OECD International Energy Agency

such as to support technological change in favour of more environmentally friendly products and services²¹.

b) Voluntary Agreements and Standardisation

To green products effectively, non-legislative solutions, such as environmental agreements and the standardisation process, need to be considered in addition to legislation. The framework for environmental agreements at the Community level is currently being considered following a Commission communication on the subject.²²

On standardisation, the Commission will continue to use International Standardisation, wherever possible. At the European level the Commission will address some key issues concerning European standardisation and environmental protection in a Communication in 2003. The Commission has also awarded a service contract to ECOS²³, a consortium of European environmental non-governmental organisations, to contribute to the integration of environmental aspects into the European standardisation process.

c) Public Procurement Legislation

Public procurement constitutes around 16 % of Community Gross Domestic Product. This is a vast section of the market that public authorities can use to drive the greening of products. Detailed Community rules exist setting down the procedures to be followed in public procurement within the internal market. The Commission's Interpretative Communication on Public Procurement and the Environment²⁴ explains the legal situation²⁵ and shows that there are ample possibilities for taking into account environmental considerations in the tendering of contracts covered by these rules, a situation that will not be altered by the ongoing revision of the public procurement directives. The real tasks for greener public procurement are to ensure that existing possibilities are used by public purchasers.

d) Other Legislation

Community legislation for any product-related measure may be necessary to resolve environmental problems particularly if market failures are not corrected or if the Single Market could be affected without Community action. This is the case, for example, with the Restriction of Hazardous Substances in Electrical and Electronic Equipment directive²⁶ and will be for the follow up to the Commission's White Paper on Chemicals.²⁷ It is also the case for the forthcoming Commission proposal for a Directive establishing a framework for the eco-design of energy using products (EuP), which will, in addition, enshrine the IPP principles, such as life-cycle thinking,

²¹ Community Guidelines on State Aid for Environmental Protection, OJ C 37, 3.2.2001, pp. 3-15

The European Environmental Citizens Organisation for Standardisation

See website in footnote 24.

White Paper on the Strategy for a future Chemicals Policy, COM(2001) 88 final

Communication from the Commission to the European Parliament, The Council, The Economic and Social Committee and the Committee of the Regions on Environmental Agreements at Community Level within the framework of the Action Plan on the Simplification and Improvement of the Regulatory Environment, COM(2002) 412 final, 17.7.2002

Commission of the European Communities (2001) Commission Interpretative Communication on the Community law applicable to public procurement and the possibilities for integrating environmental considerations into public procurement, COM(2001) 274 final, 4.7.2001. This can be found at http://simap.eu.int/EN/pub/src/welcome.htm

Directive 2002/95/EC of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment, OJ L 37, 13.2.2003, p. 19-23

stakeholder involvement and continuous improvement in a legislative framework. Legislation is also necessary where extended producer responsibility measures or deposit schemes are considered to be the most effective way to reduce the life-cycle environmental impacts. Such initiatives also have a particular value at the Community level where individual Member States have developed, or are in the process of developing, their own initiatives in this area. The Commission will develop these points further in its Thematic Strategy on the Recycling and Prevention of Waste.

5.2. Promoting the Application of Life-Cycle Thinking

For IPP to be effective life-cycle thinking needs to become second-nature for all those who come into contact with products. Educational and awareness-raising measures are best undertaken closest to the citizen, i.e. on a national and regional level. On a Community level three distinct sets of actions are required (Box 2).

Box 2

a) Making Life-Cycle Information and Interpretative Tools Available

Life-cycle data on which to base assessments – whether for design or labelling purposes - need to be collected systematically. Several Member States and industries have developed databases to help with this. The Commission will provide a platform to facilitate communication and exchanges. This will include regular meetings supported by the Commission and a directory of LCA databases to be updated at regular intervals.

Life-cycle data also needs to be made more accessible. To this end the Commission will launch a co-ordination initiative involving both ongoing data collection efforts in the EU and existing harmonisation initiatives. This initiative will act as a European link to the ongoing United Nations Environmental Programme Life-Cycle Initiative. The Commission will begin by initiating a study to examine the existing situation, and possible future directions.

LCAs provide the best framework for assessing the potential environmental impacts of products currently available. They are therefore an important support tool for IPP. However, the debate is ongoing about good practice in LCA use and interpretation. Through a series of studies and workshops, the Commission will further this discussion, with the aim of producing a handbook within two years on best practice, based on the best possible consensus attainable among stakeholders.

The Commission is also continuing its research and development support towards the implementation of this part of the IPP approach. The Fifth²⁸ and Sixth²⁹ Community Research Framework Programmes will contribute to this by enhancing knowledge of environmental processes, providing base data and measuring systems and developing

Decision No 182/1999/EC of the European Parliament and of the Council of 22 December 1998 concerning the fifth framework programme of the European Community for research, technological development and demonstration activities (1998 to 2002), OJ L 26, 1.2.1999, p. 1-31

Decision 1513/2002/EC of the European Parliament and of the Council of 27 June 2002 concerning the Sixth Framework Programme of the European Community for Research, Technological Development and Demonstration Activities contributing to the creation of the European Research Area and to innovation (2002-2006), OJ L 232, p. 1-33

feasible solutions for greener products. IPP projects are already a significant part of the scope of the Commission's LIFE programme³⁰.

b) Environmental Management Systems

Environmental management systems (EMS) provide a good framework for integrating life-cycle thinking within an organisation's operations and for achieving continuous improvement. The revision of EMAS in 2001 began the re-orientation from the process dimensions towards products. Products are now clearly within the scope of the EMAS Regulation in the same way as activities and services, i.e. their significant environmental impacts have to be included in the environmental review, management and audit system; their impacts have also to be verified by an EMAS verifier, information about them has to be included in the environmental statement and their environmental performance has to be continuously improved. Since EMAS focussed in the past more on industrial activities, the Commission will develop guidelines on how to deal with product issues within EMAS by the end of 2004. EMS are relevant for all types of organisations - public or private - and can be used to provide a framework for all types of tools, from the greening of the organisations procurement to validating green information. An EMS certification by itself does not guarantee a specific environmental product performance but in the case of EMAS it provides a framework for validating information about such performance by the EMAS verifier.

The Commission will also monitor and evaluate the implementation of the product dimension in EMAS so that it can feed into the next revision of the Regulation, which is due by 2006. The Commission will decide in 2004 whether to attain EMAS II registration; a pilot exercise has already begun with three directorates-general participating.

c) Product Design Obligations

The two elements outlined above should stimulate front-runners to develop greener products. In addition, the Commission will come forward with a discussion document in 2005 that will consider ways to promote implementation of the IPP approach in companies, including if appropriate general obligations for specific products. This will build on discussions on the application of the New Approach in the environmental field following the publication of the IPP Green Paper³¹. The reactions to the published drafts of a Directive on the eco-design of end-use equipment and of a Directive on the environmental design of electrical and electronic equipment (EEE) will also be taken into account. The experiences from the negotiations on the forthcoming proposal for a directive establishing a framework for the setting of Eco-design requirements for Energy Using Products (EuP) will also be considered. Issues to be addressed will be, inter alia, the appropriate legal base; internal market considerations; international treaty obligations; the scope of such actions; suitable products or product groups; the required level of detail of the design requirements; the role of minimum product standards; the appropriate means of enforcement and reporting; the costs and benefits of such an approach; its likely environmental effects; and how it should be integrated with policies and measures affecting the environmental dimensions of products, including IPP tools.

In the case of energy-using products sufficient experience was already available, and the

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Regulation (EC) No. 1655/2000 of the European Parliament and of the Council concerning the Financial Instrument for the Environment (LIFE), OJ L 192, 27.7.2000, p. 1-9

³¹ See www.europa.eu.int/comm/environment/ipp/standard.pdf and Godenman, G., Hart, J. W., Sanz Levia, L. (2002) The New Approach in Setting Product Standards for Safety, Environmental Protection and Human Health: Directions for the Future, Environmental News No. 66, Danish Environmental Protection Agency.

growing environmental impact clear, for the Commission to consider and EuP-style framework for these products. This framework, which will allow product-specific legislative measures to be taken, where justified, will also allow room for self-regulation by the industry where this would reduce environmental impacts faster and/or with greater cost-effectiveness than legislation.

In addition, the Commission will consider how best to ensure that information on a product's environmental performance and design is communicated to the public. Such information could significantly strengthen companies' public documents, such as environmental statements

5.3. Giving Consumers the Information to Decide

Consumers, whether private, public or individual, decide whether or not they purchase greener products and once bought, how they are used. The Community's role here is to provide and encourage EU-wide tools and frameworks to provide consumers with product information. It is for the Member States to decide on what is required to achieve the level of consumer awareness necessary for them to play their full part in greening products. A number of suitable policy instruments are discussed in Box 3. However, other factors relevant when purchasing products, like safety and health aspects, cost and effectiveness have clearly to play their role as well.

Box 3

a) Greening Public Procurement

Positive action is needed to encourage public authorities to use the possibilities in existing public procurement legislation. For this reason the Commission will initiate several actions.

It will seek to **determine the extent of greener public procurement** because, at the present time, only limited information is available on the extent to which greener public procurement is practised in the Member States. By the end of 2003 the Commission will have undertaken a survey to assess the extent to which greener public procurement is practised by public authorities. It is also co-financing a research project to assess the potential impact on the environment and on the markets of greener public procurement.

It therefore encourages Member States to draw up publicly available action plans for greening their public procurement. These should contain an assessment of the existing situation and ambitious targets for the situation in three years time. The action plans should also state clearly what measures will be taken to achieve this. They should be drawn up for the first time by the end of 2006 and then revised every three years. The action plans will not be legally-binding but will provide political impetus to the process of implementing and raising awareness of greener public procurement. They will allow Member States to choose the options that best suit their political framework and the level they have reached, while at the same time enabling an exchange of best practice in facilitating greener public procurement. The Commission too, will draw up an action programme by the end of 2006 which brings together its objectives and actions for its own procurement. It invites the other Community institutions and offices to do likewise and is prepared to share its expertise in this area with them to facilitate this.

In addition, it is also elaborating information measures for public authorities to

assist them in greening their purchasing policies. These are:

- a practical handbook for public authorities which will explain the possibilities for greener procurement in clear, simple and non-legal language. The first draft is planned for mid-2003. It will be revised, if necessary, in the light of further developments and practical experience with its use;
- a product group database This will gather together in one web-site information on the existing product criteria, such as those used by eco-labelling and environmental product declaration schemes, in order to provide corporate and public purchasers with background information on what criteria are relevant for a particular product. The first prototype is expected in 2003;
- a "greening public procurement" web site which will gather together the handbook, the product database and the relevant legislation. This will be in place by the end of 2004.

b) Greener Corporate Purchasing

The private sector can demand greener products and greener production processes from their suppliers. They have considerable potential to influence the market for greener products, should they choose to do so, through, for example, demanding a certified environmental management system, such as EMAS.

The tools being developed for greening public procurement and listed above should also facilitate greener corporate purchasing. In addition, the different types of labelling mentioned below will also be of use. The Commission has also begun working to stimulate the large corporate purchasing market by pushing for corporate purchasing practices to be more transparent through reporting³²

c) Environmental Labelling

In the labelling field the Commission is already running several important labelling schemes that provide consumers with reliable and easily understandable information on which to make their product choice. These fit well within an IPP framework.

The presence of the EU Eco-label³³ on a product tells the consumer that that product is certified to be more environmentally-friendly than most other like products across the whole of its life-cycle. As there are currently no other comparable labels covering the whole EU market, it is the best available label from the perspective of an EU IPP³⁴.

³² The Commission has invited all publicly-quoted companies with at least 500 staff to publish a "triple bottom line" in their annual reports to shareholders that measures their performance against economic, environmental and social criteria (Communication from the Commission: A sustainable Europe for a better world: A European strategy for sustainable development, COM (2001) 264, 15.5.2001). To assist this process the Commission has produced a Recommendation on how environmental issues should be disclosed (Commission Recommendation of 30 May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies (2001/453/EC), OJ L 156, 13.6.2001, p33.). It has also called for the development of commonly agreed guidelines and criteria for measurement, reporting and assurance by mid-2004. (Communication from the Commission concerning Corporate Social Responsibility: A Business Contribution to Sustainable Development, COM (2002) 347, 2.7.2002, page 15).

³³ This, as with national EU labels, is also known as an ISO Type I label.

³⁴ This does not preclude, however, that other labels may, in the future, through equivalence arrangements or new developments, play a significant role in providing such consumer information.

The **EU energy label**³⁵ is now attached to many products, particularly in the white goods sector, where energy use usually represents the most significant environmental impact across the product's life-cycle. It has a particularly high recognition, largely due to its mandatory presence on products. The **European car-labelling scheme**³⁶ is also providing the consumer with important information on the CO₂ emissions of new vehicles.

The scope of all of these labels will be gradually expanded to provide consumers with more choice. At the same time the Commission will pursue enforcement of the Misleading Advertising directive³⁷ by Member States and bring to a conclusion its work on green claims³⁸ guidelines. This should go some way to ensuring that misleading green claims do not reduce the overall level of confidence in environmental product information. The Commission will investigate the possibilities for such claims to be independently verified through the EMAS scheme. In addition, in the framework of the current Consumer Policy Strategy³⁹, the effectiveness of private labelling measures and the need for further measures will be assessed.

The comparatively new tool of environmental product declarations (EPDs)⁴⁰ may need to be developed within a European framework. EPDs are a means of presenting quantified, life-cycle based information – such as on CO₂ or NOx emissions - about a product in a standardised way. No judgement is made about how "environmental" the product itself is, instead the quantified information can be used by a potential purchaser to make their own judgement, or to feed into a LCA. The Commission financed a study⁴¹ to examine the existing EPD type schemes (and those which have similar characteristics) and to look at the possible options for development.⁴² Stakeholders were invited to comment on these results⁴³ and, by the end of 2005, the Commission will take a decision on whether any action needs to be taken at Community level to stimulate the development of this potentially important instrument. This will take into account the ongoing development of an International Standard for EPD schemes.

Council Directive 92/75/EEC of 22 September 1992 on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances, OJ L 297, 13.10.1992, p16

Directive 1999/94/EC of the European Parliament and of the Council of 13 December 1999 relating to the availability of consumer information on fuel economy and CO₂ emissions in respect of the

marketing of new passenger cars, OJ L 12, 18.1.2000, pp 16-19

Council Directive 84/450/EEC of 10 September 1984 relating to the approximation of the laws, regulations and administrative provisions of the Member States concerning misleading advertising, OJ L 250, 19.09.1984 p. 17-20. The Commission will adopt, during 2003, a proposal for a framework directive on unfair commercial practices. If agreed by the Council and Parliament this will partially replace some of the provisions of this existing Directive.

Green claims are also sometimes referred to as ISO Type II. They are statements about the environmental characteristics of a product that are generally not subject to any form of third-party verification.

- Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on Consumer Policy Strategy 2002-2006, COM(2002)208 final of 7.5.2002
- These are also often referred to as ISO Type III.
- The final report from this study is available on http://europa.eu.int/comm/environment/ipp/epds.htm
- A parallel study, focusing on LCA/EPD tools in the construction sector has also been financed by the Commission. This can be found on
 - http://europa.eu.int/comm/enterprise/construction/internal/essreq/lcarep/lcafinrep.htm
- These can also be found on the website in footnote44.

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6. DEVELOPING A FOCUS ON PARTICULAR PRODUCTS

6.1. Voluntary Pilot Projects

Life-cycle thinking has already been widespread practice for many businesses for some time now. Nevertheless, for others more remains to be done to make life-cycle thinking operational. Given the importance of life-cycle thinking for a successful product policy, this challenge has to be addressed as a matter of priority. The best way to demonstrate the advantage of this concept is by demonstrating its practical application. The Commission therefore considers that the concept can best be brought to life by applying it to a number of products individually in a pilot project exercise. For this purpose the Commission will carry out a number of pilot projects to demonstrate the potential benefits of IPP in a practical way. Stakeholders will then be able to apply this thinking to their everyday activities and to the products with which they come into contact.

Stakeholders' participation in such pilot projects is crucial to their success and all parties concerned with a particular product – all along the life-cycle – will be welcome to participate on a voluntary basis. Stakeholders who volunteer to be pioneers will benefit from enhanced visibility that they will be given across Europe. The Commission invites all stakeholders to submit their suggestions for these pilot products. **These should arrive by the end of October 2003.** The Commission will then analyse these suggestions on the basis of practical factors such as their feasibility and the willingness of all stakeholders to participate. Given the demonstration character of these projects, issues such as whether the product has a high environmental impact, or whether it has the greatest potential for improvement will not be the determining factor. As a result the choice of the product or products for a pilot exercise will in no way be a judgement of either of these attributes.

The Commission envisages that each project will last around 12 months. It will start on the basis of a common understanding of the work to be undertaken with all stakeholders. The Commission envisages that each pilot product could follow the same basic path to a solution, namely:

- (1) document and analyse all the environmental impacts of the product throughout its life cycle;
- (2) analyse the potential environmental, social and economic effects of all possible options to reduce the environmental impacts, including examining the effectiveness of existing policy tools;
- (3) identify, with stakeholders, the most feasible options for improvement;
- (4) agree on implementation plans, identifying the responsibilities of different stakeholder groups;
- (5) implementation.

An indicative worked example is given in the box below.

Example of the Car Tyre

- (1) Existing life-cycle inventory and LCA data, ideally provided by industry, will first be collected and analysed to obtain a picture of the whole life-cycle of the tyre. Any assessment will follow the relevant rules, standards and norms.
- (2) For tyres it is clear that there are impacts in all phases of the life-cycle. For the purposes of this example though, it will be assumed that these are concentrated in the use phase. Here, the tyre's rolling resistance contributes to CO₂ emissions through fuel consumption and to the pollution of soil, waters and air through abraded rubber particles and chemicals attached to them. As, on an EU level, the emissions of CO₂ are likely to be most significant the remainder of this example will concentrate on this.
- (3) It is then possible to attempt to identify the measures needed to reduce CO₂. Here one has to consider all the tools potentially available, including any instruments or measures that are already applied under the existing Community policies. Reducing the rolling resistance through innovations in tyre design could be one option. For example new materials could help, as was shown in the case of silica compounds. Re-treading might be another issue to be addressed. These are of course only examples and additional possibilities might be found. Before deciding on any particular action one would assess its potential impact along the whole life cycle, so that any adverse effects would not outweigh the sought improvement. Clearly, in an integrated approach, any options would have to be assessed for their consistency with measures under other Community policies. They would also have to take account of cost and functionality and, in the present example, transport policy and road safety.
- (4) The next stage will be to agree on who undertakes the different measures and how to implement them. For example, if tyre design were to be tackled, industry would need to take the lead in designing new tyres. Public authorities might, for example, have to address issues like harmonised certification.
- (5) The final stage will be the implementation of the measures and monitoring and reporting on progress.

While it is clear that some of the lessons learned from the pilot products exercise are likely to be product-specific, the Commission believes that, as this is practically the first time such an exercise has been attempted at the European level, much will be learned about the dynamics and organisation of such an exercise. Should this exercise, on the basis of pilot projects and sufficient additional evidence, reveal important policy inconsistencies that hamper a balanced integration of economic, social and environmental objectives, the Commission will examine what actions may be necessary to enhance the coherence of existing legal and other instruments.

6.2. Identifying which products have the greatest potential for environmental improvement

At the same time as raising the general awareness of IPP through pilot projects, the Commission will also seek to identify and stimulate action on those products with the greatest potential for environmental improvement. In assessing this improvement potential the likely socio-economic effects of any such change will be taken into account. However, as yet, there is no analytically-based consensus on which products have the greatest environmental impact, nor therefore on those which have the greatest potential for environmental improvement.

The Commission will therefore initiate the development of a methodology for identifying these products at the European level. This will build on existing experiences, such as those in Belgium. He is methodology will then be discussed with stakeholders with the aim of achieving a broad level of consensus. Following this a further study will be conducted that will apply this methodology and identify the products with the greatest environmental impact. Once this has been done, for those that are towards the top of the list, further analysis will be undertaken to identify all possible ways in which the environmental impacts can be reduced. For each of these possible ways the potential socio-economic impacts of each measure will be assessed. This whole exercise is likely to take three to four years.

Once this exercise has been completed, the Commission will seek to address some of the products with the greatest potential for environmental improvement at least socio-economic cost individually. The experiences in the pilot project exercise will be a valuable input to this process.

7. Co-ordination and Integration

The IPP approach requires that the synergies between the different tools are exploited. To do this there is a need to ensure that "IPP thinking" permeates all aspects of the management of these tools. At the same time there is a need for IPP thinking to be integrated further into other policy areas than environment. To this end the Commission will encourage individual sectors, in their reports pursuant to the Cardiff Process⁴⁵, to be more explicit in how they intend to integrate the IPP approach into their work.

In addition, the Commission will initiate a number of processes to facilitate coordination and monitor progress.

It will **develop suitable indicators**, in co-operation with Member States and the European Environment Agency, to measure the environmental improvements induced by the IPP approach.

Institut Wallon de Développement Économique et Social et d'Aménagement du Territoire et Vlaamse Instelling voor Technologisch Onderzoek (2002) Identifying Key Products for the Federal Product and Environment Policy, Draft Final Report, November 2002

At the 1998 European Council meeting in Cardiff several other sectors were asked to develop integration strategies, including indicators (transport, energy, agriculture), with a view to help solve the climate change problem and advance environmental concerns in the Agenda 2000 process. This process has subsequently been extended to other sectors.

It will also prepare a **report** on progress being made in implementing IPP and submit it to the European Parliament and Council. This will be based on reports which Member States should submit to the Commission every three years, beginning at the end of 2006, detailing the measures taken and progress made in implementing the IPP approach. Industry sectors and consumer organisations are also asked to do likewise.

In addition, it will also chair **regular meetings** where both Member States' and Stakeholders' representatives attend. These will assist the Commission in its development and implementation of IPP, as well as monitoring progress in the Member States. Where particular areas merit closer attention, such as on reporting formats, the Commission may initiate working groups or utilise existing structures. The Commission would suggest that the IPP Informal Network, established by Member States on their initiative⁴⁶, continues with its parallel task of information-sharing under the Chair of the Council Presidency. It also suggests that its membership be extended to Acceding and Candidate Countries.

It will seek to **promote the IPP approach on the international level** by explaining its potential benefits of the IPP approach for the environment and sustainable development. A common understanding of the IPP approach, taking into account the particular needs of developing countries, will further the development of IPP and assist in responding to global environmental challenges.

The Commission will inform stakeholders of all developments, including consultation exercises, via its website – www.europa.eu.int/comm/environment/ipp – and its mailing list service.

And which the Commission attends as an observer.

Annex I: Stakeholder Consultations following the adoption of the IPP Green Paper

The Green Paper contained several questions on how IPP should be developed, both in terms of the overall approach and different instruments. Stakeholders were invited to submit written comments to the Commission by the end of June 2001. 133 stakeholder groups did so. Many of these comments can be accessed via the Commission's IPP webpages. 47

Of the 133 contributions, 78 were from industry, 30 from governmental organisations (including other European Institutions), 10 from individuals, 6 from consumer organisations, 4 from academia, 3 from environmental NGOs and 2 from standardisation bodies.

Most stakeholders welcomed the Green Paper and endorsed the new policy logic set out in IPP. The opinions on the merits of the various instruments were, however, more divergent. While many stakeholders were in favour of a market-oriented approach, their enthusiasm often did not extend to using differentiated taxation. The idea of applying a reduced VAT rate to products bearing the EU Eco-label was opposed by most industrial and governmental stakeholders, while environmental NGOs were more welcoming. The balance between voluntary and mandatory instruments was also the subject of divergent opinions. Industry generally favoured a more voluntary approach, while other stakeholders underlined the importance of legislation as a necessary tool.

On the subject of life-cycle assessment, several stakeholders pointed to the limitations of the methodology, while others expressed support for the development of life-cycle information databases and awareness-raising measures to support good practice. As far as using the New Approach is concerned, all stakeholders expressed considerable concerns about its use for environmental goals. For greening public procurement there was general support for awareness-raising measures. Environmental labelling was held to be important, however different stakeholders supported different types. It was generally agreed that environmental management systems (EMAS, ISO 14001 or even POEMS (Product-Oriented Environmental Management Systems)) could be a useful tool. The product panels idea was found interesting, although several stakeholders had doubts about their likely success at the European level.

In addition, to the written comments from stakeholders, the European Parliament and the Council of Ministers also produced opinions on the Green Paper. The Council of Ministers was generally supportive of the approach but the European Parliament was guarded in its welcome, calling for clarification of how IPP would be applied in practice. The decision to organise a pilot project exercise was taken partly in response to this call.

In addition to the written comments and opinions the Commission's services also organised several expert meetings and a stakeholder conference to discuss the paper. It also held numerous bilateral meetings with interested stakeholders.

http://europa.eu.int/comm/environment/ipp/tablelisting.htm

This Communication builds on these consultations and attempts to strike the balance between the different opinions expressed during them.

Annex II: Possible Roles and Responsibilities of Stakeholders⁴⁸

1. MEMBER STATES

Establish framework for national voluntary agreements

Promote integration of environmental considerations into national standardisation bodies

Removal of impediments to greening public procurement in national laws

Promote and encourage, where appropriate, the use of fiscal measures, such as environmentally-related taxes and incentives, in order to promote greener products

Elimination of environmentally negative subsidies

Provide public funding to support technological change in favour of more environmentally friendly products and services

Education, training and awareness-raising measures on life-cycle thinking

Contribute to Community efforts on life-cycle databases

Promoting the uptake of eco-design and LCA

Directing national research programmes towards IPP related research

Promoting uptake of EMS, including in national administrations

Drawing up publicly available plans for greening public procurement

Encouraging uptake of information measures for public authorities for public procurement

Promoting the development and use of the European Eco-label

Ensuring implementation of the Misleading Advertising Directive

Ensuring the integration of IPP thinking into non-environment policy areas

Assisting with the development of indicators

Reporting on the implementation of IPP

Information sharing on IPP implementation with Member States

Promotion of IPP on the international level

The Commission is not included in this list, because the main body of the text sets out what it considers it should do.

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2. Industry (including extractors, designers, manufacturers, distributors, retailers and recyclers)⁴⁹

Proposing environmental agreements

Promote integration of environmental considerations into national standardisation bodies

Employee education, training and awareness-raising measures on life-cycle thinking and environmental information tools

Contribute to Community efforts on life-cycle databases

Promoting the uptake of eco-design and LCA

Integrating IPP thinking into company RTD programmes

Using EMS, including the product dimension

Practising corporate green purchasing

Applying for and supporting the development of the European Eco-label

Following guidelines on green claims

Customer and supplier education and training /information on life-cycle thinking

Participating in pilot products projects

Reporting on the implementation of IPP, including in company environmental reports

Information sharing on IPP implementation with other companies and stakeholders

3. CONSUMER ORGANISATIONS

Promote integration of environmental considerations into national standardisation bodies

Education and awareness-raising measures on life-cycle thinking and environmental information sources

Promoting the development and use of the European Eco-label

Purchasing greener products

Reporting on the implementation of IPP

Information sharing on IPP implementation with Member States

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This applies to industry outside the EU too, where appropriate

4. Environmental Organisations

Promote integration of environmental considerations into national standardisation bodies

Education and awareness-raising measures on life-cycle thinking

Promoting uptake of EMS, including in national administrations

Commenting on publicly available plans for greening public procurement

Encouraging uptake of information measures for public authorities for public procurement

Promoting corporate green purchasing

Promoting the development and use of the European Eco-label

Ensuring the integration of IPP thinking into non-environment policy areas

Assisting with the development of indicators

Reporting on the implementation of IPP

5. CONSUMERS

Purchasing greener products

Using and maintaining products so as to minimise environmental impacts

Disposing of products correctly

LEGISLATIVE FINANCIAL STATEMENT

Policy area(s): Environment

Activit(y/ies): Policy Development

TITLE OF ACTION: COMMUNICATION "INTEGRATED PRODUCT POLICY"

1. BUDGET LINE(S) + HEADING(S)

B4-3040 A

- 2. OVERALL FIGURES
- 2.1. Total allocation for action (Part B): € 1.605 million for commitment
- **2.2.** Period of application: 2003 2007
- 2.3. Overall multiannual estimate of expenditure:
- (a) Schedule of commitment appropriations/payment appropriations (financial intervention) (see point 6.1.1)

€ million (to three decimal places)

	Year 2003	2004	2005	2006	2007	2008 and subs. Years	Total
Commitments							
Payments							

(b) Technical and administrative assistance and support expenditure(see point 6.1.2)

Commitments	0.526	0.442	0.266	0.208	0.163	0.000	1.605
Payments	0.200	0.400	0.350	0.350	0.200	0.105	1.605

Subtotal a+b							
Commitments	0.526	0.442	0.266	0.208	0.163	0.000	1.605
Payments	0.200	0.400	0.350	0.350	0.200	0.105	1.605

(c) Overall financial impact of human resources and other administrative expenditure (see points 7.2 and 7.3)

Commitments/	0.661	0.661	0.661	0.661	0.661	3.305
payments						

TOTAL a+b+c							
Commitments	1.187	1.103	0.927	0.869	0.824	0.000	4.910
Payments	0.861	1.061	1.011	1.011	0.861	0.105	4.910

The estimative credits foreseen in this planning shall be covered within the allocations of appropriations on the B4-3040A granted to the managing DGs (DG Environment and others) in the framework of the annual budget procedure.

2.4. Compatibility with financial programming and financial perspective

- [X] Proposal is compatible with existing financial programming.
- [...] Proposal will entail reprogramming of the relevant heading in the financial perspective.
- [...] Proposal may require application of the provisions of the Inter-institutional Agreement.

2.5. Financial impact on revenue:

[X] Proposal has no financial implications (involves technical aspects regarding implementation of a measure)

OR

[...] Proposal has financial impact – the effect on revenue is as follows:

(NB All details and observations relating to the method of calculating the effect on revenue should be shown in a separate annex.)

(€ million to one decimal place)

	Prior to action		Situation following action						
Budget line	Revenue	[Year n- 1]		[Year n]	[n+1]	[n+2]	[n+3]	[n+4]	[n+5]
	a) Revenue in absolute terms								
	b) Change in revenue	Δ							

(Please specify each budget line involved, adding the appropriate number of rows to the table if there is an effect on more than one budget line.)

3. BUDGET CHARACTERISTICS

Type of ex	xpenditure	New	EFTA contribution	Contributions form applicant countries	Heading in financial perspective
Non-comp	Diff	NO	NO	NO	No [3]

4. LEGAL BASIS

Treaty establishing the European Community (in particular Article 95 or 174 as appropriate) and Decision 1600/2002/EC of the European Parliament and of the Council laying down the Sixth Community Environment Action Programme, OJ L 242, 10.9.2002, p. 1-15.

5. DESCRIPTION AND GROUNDS

5.1. Need for Community intervention

5.1.1. Objectives pursued

To reduce the overall environmental impacts of products through their life-cycle.

5.1.2. Measures taken in connection with ex ante evaluation

In order to assess the need for a Community approach to Integrated Product Policy a Green Paper was adopted in February 2001. In the stakeholder responses to this paper it became clear that the development of such an approach at a European level was broadly welcomed.

5.1.3. Measures taken following ex-post evaluation

This will be covered by regular reports mentioned under 8.2.

5.2. Action envisaged and budget intervention arrangements

Following adoption the Communication will be transmitted to the Council and to the European Parliament for discussions. Stakeholders will also be welcome to submit comments. It may be that legislation on particular aspects of IPP will be required in the future. Please note that these financial arrangements do not include any actions related to the adoption and implementation of the Draft Directive on the Eco-design of Energy-Using Products. This will be covered by a separate proposal from the responsible services.

All those who come into contact with products and services throughout their life-cycle (i.e. in particular producers, consumers and government) are concerned by the policy. They will all be asked to implement life-cycle thinking into their product-related activities. Environmental NGOs will also have a subsidiary role in using their independence to promote greener purchasing choices and promoting environmental reporting.

5.3. Methods of implementation

The promotion of the strategy itself will be largely an information-led exercise. The further development of the particular tools in the "IPP Toolbox" will necessitate a combination of legislation, encouragement (name and fame), co-operation and information. These financial estimates are based on the assumption that only one "pilot product" will be investigated at any one time. Should several products be worked on in parallel, or, if particular measures are required following the application of the IPP approach to the "pilot products", then the resource implications will have to be reassessed. However, any additional resources will be covered by the existing allocations.

6. FINANCIAL IMPACT

6.1. Total financial impact on Part B - (over the entire programming period)

(The method of calculating the total amounts set out in the table below must be explained by the breakdown in Table 6.2.)

6.1.1. Financial intervention

Commitments (in € million to three decimal places)

Breakdown	2003	2004	2005	2006	2007	2008 and subs. Years	Total
Action 1							0
Action 2							0
etc.							0
TOTAL	0	0	0	0	0	0	0

6.1.2. Technical and administrative assistance, support expenditure and IT expenditure (commitment appropriations)

	2003	2004	2005	2006	2007	2008 and subs. Years	Total
1) Technical and administrative assistance							
a) Technical assistance offices							
b) Other technical and administrative assistance:							
- intra muros:							
- extra muros:							
of which for construction and maintenance of computerised management systems							
Subtotal 1							
2) Support expenditure							
a) Studies	0.461	0.381	0.222	0.169	0.128		1.361
b) Meetings of experts	0.065	0.061	0.044	0.039	0.035		0.244
c) Information and publications							
Subtotal 2							
TOTAL	0.526	0.442	0.266	0.208	0.163	0.000	1.605

6.2. Calculation of costs by measure envisaged in Part B (over the entire programming period)

Commitments (in € million to three decimal places)

Breakdown	Type of outputs (projects, files) Number of outputs (total for years 1 to 5)		Average unit cost	Total cost (total for years 1to 5)
	1	2	3	4=(2X3)
Development of IPP toolbox				
- expert consultations	Meeting reports	20	4000 €	0.080 Mio €
- studies	Study reports	11	80,000 €	0.880 Mio €
IPP pilot products - expert consultations - studies	Meeting reports Study reports	24 4	4,000 € 80,250 €	0.096 Mio € 0.321 Mio €
Progress monitoring - expert consultations - studies	Meeting reports Study reports	17 2	4,000 € 80,000 €	0.068 Mio € 0.160 Mio €
TOTAL COST				1.605 Mio €

The allocation of studies to the three actions is indicative. Depending on different grades of complexity encountered in the second action, more studies may have to be aimed at the pilot products and fewer at the other two actions. Depending on the exact subject of the studies and also depending on the results achieved in the first years some studies may be combined to cover the first two actions.

7. IMPACT ON STAFF AND ADMINISTRATIVE EXPENDITURE

The needs for human and administrative resources shall be covered within the allocation granted to the managing DGs (DG Environment and others) in the framework of the annual budget procedure.

7.1. Impact on human resources

Types of post		Staff to be assigned to action using existin resou	•	Total	Description of tasks deriving from the action
		Number of permanent posts	Number of temporary posts	Total	
	A	4		4	Desk officers and management
Officials or temporary staff	В	0.5		0.5	Study contracts, payments, informatics
temperary starr	C	1.5		1.5	Secretarial support
Other human resources					
Total		6.0		6.0	

7.2. Overall financial impact of human resources

Type of human resources	Amount (€)	Method of calculation *
Officials	0.648 Mio €	6.0 x 108,000 €
Temporary staff		
Other human resources		
(specify budget line)		
Total	0.648 Mio €	

The amounts are total expenditure for twelve months.

7.3. Other administrative expenditure deriving from the action

Budget line (number and heading)	Amount €	Method of calculation	
Overall allocation (Title A7) A0701 – Missions A07030 – Meetings A07031 – Compulsory committees ¹ A07032 – Non-compulsory committees ¹ A07040 – Conferences A0705 – Studies and consultations Other expenditure (specify)	0.013 Mio €	10 x 1300 € (based on two-day missions including 300€ indemnity + 850€ travelling + 150€ accommodation)	
Information systems (A-5001/A-4300) Other expenditure - Part A (specify)			
Total	0.013 Mio €	See above	

The amounts are total expenditure for twelve months.

¹ Specify the type of committee and the group to which it belongs.

I.	Annual total $(7.2 + 7.3)$	0.661 Mio €
II.	Duration of action	5 years
III.	Total cost of action (I x II)	3.305 Mio €

8. FOLLOW-UP AND EVALUATION

8.1. Follow-up arrangements

The Commission proposes to review the effectiveness of the IPP approach every three years following publication of the Communication. For this purpose the Commission will prepare a report which will be published and submitted to the institutions.

8.2. Arrangements and schedule for the planned evaluation

The precise modalities for the implementation will have to be arranged, but it will be based on the information submitted by Member States and other stakeholders to the Commission. The Commission will convene meetings of Member States and stakeholders to co-ordinate reporting formats to facilitate useful reporting. The Commission will also, in co-operation with the European Environmental Agency, try to develop indicators that can assess progress in implementing the policy.

9. ANTI-FRAUD MEASURES

The proposed activities only consist of expenditure on personnel, expert meetings and study contracts. The latter will be subject to the Commission's usual control mechanisms and therefore there is no need for supplementary anti-fraud measures.