

POLICY TOOLS FOR THE GREENING OF PRODUCTS

IPP aims to reduce the products' environmental impact throughout their life-cycle taking into account social and economic impacts. To achieve this and encourage the greening of products many policy tools already exist or can be developed. These policy tools should be used for a product in coherence with each other so that they reinforce each other's effect and contribute to a better environmental performance of products. This approach applies to all products, including mobile phones.

There is a body of legislation that mobile phones and their production have to comply with. IPP can complement this legislation by triggering, on a voluntary basis, further improvements in those areas that do not necessarily require legislation, by using other tools. Non legal instruments can supplement the legal constraints and can make the products environmentally friendlier throughout its life cycle working with the market encouraging both the supply and demand for greener products. Several different policy tools can apply to the mobile phones.

This paper will look at a number of policy tools possible to use for the greening of products, most of them listed in the in the IPP Communication. This is not an exhaustive list of tools.

ECONOMIC AND LEGAL FRAMEWORK

- **Environmental legislation affecting mobile phones**

A number of legal obligations that can apply to the mobile phones are listed below.

RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) Directive¹

The RoHS Directive provides for the substitution of certain heavy metals and brominated flame retardants where alternatives are available. It sets out that by 1 July 2006, no equipment may be sold containing the concerned substances. The substances subject to restrictions are the heavy metals: mercury, lead, cadmium and hexavalent chromium, and the brominated flame retardants: PBBs (polybrominated biphenyls) and PBDEs (polybrominated diphenylethers). The restrictions are not absolute and a number of derogations are provided for in the annex to the directive.

Directive on Waste Electrical and Electronic Equipment (WEEE)²

The objective of the WEEE directive is to divert WEEE from landfills and incinerators to environmentally sound re-use and recycling.

¹ Directive 2002/95/EC

² Directive 2002/96/EC

The Directive entered into force on 13 February 2003. Member States had to transpose the provisions of the Directives into national law by 13 August 2004.

Directive on Batteries and Accumulators and Spent Batteries and Accumulators³

On 23 November 2003, the Commission adopted a Proposal for a new Battery Directive, which -- once adopted -- will repeal and replace the existing Battery Directives.

The main elements of the Commission's Proposal are:

- A collection target for all portable batteries of 160 grams/inhabitant and an additional collection target for portable nickel-cadmium batteries of 80% calculated on the basis of the amount of portable nickel-cadmium batteries discarded in the municipal solid waste stream;
- Recycling requirements for all collected batteries.

Together, the collection and recycling requirements should ensure a "closed-loop" system for all batteries, in order to prevent batteries from ending up in the environment, which is one of the main objectives of the Proposal.

Second reading of the Commission's Proposal in the European Parliament is expected to start in September 2005. The Directive will probably be adopted in the course of 2006.

REACH⁴

This is a Commission Proposal for a new EU regulatory framework for chemicals, the proposed new system is called REACH (Registration, Evaluation and Authorisation of Chemicals).

Under the proposed new system REACH, enterprises that manufacture or import more than one tonne of a chemical substance per year would be required to register it in a central database. The aims of the proposed new Regulation are to improve the protection of human health and the environment while maintaining the competitiveness and enhancing the innovative capability of the EU chemicals industry. REACH would furthermore give greater responsibility to industry to manage the risks from chemicals and to provide safety information on the substances. This information would be passed down the chain of production.

The Commission's Proposal on REACH is now under discussion in Parliament and Council.

Waste Shipment Regulation⁵

This regulation lays down rules for the movement of waste within, into and out of the Community. Particularly the shipment of hazardous waste is restricted and subject to control procedures. While electronic scrap and reclaimed electronic components suitable

³ COM(2003) 723 final

⁴ COM(2003) 644 final

⁵ Council Regulation (EEC) No 259/93 (OJ L 30, 6.2.1993, p.1)

for base and precious metal recovery are in principle regarded as “green-listed” and non-hazardous, this does not apply if they are contaminated by other materials to an extent which makes them hazardous or prevents the environmentally sound recovery of the waste.

A new Shipment Regulation to replace the present one from 1993 is currently in the legislative process.

Directive establishing a framework for setting of eco-design requirements for Energy-Using Products (EuP Directive)⁶

It is estimated that a significant part of the product-related environmental impacts is determined during the product design phase. Integrating environmental considerations as early as possible into the product development process can therefore be an effective policy tool to improve the environmental impact of products. The EuP Directive applies this thinking and aims at improving the environmental performance of energy using products throughout their life-cycle by systematic integration of environmental aspects at the earliest stage of their design.

This Directive gives a preference to alternative courses of actions such as self-regulation by the industry where such actions are likely to deliver the policy objectives faster or less costly than mandatory requirements. Legislative measures can be needed where the market forces fail to evolve in the right direction or at an acceptable speed.

It is a Framework Directive; legal obligations for manufacturers will only come with the implementing measures. The formal adoption of the final text by Council and EP is expected soon; implementing measures will follow (adopted by the Commission, in cooperation with the Member States in a regulatory committee) on specific groups of products or environmental aspects. Stakeholder participation will be ensured during the preparation of the implementing measures. When an EuP meets certain criteria (significant volume of sales and trade in the internal market (indicative threshold: 200.000 units/year), significant environmental impact, significant potential for improvement) it shall be covered by an implementing measure or by a self-regulation measure.

- **Taxes and subsidies**

Getting the prices right, 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 will continue to promote and encourage the use of fiscal measures, such as environmentally-related taxes and incentives, at the appropriate local, national or

⁶ COM(2003)453

Community level.⁷ 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.

For other types of tax, Member States, where appropriate, should promote and encourage the use of fiscal measures to favour greener products.

The Commission has also established guidelines on state aid for environmental purposes, such as to support technological change in favour of more environmentally friendly products and services.⁸

- **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.

Voluntary Agreements

At Community level, voluntary or environmental agreements are typically unilateral commitments from business or industry designed to achieve environmental objectives. They can form a rapid and flexible response to environmental challenges from stakeholders who have gained particular experience in the field. They should stimulate a proactive approach from industry and can offer cost-effective solutions for the faster achievement of environmental objectives. They may be formally acknowledged by the Commission, typically by means of a Recommendation.

The Communication on the Environmental Agreements on the Community level⁹ recognises the potential of such agreements between stakeholders to contribute to environmental policy objectives. Such agreements have a potentially valuable role to play in complementing – but not replacing – other policy instruments, notably legislation.

The Communication sets out a number of criteria considered necessary for the appropriate use of agreements and for their success, as well as some procedural requirements for their formal acknowledgement by the Commission. Among these criteria, it is worth noting that the parties concerned by an environmental agreement must be considered to be representative, organised and responsible by the Commission, Council and the European Parliament. Industry and their associations taking part in an agreement should represent the vast majority of the relevant economic sector.

Standards

⁷ 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.

⁸ Community Guidelines on State Aid for Environmental Protection, OJ C 37, 3.2.2001, pp. 3-15

⁹ 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

At the European level the Commission addresses some key issues concerning European standardisation and environmental protection in its Communication on the Integration Environmental aspects into standardisation.¹⁰

European Standardisation is a tool that has been used frequently in the implementation of Community policies. Consequently, there has been an increasing focus on the role it can play in protecting the environment and supporting sustainable development.

Standardisation and legislation are two different tools, which can offer, in some cases, two options to address environmental issues. They can also be complementary processes as standardisation can support the regulatory approach. Standards can provide solutions to complex technical problems and therefore offer advantages. Stable framework conditions can be created if legislation is kept performance-oriented and technical details are dealt with by voluntary standards.

Due to associated benefits in terms of trade, market access and dissemination of technologies, European standardisation is closely linked to international standardisation. Consequently, European standards are based on international standards if international standards are available and if they meet European needs. Via the agreements concluded between the European and international standardisation organisations, there is also the possibility that European standards may be offered to the international standardisation organisations for adoption as international standards.

Standards are tools for the dissemination of technical knowledge. There are already many European standards that either directly deal with the environment or that take environmental aspects into account.

- **Environnemental Technologies Action Plan (ETAP) - Performance Targets**

The potential of technology to create synergies between environmental protection and economic growth was recognised by the October 2003 European Council. The Environmental Technologies Action Plan (ETAP) aims to harness this potential to reduce pressures on our natural resources, improve the quality of life of European citizens and stimulate economic growth.

One of the actions under the ETAP communication that is particularly relevant to IPP is to set out performance targets for products. Setting targets that are long-term and visionary as well as perceived as being viable and realistic by many different stakeholders (e.g. consumers, producers and policymakers) is one way to encourage industry to develop and take up environmental technologies. These targets need to be based on best environmental performance, while being realistic from an economic and social efficiency viewpoint, as well as different regional conditions. This means focussing on concrete quantifiable values.

¹⁰ Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee Integration of Environmental Aspects into European Standardisation, COM(2004)130 Final

The Commission has started work on how to set performance targets. The Commission thinks that the choice of the product, service or process, and the level of aggregation of these, should make sense both from the environmental and from market perspectives for this. It should build on a life-cycle approach, in particular when relating to products or services, in order to select parameters representative of the main impacts on the environment and to avoid shifting pollution from one stage to another in the life-cycle of related products or services. It should also be coherent with other relevant initiatives and regulations.

APPLYING LIFE CYCLE THINKING

- **Making Life-Cycle Information and Interpretative Tools Available**

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.

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.

Life-cycle data also needs to be made more accessible. The Commission has started work to 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.

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. The Commission will further this discussion, with the aim of producing a handbook on best practice, based on the best possible consensus attainable with stakeholders.

- **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.

Products are 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. In order to reinforce this particular aspect and ensure its coherent assessment across Europe, the Commission is currently running a contract to create a guidance document to verifiers and organisations on how to assess the product dimension in EMAS.

The Commission is currently running an external evaluation of the EMAS and Eco-Label schemes. Based on the results of this study, the Commission will start the revision process of the scheme, as foreseen in the EMAS Regulation, in the beginning of 2006.

- **Product Design Obligations**

To promote and apply the life-cycle thinking product design obligations are a possible tool to be used.

The Commission will come forward with a discussion document that will consider ways to promote implementation of the IPP approach in companies, including if appropriate general obligations for specific products. This will take into account existing legislation influencing to the eco-design of products as the WEEE, ROHs and EuP Directive. The description of these directives can be found among legal instruments.

CONSUMERS

- **Green Public Procurement (GPP)**

The promotion of “green” public procurement procedures is an important tool and can act as an important driver for the development and production of more environmentally friendly products and technologies. Public authorities can also set the example and encourage corporate and even private purchasers to buy products which are less harmful for the environment.

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 including encouraging the creation of action plans for greening of public procurement in the Member States and as part of the implementation of the pilot project “EMAS in the European Commission”, the Commission will release by the end of 2005 an internal handbook with the purpose of guiding staff to consider environmental criteria in the management of Commission purchasing. In addition to this, the Commission is also elaborating information measures for public authorities to assist them in greening their purchasing policies. The European Commission issued a handbook in 2004 on environmental public procurement. This handbook explains in clear, non legal terms how public purchasers can integrate environmental considerations when buying goods. The European Commission has also set up a product group database to assist green public procurement. The database informs users about existing Eco-labels for the product groups they are interested in, the main environmental issues and potential questions they can ask suppliers. (<http://europa.eu.int/comm/environment/gpp/>)

Legal Framework for GPP:

In July 2001, the European Commission issued an Interpretative Communication on environmentally-friendly procurement¹¹. Here the Commission clarifies how Community law offers numerous possibilities to public purchasers who wish to integrate environmental considerations into public procurement procedures. The recently adopted new public procurement directives of March 2004 have further clarified these

¹¹ 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

possibilities for including environmental considerations in the technical specifications (including the production methods), selection and award criteria and contract performance clauses.

- **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 developed for greening public procurement should also facilitate greener corporate purchasing. In addition, 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 reporting¹²

- **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.

Eco-label

The presence of the EU Eco-label 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 IPP.

The Eco-label scheme is currently under review, and the results of a major Eco-label/EMAS evaluation study are due to be published end 2005. Work on drafting a new Eco-label Regulation will start in 2006.

There are currently no plans to develop EU Eco-label criteria for mobile phones, mobile phone batteries, or individual components of mobile phones, although these may be considered for future development. The paper user-manual may be printed on eco-labelled paper, and printing services are likely to be eco-labelled by 2006.

EPDs

Environmental Product Declarations (EPDs) are a means of presenting quantified, life-cycle based information about a product in a standardised way. No judgement is made

¹² 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 SustainableDevelopment, COM (2002) 347, 2.7.2002, page 15).

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.

There is ongoing standardisation work in ISO on EPDs.