Integrated Product Policy (IPP), Consumption and carbon dioxide (CO2) reduction: An analysis and future implications

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Summary

Some conclusions can be drawn on Integrated Product Policy (IPP) and Environmental Product Policy (EPP) and the implications for CO2 reduction and sustainable consumption in Japan.

IPP is a potentially useful as a policy toolbox approach:

- It provides a basis for strategies aimed at achieving sustainable consumption and production in their response to World Summit on Sustainable Development (WSSD). Japan needs to consider its own definition of sustainable consumption as appropriate to its needs, while being aware of the broader context. Whatever approach is taken needs to be clearly defined to ensure clear objectives.
- It provides a basis for government policy development aimed at reducing the environmental impacts of products. Any policy is likely to be optimal and most effective where it and its objectives are considered in an integrated way with other, related policies and objectives.
- It provides a generic ‘toolbox’ or set of policies and measures which may be used as for reducing any product-related aspect or impact, including CO2 emissions. Any individual or set of policies and measures may be used as appropriate.
- It helps to emphasise that both supply-side and demand side measures are important, and that appropriate combinations need to considered together for optimal solutions. Supply-side measures alone are unlikely to achieve much in the absence of demand-side initiatives to shift markets, for example public procurement and the use of economic instruments.
- It helps to encourage life cycle thinking (LCT) in environmental product policy (LCT), so that key life cycle impacts are considered, and different types of impact are considered and prioritised effectively.
- It provides a policy framework for greater consideration of the role of services and product-service systems (LCT) as a possible approach to sustainable consumption. This is an area of increasing discussion and research (see www.suspronet.org).

However:

- These are still early days, however, in thinking on IPP and there is little experience to learn from. Within the EU and EC it remains the subject of discussion rather than application and there are wide disparities in interest, consideration and application among the governments of European countries.
- The emerging consensus is that IPP is a policy approach for focusing on high impact products and then determining the optimum mix of demand and supply-side tools for a particular product type. There is no one single best approach or set of instruments.
- EPPs applied so far have mostly been on the supply side, probably because they are more straightforward to implement compared with attempting to influence demand. Economic instruments are potentially powerful tools for change but the barriers are greatest and so they have been generally under-exploited.
- Changing business models are changing the dimensions of IPP. With global supply chains supply-side issues may often need to be addressed outside of a particular country. Applying IPP to sustainable development through sustainable IPP (SIPP) will require a cooperative approach between countries.

Sustainable consumption

There is no well established definition of sustainable consumption. In its widest sense it includes use of materials or energy by all users in the economy (including businesses and
government), not just end consumers. Consumption becomes sustainable in an eco-efficiency context when it involves use such that short and long term impacts do not undermine the capacity to use a resource, or undermine capacity for sustainable development. Since sustainable development is established as including the social dimensions of meeting needs with social justice, The Centre for Sustainable Design (CfSD) prefers to include this wider view in defining sustainable consumption.

CfSD’s suggested working definition is:

‘Use of products and services, and their constituent materials and energy, by nations, communities, organisations and individuals, in such a way that society’s and global capacity for sustainable development is not diminished and is, where possible, enhanced.’

Environmental Product policy (EPP)
An EPP is any product-oriented government policy or measure (normally at national level) aimed at reducing the environmental impacts of products. EPPs include a range of supply-side tools (including prohibitions and informational tools such as eco-labels), and demand-side tools (including economic instruments such as differential taxation, and public procurement) aimed at stimulating markets for greener products.

Integrated Product Policy (IPP)
An EC initiative, IPP is a governmental approach to reducing the environmental impact of products by using an appropriate mix of supply-side and demand-side EPP tools. Integration is designed to optimise results and may take place at various levels. At the national level there may be integrated consideration of product life cycle impacts, integration of EPP approaches, integration of EPPs with other aspects of environmental policy and integration of EPPs with other, non-environmental, government policies. At the European Union (EU) level, the EC is also concerned with harmonising EPP approaches between Member States since the various countries have been progressing at widely differing rates.

While businesses may be involved in implementing some EPPs, especially on the supply-side, IPP development and implementation is primarily a task for government, especially on demand-side measures.

IPP is being increasingly recognised not only as an approach to integrating EPPs but as a key aspect of national strategies for sustainable consumption and sustainable development.

IPP and EPP developments
EPPs have existed in various forms in European countries since the 1980s and the general picture has been as follows:

- The main activity has been in the northern European countries, especially Denmark, Sweden, and The Netherlands. These have been most advanced in their thinking and in implementing a variety of policy instruments.
- Other countries such as Germany and Austria have been quite active and Finland and Belgium increasingly so. There has been discussion but relatively little activity in the UK in the past but it is now becoming more proactive. There has been very little activity in the southern European countries although there has been some progress in eco-labelling.
- Where EPPs have been developed, the main emphasis for environmental objectives and issues has been on reducing waste, toxic materials and emissions. Increasing resource efficiency, including energy efficiency has been one aspect, and there has been some energy labelling. Until now there has been no specific emphasis on reducing CO2 emissions.
- The focus has been on consumer products rather than business-to-business (B2B) products.
- The main EPP instruments used so far by countries include eco-labels, public information, procurement, and in some countries economic instruments, negotiated agreements, self declarations, eco-design awards, product-oriented environmental management systems (POEMS) and producer responsibility.
The EC has initiated some EPP instruments also, including the unsuccessful EU Flower eco-labelling scheme, but mostly these have been Directives or other policies for implementation in Member States.

IPP continues mainly to be the subject of discussion rather than application, in the EC and even in those countries which are relatively advanced in EPP application:

- The EC has taken a lead in IPP discussions and the phrase was first coined in a 1998 report for the EC. There has been continuing discussion, particularly on the role of IPP and the EC and on the practicalities of implementation.
- The most advanced countries in IPP thinking and application are also those which are most advanced in EPP application. In these cases, IPP has been specifically identified as a key element of strategies for sustainable consumption and production and IPP application is likely to increase.
- Progress in IPP application has, however, been and is likely to continue to be slow because of the practical barriers, for example the lack of clear objectives, conflicts of interest, and a lack of coherent approaches where government activities are split between federal and regional levels. A major barrier at the national level is gaining treasury acceptance of new economic instruments.
- Organisational as well as economic and practical complexities and barriers apply to implementing IPP, for example demand-side and supply-side tools being 'owned' by different European Directorates-General (DGs) and government departments with different priorities.
- At the EU level, the principle aim of integrating national EPP policies is itself an area of difficulty. Member States have been progressing EPP at different speeds and with differing approaches, and some hardly at all. At the same time, the EC prefers a voluntary to regulatory approach in this area. The scale of the task will be even greater when the EU membership is enlarged.
- Because of the complexities, there has been an emerging consensus towards treating full comprehensive integration as an ideal to aim at and taking a simpler, more pragmatic view of IPP. It now tends to be viewed as an approach to defining the specific optimum mix of EPPs to reduce the impacts of particular, high impact product groups.
- Following criticism of its 2001 Green Paper and a major re-think, the EC has continued to delay its long-awaited White Paper on IPP and will now be producing a Communication, probably in April 2003. From our discussions and an internal discussion document, this is expected to lay down the general principles for the future direction of IPP but not include any significant new policies or strategies.
- IPP discussion remains focused on products but there is increasing discussion of the role of services and this is likely to continue in the future. Neglect of the service dimension of products omits major environmental impacts.
- EPP development is likely to continue at EU level and in all European countries in response to specific issues and commitments, for example responding to the World Summit on Sustainable Development (WSSD) and the need to address sustainable consumption and production.
- Ongoing discussion is further maintained by the Informal IPP Network of European national government contacts.

**EPP, IPP and CO2 reduction**

EPP, IPP and sustainable consumption are all linked at the general level and in relation to reducing specific environmental impacts. Reducing emissions of CO2 and other greenhouse gases is an international priority in order to lessen the potentially serious consequences of resulting climate change. Signatories to Kyoto have recognised this in committing to national reduction targets. Some countries have included reducing emissions from product use or consumption in their strategies for greenhouse gas reduction. This is especially the case where greenhouse emissions arising through use of products such as cars and electrical appliances, is a significant proportion of total emissions or offers the most scope for reduction. Besides offering a set of tools for sustainable consumption, IPP can also be used for identifying an optimal approach to reducing CO2 emissions from products.
Current applications
In the past, few EPP measures have been specifically aimed at energy efficiency and reducing CO2 emissions, the emphasis having been generally on waste, emissions and toxic materials reduction. Nevertheless some labels on energy efficiency have been used, for example Energy Star, and energy aspects have been generally considered as an element of tools aimed at reducing general impacts, for example eco-labels, information and public procurement. There is now, however, increased EPP consideration in this area in response to Kyoto obligations and targets:

- At EC level there have been new Directives aimed at CO2 reduction, especially the Directive on consumer information on fuel economy and CO2 emissions for new passenger cars, and the Directives on energy labelling of appliances.
- At national level, implementation of such labelling schemes, combined with other product–related measures such as differential vehicle taxes, is expected to make significant contributions to curbing rises in greenhouse emissions from some countries. For example car and appliance energy efficiency improvements are expected to contribute about 25% of the UK’s target CO2 reduction for 2008-2012.

The relative importance of product-related energy use and targets for reduction varies between countries. For example, product use impacts are relatively less important in Finland where most CO2 emissions arise from power generation and energy-intensive industries.

While EPPs are an element of climate strategy, IPP has itself not been specifically referenced in the strategy for any European country:

- In all countries, product-related CO2 emissions are just one source alongside various major non-product categories. Furthermore, in most cases climate strategies have been prepared before there were conclusive outcomes from discussion on IPP.
- While IPP may address CO2 issues, it has been thought of as a tool for integrated consideration of all environmental impacts, not just energy impacts. IPP also aims to encourage life cycle thinking (LCT), not just the use phase for new vehicles and appliances, which is the focus of energy labels so far.

Opportunities for IPP in CO2 reduction
Since IPP appears in some national strategies for sustainable development, it may in time be more overtly considered in climate strategies. Applied in a pragmatic way with a focus on products with major environmental impacts, and considering priority issues, IPP is a potentially useful approach. For example, energy labelling, voluntary agreements, public information, economic instruments and public procurement can all be considered together in an integrated way to achieve objectives.