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CONCLUSIONS AND PAPERS PRESENTED AT THE INTERNATIONAL CONFERENCE: GREEN GOODS V "ECO-LABELLING FOR A SUSTAINABLE FUTURE"

Berlin, 26-28 October 1998

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FOREWORD

This document presents the papers and conclusions of the Green Goods V, "Eco-labelling for a Sustainable Future" Conference organised by the OECD's Working Party on Pollution Prevention and Control and hosted by the German Federal Government. The Conference and the Conference conclusions were developed under the guidance of a Steering Group emanating from the WPPPC. The Steering Group has determined the themes, stimulated and selected the contributions presented at the Conference and ensured maximum stakeholder participation. The Conference conclusions were developed with the workshop chairmen and rapporteurs and submitted to participants during the final Conference plenary meeting, before being presented to the WPPPC.

The OECD Secretariat would like to take this opportunity to thank all contributors and participants to the Conference for their work, while expressing special thanks to Dr. Harald Neitzel of the German Federal Environmental Agency, and Mrs. Nicola Breier of the German Federal Ministry for the Environment. Particular thanks also go to Mrs. Dagmar Larws and Mrs. Glady Takramah, who ensured the impeccable organisation of the event. We also benefited from the work of Mrs. Hanni Rosenbaum of BIAC, and Mr. Baas de Leeuw of UNEP who helped convey the contributions of the private sector and non-OECD Member countries. Finally, it must be pointed out that the Conference would not have taken place without the financial support of German Federal Government. This support, together with that provided by the Government of Sweden, also enabled several participants from distant countries to attend the Conference.

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(Berlin, 26-28 October 1988)

INTRODUCTION

At its November 1997 meeting, the Working Party on Pollution_Prevention and Control established a Steering Group to prepare the Green Goods Conference on "Eco-labelling for a Sustainable Future". The Steering Group defined the objectives of the Conference and produced a "call for papers" which was widely distributed. Invited participants to the Conference were selected on the basis of the abstracts of their presentations describing their ability to contribute to advancing the issue of product environmental information, and with the aim of ensuring wide stakeholder participation. This document brings together the interventions developed by a few of the 175 participants from 20 OECD Member countries and 12 non-OECD Members, who attended the fifth Green Goods Conference. This selection of contributions reflects the opinions and analysis of the invited participants who developed and presented papers at the Conference. Altogether they represent environmental labelling practitioners, consumer organisations and a wide spectrum of businesses. Germany hosted the event in order to mark the 20th anniversary of the 'Blue Angel' eco-labelling scheme. The Conference was co-organised with German Federal Government through an *ad hoc* Steering Group. The Steering Group comprised delegates to the OECD Pollution Prevention and Control Group. To ensure adequate international coverage, it also included representatives of the United Nations Environment Programme (UNEP) and the Global Eco-labelling Network (GEN). The Steering Group maintained close links with the World Trade Organisation (WTO) and the Business and Industry Advisory Committee (BIAC) to the OECD (The annexes contain a list of conference participants and WPPPC steering group members).

Following the implementation of the eco-labelling scheme in Germany 20 years ago, many similar schemes have been put in place in OECD countries. By increasing the availability of environmental information on products and services, eco-labelling can contribute to achieving environmentally sustainable economies by:

- supporting consumer choice
- assisting professional purchasers
- recognising manufacturers of environmentally preferable products

- encouraging the environmentally sound development product and design of products
- contributing to environmental and educational policy objectives

Over the last few years, attention generated by eco-labelling has focused on 'potential trade aspects' (OECD workshop on "Eco-labelling and Trade", London, October 1994, OECD (1997), the general distribution Document "Eco-labelling Actual effects of Selected Programs", Paris, (1997) and UNCTAD, WTO workshops and analysis). In the intent of the organisers, the Conference provided an occasion to examine the broader aspects of environmental labelling. Hence, the overall aims of the Green Goods V International Conference, as established by the WPPPC Steering Group, were to:

- review the role of eco-labelling as an environmental policy tool
- clearly identify benefits provided by adequate environmental information
- describe factors that render eco-labelling schemes most effective

During the plenary session, presentations aimed at conveying a comprehensive picture of eco-labelling as a tool contributing to the attainment of sustainable consumption. The presentations also stressed the role of eco-labelling as a component of 'Integrated product policies'. They prepared the ground for nine workshops that comprised 40 original presentations on experiences gained from existing eco-labelling schemes.

The Workshops also explored concerns and opportunities raised by such systems, looked at ways to promote them and to increase their effectiveness, considered the possibilities offered by other approaches such as single issue labels, and investigated possibilities for international co-operation and adoption in transitional and developing countries (for both national and export markets). Discussions confirmed an overall shift of trade concerns -- with a focus towards trade benefits rather than on distortion. They also showed that existing eco-labelling schemes have become more transparent, since an increasing amount of information is available through the Internet.

Finally, a reminder concerning the subject of the conference: while environmental labelling comprises all forms of labelling that may carry an environmental message (see ISO definitions), the conference focussed on eco-labelling schemes based on multiple-criteria and third party review. Hence overall Conference Conclusions only concern these types of labelling systems.

Outcome

The results of these discussions are reflected in the Conference Conclusions prepared by rapporteurs and moderators of the work sessions on the basis of a framework developed by the WPPPC steering group. The conclusions are presented immediately below, together with all major papers and abstracts submitted at the conference (only the slides presented at the conference are not reproduced for technical reasons).

ECO-LABELLING FOR A SUSTAINABLE FUTURE

Green Goods V International Conference

CONFERENCE CONCLUSIONS

Berlin, Palais am Festungsgraben, 26 - 28 October 1998

Environmental labelling and declarations stand among the product policy tools and market instruments useful to achieve sustainability. They are intended to inform consumers about their product choices by providing the market place with environmental information. They may include environmental certification programmes, single issues or multi-attribute and/or self-declaration or independently certified claims. Different countries and different firms may use and prefer one or another set of approaches. Discussions at the Conference focused largely on third party organised environmental labelling (such as Type I labelling, ISO 14024), although several other types of labels were also discussed .

1. Among the various policy-tools used to achieve environmental goals, eco-labelling stands as a market based tool with the following characteristics:

- it is a voluntary approach
- it uses market incentives to improve environmental performance and raise environmental awareness
- it fosters a move towards more sustainable production and consumption patterns
- it is based on a participatory decision-making process
- it provides guidance to consumers so they can select products that are environmentally preferable
- it is based on scientific assessment to underpin product qualification criteria.

2. By describing and setting environmental performance criteria over a product's life cycle within its product category, eco-labelling provides the market place with an environmental incentive.

3. Appropriate stakeholder involvement is key to achieving the transparency necessary to set the environmental performance criteria. Governments as well as industry, trade, environmental organisations and consumer associations should be encouraged to contribute to eco-labelling activities.

4. Eco-labelling schemes aim at providing environmental guidance and information on products and services as a means for the promotion of environmentally sustainable economies. The tool effectively responds to market demand by:

- helping consumers to make a choice
- assisting professional purchasers

- providing industries with an environmental marketing tool
- creating markets for environmentally preferable goods
- providing guidance for product development and design
- stimulating more sustainable production processes
- serving environmental and educational policy objectives.

5. A number of experiences are available on existing eco-labelling schemes and these indicate that:

- in many schemes, promotional efforts have focused on raising consumer/purchaser awareness and encouraging industry participation
- the increasing diffusion of eco-labelling schemes, and the increasing number of product groups show a growing acceptance and recognition of the instrument
- considerable opportunities may be realised by small and medium sized enterprises
- eco-labelling schemes achieve their objectives through different organisational structures (e.g. decision-making procedures can differ)
- environmental labelling contributes to public policy and government activities, e.g. it may assist the choices of professional purchasers.

6. Several stakeholders described the concerns raised by the development of different eco-labelling schemes, and stressed the need for monitoring and analysis to describe and address these issues. In particular they underlined the following would need special consideration:

- disparities stemming from differences in criteria set for a same product-category
- effects on developing and transition economies, as well as regional or local economies
- transparency, accessability and relationship to non-product related process and production methods
- market share thresholds and trends determining undesirable mandatory access conditions
- rationale for criteria development.

7. Correctly devised and implemented eco-labelling schemes can provide considerable business opportunities for developing and transition economies. However, special attention and appropriate resources should be devoted to the following:

- examining attitudes and environmental awareness of consumers in different societies and their resulting relationship with businesses
- testing facilities and appropriate technology
- scarcity of information
- cost of implementation
- options available to obtain government support.

8. Eco-labelling schemes and the use of labels to promote environmentally preferable products should be evaluated on a periodical basis in order to determine, and possibly improve, their overall effectiveness, and their role within specific product categories. The evaluation should include factors such as:

- appropriateness of eco-labelling as an instrument
- scientific knowledge contributing to the definition of product criteria
- administrative and financial requirements
- market demand and impact
- inclusion of different stakeholders

- specific reasons for success
- new and innovative products, processes, and labelling approaches
- indicators of environmental effectiveness.

9. Eco-labelling has several links to other management strategies and/or environmental policy instruments. It serves as an element of the development of other policy strategies e.g. strategies for the greening of government rely on indicators of environmental preferences. Also, it is closely related to the implementation of eco-efficiency, green public and private purchasing, and life cycle management - including the development of product standards.

10. Practical tools to improve eco-labelling should be encouraged through the use of

- life cycle approaches to identify the most important parameters
- a balanced group of experts
- internationally recognised testing and verification methods when available.

11. Co-operation issues:

- eco-labelling practitioners as well as international organisations should be encouraged to improve information exchange and enhance co-operation towards assessment of feasibility of harmonisation or mutual recognition in order to strengthen the use and credibility of eco-labelling.

- further development of the Global Eco-labelling Network (GEN) should be supported in order to establish an effective strategy for co-operation.

- several initiatives are undertaken to facilitate the development and the use of eco-labelling at the international, national and regional level. The ISO 14000 series standards play an important role in establishing sets of predetermined requirements for eco-labelling programs. Provision should be made for balanced participation in the decision making process of standardisation.

- better co-operation should be established between eco-labelling schemes in developed and developing countries.

PLENARY SESSION PRESENTATIONS

Opening Address *by Prof. Dr. Andreas Troge, President of the Federal Environmental Agency*

0 Welcome

I am delighted to welcome you to Berlin, Germany's capital, which will soon be the seat of the Bundestag (upper house of the German parliament) and the Federal Government.

An election has taken place recently in Germany. The new Environment Minister will only be appointed in two days. I trust you understand, therefore, that a high-ranking representative of the Federal Government cannot be present here today.

I Introduction, Personal relation to the subject of eco-labelling

The overwhelming majority of you are already familiar with the basic elements of and the controversies surrounding eco-labelling. For many of you it even is part of everyday business. That is why, as an introduction to the conference, I have chosen to make my talk a rather personal one. It will surely not be surprising for you that many of the things I will address derive from the experiences which we have gained in what are now 20 years of work on the "Blue Angel" Environmental Label. Of course, by "we" I do not only mean the Federal Environmental Agency and the Federal Environment Ministry to which the Agency reports, but also the Environmental Label Jury, whose chairman over many years - Professor Kurt Oeser - will speak to you tomorrow. With "we" I am also referring to the experiences gained by our partner, the German Institute for Quality Assurance and Labelling, RAL for short. The head of RAL, Director Wolfgang Schirmer, will chair the first session tomorrow morning.

Today's conference "Eco-labelling for a Sustainable Future" is not the first international conference that has devoted itself to this topic, which, at first glance, appears to be a lesser-priority environmental policy issue. I would like to mention in this context a conference which was held in this city in July 1990, in the Reichstag; the "Berlin Declaration" adopted at this conference is still topical and often cited. Then there was the conference which with support from the British government was conducted in October 1994 in London by a number of international organisations - a consortium made up of OECD, UNCTAD, WTO and UNEP -, which dealt with the relations between environmental labelling and international trade - a long-running issue in the international debate whose importance is likely to continue to grow and which should by no means be underestimated by eco-labelling practitioners.

But even without exclusive conferences, eco-labelling is a topic that is increasingly enjoying attention in the international arena. Allow me here to spare you the details of the various initiatives undertaken by bodies such as the Commission for Sustainable Development (CSD), the International Standardisation Organisation (ISO) or the World Trade Organisation (WTO).

In my professional life, I have encountered the eco-labelling subject in a number of different functions. This has provided me with the opportunity to become familiar not only with the "philosophy" behind the Environmental Label, but also with the day-to-day work along with its many problems:

- In the early 1980s, as an economist working at a university, I looked into the prospects of economic instruments and voluntary agreements. Although eco-labelling was already a recognised and integrated topic, its potential effect was largely underestimated, particularly since at the time the "Blue Angel" was the only existing label and, in addition, was anything but successful.

- One of my tasks, until the mid-eighties, as a subject specialist at the National Association of German Industries was to co-ordinate the participation of industry representatives in expert hearings within the Environmental Label Jury and the opinion-forming process for the industry representative in that Jury. It was then at the latest that I was confronted with the greatly differing opinions that prevail in industry to this day on the subject of eco-labelling.

- Subsequently, until the end of the eighties, as head of a chemically and technically oriented research institute, I got to know an altogether different side: from the performance of effluent-related assessment work for a then-highly-successful environmental label for industrial cleansers - which no longer exists today - to the many detailed problems associated with such work, which went as far as the questioning of unwelcome laboratory results. One of the insights I gained in the process is that a functioning assessment system is one of the basic prerequisites for the integrity and reliability of environmental labels.

- As vice-president and, since 1996, the president of the Federal Environmental Agency, I have closely followed further developments in this field since the beginning of the nineties. As in industry, different opinions are held at the Federal Environmental Agency as to the capacities the Agency should invest in this instrument. The most important capital that we can feed into the Environmental Label is the expertise of our specialists. These have an excellent overview of the situation in their respective fields of work - be they detergents, cars, paints and varnishes, or heating systems. However, for them to make more contributions to the instrument of eco-labelling, which seems to be far removed from the technical point of view, they must be won over again and again - also in competition with other activities aimed at improving the environmental quality of products. At a time when the Federal Environmental Agency - like nearly all public institutions in Germany - is economising due to the tightness of public budgets, we have had to realign our work on the Environmental Label. I have defended the position that while criteria development is to be accorded high priority - the significance of this work within the framework of environmental policy is a subject I'll get back to later - it should simultaneously be arranged that resource-intensive award application work such as the evaluation of chemical formulations, which hitherto has been done by us free of charge, are organised by external parties subject to payment of a fee.

II Eco-labelling: Approach and Reality

Agenda 21, which was adopted in 1992 in Rio and is literally called: "What we have to do in the 21st century", is the first globally recognised document to address environmental labelling as a possible instrument for improving the environmental quality of products. It is also made clear, however, that this instrument can only be one of the elements of a programme of action whose central message is: "changing production and consumption patterns". Jean Cinq-Mars, the Director of the Environment Department of the OECD, will discuss these relationships in greater depth.

It can be seen nonetheless that the importance of product-related environmental protection has grown world-wide. One reason for this, which we welcome, is that the pollution from industrial installations has declined at least in the industrialised countries, coupled with a concomitant increase in product-related environmental pressures. To give an example:

In Germany, industrial installations long ago ceased to be the most important source of pollution by cadmium, with remaining emissions of about 3 tonnes. Rather, the main source now is the diffuse distribution of nickel-cadmium batteries in household waste, whose current quantities come to about 350 tonnes in Germany alone. On the other hand, since they can be recharged, these nickel-cadmium batteries also have positive effects on the environment. This observation already establishes a link to a current controversial discussion among eco-labelling practitioners and stakeholders.

According to the results from many life cycle assessment studies, today we are able to recognise the use phase as causing the most environmental problems in the entire life cycle. Products such as washing machines and dishwashers, heaters, television sets, detergents, paints, cars, etc., are cases in point.

The growing relevance of product-related pollution also manifests itself by the ever-growing number of international activities in this field. Some examples of fields of work:

- extended producer responsibility
- design for environment
- integrated product policy
- product chain management
- life cycle assessment.

Hardly a day passes without there being a conference somewhere on one of these issues. This is particularly important in the exploration and orientation phase, which we are still undergoing.

One point seems to be essential for product-related environmental protection and sustainable consumption strategies:

Many environmental problems can only be solved if, in addition to official regulations, options for action by citizens and institutions are created. This approach is based on the environmental consciousness of the people and the environmental management systems of institutions that may guide their actions. The recommended purchase of environmentally sound products may be the heart of such strategies, which emphasise the reduction of the environmental impact of products. In order to provide information on products that can be assessed as environmentally preferable in a comparative consideration, an objective and neutral product-labelling scheme is required. This can create market incentives to improve the environmental quality of products and support the credible use of environmental claims in advertising.

The goals of eco-labelling work have been described in a long list of publications. But what about the real situation? What makes us so sure that eco-labelling is an important tool to support sustainable product development?

There are a lot of strong, convincing arguments - but there are also some weak points to consider very carefully.

1. The first goal is to provide private consumers with credible information on how they may contribute to environmental protection by their purchasing behaviour. To not just offer them some quantitative information but to give them something like a final value choice - what products should be assessed as more environmentally compatible according to the best state of technology. Do the consumers want that?

Every survey known to me confirms the consumers' desire for a reliable assessment of the environmental quality of products. It really doesn't matter in this context whether the percentage of consumers who want this today and actually look for corresponding information is 20, 40 or 60%. Any company is prepared to spend millions to reach a mere 5% of the population, if that percentage can be defined as that company's "target group". The most essential point of eco-labelling is the final valuation as to whether or not a product can be claimed as environmentally sound. A lot of useful information about energy consumption, composition of substances, content of hazardous substances or noise levels is not sufficient to communicate such a message to the consumer. The information might also be based on different test methods that cannot be compared.

I am therefore pleased to quote the following from a study commissioned by an important company from the detergents industry:

"An eco-label, when available and reliable, seems to be a useful consumer guideline to support the possible purchase of an environmentally friendly laundry detergent. Especially Swedish consumers claim to buy environmentally friendly detergents at a significantly higher level compared with 1993." The availability of an eco-label ranks seventh among 20 addressed aspects of laundry detergents. This information underlines one success story of the eco-label "Nordic Swan" in Sweden. I am sorry to mention that so far the detergent project has been a flop, so to speak, in Germany as well as in the European Community, where eco-labelled detergents cannot be seen in the shops although the detergent industries have improved their products' ecological quality several times in the last decade.

2. An underlying assumption of eco-labelling is that it can encourage consumers to buy eco-labelled products because of heightened environmental awareness. This is intended to create market pressure and market incentives in the whole sector for the improvement of the products' environmental profiles. But do we have findings that confirm that these effects really occur?

A recently published OECD study has claimed that the environmental benefit of eco-labelling will be realised if a balance is reached between the number of eco-labelled products and the level of criteria. A large number of certified products alone is no success factor. Continuously improved criteria may be a precondition for eco-labelling to achieve positive environmental effects.
Another interesting observation is that successfully eco-labelled products often have a market share of more than 30% in a product category. Eco-labelling then tends to become a de facto voluntary standard. We have also had this effect with the Blue Angel in some product categories. In such a case, for some types of heaters for example, it does not seem very useful to further improve the criteria. But withdrawing these criteria documents would again open up market prospects for products that have an inferior environmental performance.

Among your conference documents you will find a very new study which deals with the question of how companies assess the benefits of the German Blue Angel. 296 companies out of 1000 have completed the questionnaire. Some results concerning market incentives:

⇒ 76% of the companies believe that the Environmental Label has enhanced competition for ecological innovation within the respective sectors;

⇒ 38% believe that the Environmental Label has led to marked improvements in the products' ecological quality while 28% partially agree with this opinion;

⇒ "responding to competition" and "improving the product's chances on the market" were the most frequently cited reasons for applying for the Environmental Label; 91% of customers have responded positively to the products' labelling with the Blue Angel;

⇒ Another encouraging finding is that 60% of company employees have responded positively: the eco-label as an effective tool to integrate the environmental performance of a company's products into the scope of its corporate identity;

⇒ only 25%, though, were able to actually improve their competitive position; yet, no less than another 38% agreed that their competitive positions have improved "partially".

Eco-labelling can also contribute to noteworthy developments in "countries in transition". A good example of this are the environmental labels for refrigerators in Hungary and Korea, which in the interests of all of us have furthered considerably the widespread use of fridges free of CFCs.

Many eco-labelling initiatives have also been launched in developing countries. I am particularly pleased to welcome at this conference the representatives of Thailand, Zimbabwe, India, the Philippines and Indonesia.

3. Eco-labelling practitioners should increasingly devote attention to the target group professional purchasers in the public procurement sector, at retail companies, the manual trades and industrial companies. The procurement of environmentally acceptable products and materials is among the generally accepted measures of environmental management. Professional purchasers are usually much better informed than private consumers.

An initiative deserving particular mention in this context is the "Green Purchasing Network" which was founded in 1996 in Japan and now has more than 1,500 member organisations. These include 33 of the 55 district governments in Japan, among them all major cities. Environmental labels such as Japan's "Eco Mark" play an important role as a source of information. The Green Purchasing Network also develops criteria of its own for products such as computers and office equipment, for example.

A very interesting approach - to be presented at this conference - is the Swedish Goods Environmental Choice programme, which is managed by the Swedish Society for Nature. This eco-labelling scheme is organised in close co-operation with major Swedish retailers who want to stock eco-labelled products. It is obvious that more than half of the success of an eco-labelling project is achieved when eco-labelled products appear in the shops.

Environmental Choice Canada has performed its programme in order to meet the information needs of governmental and institutional purchasers.

In Germany, two recent studies have found that the Environmental Label plays a large role in public procurement, mostly for such product groups as copiers, computers or lubricants.

4. An approach widely used in eco-labelling is the stakeholders' approach. This means full participation of all interested parties as well as full transparency in all phases of the decision making process. It is not surprising that the OECD study, which I already mentioned, gave the schemes good marks: "The different eco-labels use similar procedures. The transparency and consultation process

follows the same general patterns with certain variations. Eco-labelling programmes all have mechanisms for transparency (...) and they have similar consultation processes". An appropriate participation of importers seems to be the weak point of this approach, and should be discussed at this conference.

5. On the basis of the widely accepted stakeholders' approach, eco-labelling activities create important forums for the discussion of the environmental goals to be pursued in future product development. This question is discussed in great detail, product category by product category, and not only in general terms of environmental improvement as is being done in the current debate on how to put Design for Environment into practice. Eco-labelling activities provide an occasion to actually think hard about the environmental requirements to be met by products such as TVs, washing machines or even coffee-makers, to settle controversies and to discuss ecological optimisations in depth. I would like to call this the communicative role of environmental labelling. Eco-labelling projects often give rise to interesting discussions between representatives of industrial, environmental and consumer associations about questions concerning product-related environmental protection, which otherwise would not have taken place. At the same time, however, eco-labelling projects are also the arena for disputes that actually overtax the system; in the case of the Blue Angel, such disputes concern questions such as whether or not an off-switch should be a standard feature of computers, copiers or similar products.

Today, the discussion of the objectives of product-related environmental protection takes place in a European perspective within the framework of the European Eco-label, and we experience again and again how difficult this process is. Yet, all participating parties profit from this discourse, in fields far beyond eco-labelling.

One further thought in this context. It is based on the assumption that awarding the label only to the environmentally most favourable products of a product category is the right approach: I know that there is a lot of controversy about whether these should be 10% or 30% of the products available on the market or whether - the hard-liners' point of view - only the ecologically very best products. This is one of the debates that I consider as being of rather secondary relevance. The crucial question is whether it will be possible, with support from all parties concerned, to provide all companies with guidance on how the products should be improved and what requirements they could be expected to satisfy as soon as tomorrow. I am therefore convinced that it is allowed to claim that within the framework of eco-labelling ecological standards for products are created to supplement the technical standards developed by standardisation bodies such as ISO or CEN for Europe. That is the strategic point of eco-labelling, and it may be the main reason why an environmental authority like the Federal Environmental Agency has a major interest to provide staff and money for eco-labelling.

Allow me to cite one last result from one of the 120 telephone interviews conducted in the environmental label study referred to earlier:

"In the beginning, labelling with the Blue Angel had a positive effect on sales. Today, the Environmental Label has become the standard." - Isn't that precisely what we are seeking to achieve? That is why, by providing consumers with information, environmental labels more and more often have an anticipatory effect similar to what is achieved with environment-related technical product standards.

But I also have to mention some weak points of eco-labelling.

6. It is not always sure whether companies will really take the initiative and actually **apply for the environmental label**. There may be a variety of reasons for corporate pioneers to suddenly and unexpectedly hold back. I believe that I express exactly what eco-labelling practitioners feel when I say that nothing is more disappointing than to discover, after a huge investment of work and many

controversial discussions, that the environmental label criteria document finally adopted is not accepted by industry. How to convince companies in such cases to take the initiative anyway is one of the questions that should be discussed at this conference. We can furnish plenty of input to this discussion by way of examples from our Blue Angel scheme. For instance, the Blue Angel for low noise and energy saving tyres has not found any interest among companies although the criteria document requires compliance with ambitious levels in line with the state of the art.

7. What about the often invoked **trade issues or trade barriers**?

The recently published OECD study, which I already cited, has found that there is no hard evidence of trade effects in terms of barriers. An aspect examined was which circumstances may potentially lead to trade concerns. The most important point to consider is the inclusion of some production-related criteria especially for products that are imported by the country where an eco-labelling scheme exists. But the production process often takes place outside of the country where the product is sold and the eco-label is certified and used. Only a limited number of eco-labels have included requirements relating to environmental effects that occur during the production phase such as waste water impacts or air emissions. Examples are textile products or leather products. We have representatives from the UNCTAD/World Trade Organisation among us to discuss this important issue.

But the widely accepted life-cycle approach to eco-labelling also requires the inclusion of the production phase and criteria addressing non-product-related production and process methods, the so-called PPMs. How should this be handled?

The approach used under Germany's "Blue Angel" scheme is to exclude those PPM-related criteria which cannot be identified in the product itself. This is done for several reasons, such as avoiding trade barriers and taking into account results from LCA studies. In order to check whether German companies comply with the provisions of environmental legislation, the German states participate in the award process.

I am sure you will discuss this issue very controversially. I hope you will work out some guidance on how to handle these problems.

There are no further weak points I wish to discuss here. These weak points, however, are surely a challenge to be tackled in future work. This is the issue I would like to deal with in the final part of my talk.

III Challenges for Eco-labelling in the Future

The challenges for future eco-labelling activities are characterised by two major developments:

- an evident increase in the importance of eco-labelling work in a world-wide context;
- diversification processes in the eco-labelling movement.

1. Eco-labelling for a Sustainable Development. At a time when complaints about the growing numbers of different eco-labels are increasing, environmental labels and the associated certifications play an increasingly important role in strategies and campaigns that are essential to sustainable development. Let me address four topics:

- Sustainable forest management: Organised by the Forest Stewardship Council, this forest and timber certification scheme is gaining more and more attention. It no longer just influences the construction-and-furniture timber sector, but is also becoming an important factor in the purchasing of raw materials by the paper industry and newspaper publishers. Here too, we can only expect a success in the medium term if all stakeholders jointly take action.

- Sustainable fishery: The increasing overfishing of our seas virtually cries out for sustainable fisheries. For this area as well, a labelling initiative was launched recently with the support of the Unilever Company. A representative of the Marine Stewardship Council is taking part in this conference. Another issue that has become the subject of a critical environmental debate is intensive salmon farming. I am pleased to welcome a representative of a Chilean initiative for sustainable salmon farming among those assembled here.

- A good four weeks ago, Greenpeace representatives officially presented me with an eco-label proposal for "Green Power". In the USA and Australia, models already exist for eco-labelling schemes designed to encourage the use of electricity generated from renewable energy sources. Two representatives of this initiative from Switzerland are taking part in this conference. It will be very interesting indeed to follow the further discussions on this question.

- For organic agricultural products there have been well-functioning environmental labels for years, and their numbers continue to grow. A particularly noteworthy fact is that these labelling schemes are increasingly developing a global orientation. All except the Dutch scheme "Stichting Milieukeur" have been organised separately from conventional eco-labelling programmes. What can also be seen more and more is that topics other than food are taken up, such as organically grown cotton or flowers from low-pesticide horticulture. I am very pleased to welcome representatives of the flower campaign as well.

What I find interesting is that it was not the so-called eco-labelling practitioners that first proposed to bring these topics into the eco-labelling world; rather, the associations active in these fields themselves came to recognise the strategic and conceptual value which eco-labelling has for communication, information and control. The international orientation of some of these activities is likewise of outstanding importance.

Although these labels usually focus on single major environmental problems, they are nonetheless part of the eco-labelling movement. Experts working in this field now commonly call them the “single-issue approach”.

These important labelling activities should complement the eco-labelling schemes which are displayed here at the stands in the lobby and which are based on an approach that considers all environmental impacts throughout the product's life cycle - called the "multiple criteria approach".

So, the challenge faced by all participating parties is to appealingly present and publicise the different approaches, every single one of which has a sound rationale. Instead of constantly complaining about the overabundance of labels, we should begin to more clearly present the factors that have led to this situation, and also the advantages associated with it.

Let me discuss this last point in somewhat more detail.

2. Too many labels - more and more confusion or a big chance for co-operation and networking?
We have labels that are communicated worldwide such as the FSC label, we have continental logos such

as the European Eco-label, there are national labels as well as local labels, for local products for example. I have heard about the results of a conference held in Washington, D.C., in April of this year - "Labelling for a Sustainable and Just World" - which brought together over 50 representatives from various eco-labelling organisations, most of them from the United States. To co-ordinate this, an Environmental Choice Council was founded in the U.S. It is my pleasure to welcome an impressive delegation from the U.S.

In Germany, we have a new movement, the promotion of local products. Most of them are agricultural products. We now have approximately 200 initiatives and all of them have their own labels.

Other activities are concerned with supporting products from developing countries that contribute to sustainable development by very well defined ecological or social characteristics. In Germany alone, there are about 30 initiatives that work in this important field. Most of them also have their own logos. We in Germany are supporting a project to bring these together in a network, as a basis for more co-operation in the future.

More and more product-related eco-labelling schemes are extending their scopes to include services. I am glad to mention the successes achieved in Austria with an environmental label for tourist facilities. The Green Seal Programme in the United States is also developing criteria for hotels. The Spanish eco-labelling programme has decided its extension to include services. In Germany, intensive work is being done to develop Environmental Label criteria for car-sharing organisations and textile cleaning establishments, for example.

Another item to consider is the confusion about company-related eco-labels, e.g. for companies that have a certified environmental management system, and product-related labels. Do the customers really know what the label stands for? I have heard that Zimbabwe has established a single label for both, environmentally sound companies and products. It will be very interesting to hear about the experiences from Zimbabwe.

So, we have to accept **the reality of a growing and more diverse eco-labelling movement**. All initiatives have the goal to communicate their own logos. On the other hand, concern about too many and too different environmentally oriented labels is growing not only in Germany.

What should be the policy concerning this point? Some observations:

- The main reason that so many environmental labels already exist is that most of the initiatives are organised in a decentralised manner and are ultimately autonomous. We all know that smaller organisational units can act more flexibly. We should appreciate the value of this and continue to rely on the innovative power of independent initiatives.

- The price to be paid for this advantage is the natural interest of every organisation in being as independent as possible and presenting its own objectives or, in other words, its own label. Unification processes can never be initiated "from the top" but, rather, must grow "from the bottom upward". For example, in the early nineties the Federal Environmental Agency failed with its initiatives aimed at unifying the environmentally oriented labels for the tourism and the dry cleaning sectors, and since then has never attempted to do so again.

- Another perfectly positive factor is the competition that develops between different labels when they deal with the same products. That is why eco-labels need public reporting, need the media. It was, incidentally, mainly thanks to them that the "Blue Angel" environmental label is so well known today.

I am confident that already in the medium term the better and more ambitious labels will have prevailed.

- I can well understand the growing uncertainty and confusion on the part of the consumers. However, I see this mainly as a challenge for us to better inform consumers about independent labels. The new information media provide a host of possibilities for doing so.

The Blue Angel programme must accept the competition to other environmentally related labelling activities. This "labelling market" should be evaluated and compared by independent bodies. Federal Environmental Agency itself supports the implementation of some additional labels. The only way to clear up confusion is to initiate well-prepared information campaigns to bring about a correct understanding of the situation.

3. Self-declared environmental labels raise the real problem of consumers' being misled by single companies generally taken to be independent. We know from our surveys that private consumers cannot distinguish between independently organised logos and logos based on self-declared claims. With respect to the use of self-declared labels by single companies, there is an urgent need to implement ISO 14021. The relevant passage reads as follows: "A self-declared environmental claim, and any explanatory statement shall (...) (j) not be presented in a manner which implies that product or service endorsed or certified by an independent third party organisation when it has not been". More should be done in future to tackle the problem of self-declared labels that do not meet this requirement.

4. Another challenge is to improve the image of the eco-labels through better, more target-group specific marketing. I won't conceal from you the fact that the study "Assessing the success of the German Eco-Label" has not given our PR work particularly good marks. The situation might the same for other eco-labelling programmes. Company participation would of course increase if the eco-labels improved their profiles. As far as I have heard the Canadian Environmental Choice programme seems to have the most experience with how to organise and successfully communicate eco-labelling marketing strategies. One working group will focus on that issue and present its ideas Wednesday morning.

5. Care should be taken to ensure that eco-labelling activities are in keeping with international trade regulations. The ISO standard 14024 - Type I Environmental Labelling, Principles and Procedures -, shortly to be adopted, makes an important contribution to stakeholders worldwide reaching an understanding about basic eco-labelling aspects. Attention should also be paid to another point: The integration of eco-labelling into the ISO-14000 family automatically makes this instrument a globally recognised component of environmental management. This, too, will greatly help generate more interest among industry in the future.

6. The key issue for improving the working methods of eco-labelling practitioners and putting them on a sounder scientific basis is the use of life-cycle assessment techniques. Criticism often heard by eco-labelling practitioners is that the selection of product categories and criteria and/or the setting of the levels is arbitrary. The LCA techniques provide eco-labelling practitioners with urgently needed guidance that helps them to prioritise their work.

- Which product categories cause significant environmental impacts?

- Which phases of the entire life-cycle are the most important ones and should be selected for criteria definition?

- Which impacts are the most significant contributors and should be the core of the criteria document?

- What improvement potentials have been identified_in LCA studies and may guide future criteria development goals?

- Which impacts play only a marginal role and should be neglected so as keep the criteria document practicable?

Environmental labelling is very often mentioned in LCA documents as being one of the most important applications of LCA. Current German experience suggests, however, that LCA results cannot be automatically transformed into labelling criteria but, rather, have to be discussed among practitioners and competent bodies like all other relevant scientific findings. International exchange of information must be intensified to communicate which projects are in progress, what experiences have been gained and what was learnt and decided.

This takes me to the last and most important point of this conference:

7. The key issue of **international co-operation** is an approach that goes beyond the mere exchange of information.

Much progress in furthering a general understanding about eco-labelling principles and procedures has been made within the framework of the work on ISO 14024. The Global Eco-labelling Network (GEN), founded in 1994, is the first important attempt to provide eco-labelling practitioners with continuously working structures for organising international co-operation. It is one of the most important goals of this conference to enforce the process of co-operation and consensus-finding. The framework declaration paper of this conference, a draft of which has already been prepared by an international steering committee, may play a major role in this discussion. But there are only very few, isolated projects concerned with furthering international co-operation in criteria development.

The often-criticised situation of different eco-labelling schemes having very different criteria for one and the same product category is caused by this evident lack. But the often-invoked vision of mutual recognition can only be achieved as a very ambitious final step of the chain:

- information exchange

- co-operation in criteria development

- harmonisation of criteria and verification

- mutual recognition.

So, I strongly recommend a step-by-step approach to achieving more co-operation.

At the moment most eco-labelling schemes, Germany's included, are making initial efforts to go beyond information exchange. This is proving to be very difficult. Eco-labelling boards are usually free in their decision-making processes and may not be convinced or willing to decide or accept criteria which are the compromise of international negotiation processes. But mutual recognition may only be feasible if it is based on equal criteria and verification procedures. Otherwise, there may be cases where certification is rejected in a country because criteria are not fulfilled as required. On the basis of a mutual-recognition agreement, however, this company can successfully certify this product in another country and is allowed claim the eco-label in both countries. Eco-labelling schemes would lose their credibility dramatically.

Of great interest in this context is the work on the **European Eco-Label**, in which the considerable challenge is to unify the sometimes greatly varying opinions of 15 member states. It is impressive to see for how many products of major environmental relevance, such as computers, paints and varnishes or detergents, a consensus about eco-label criteria has already been reached. On the other hand, we should not forget that many meetings and controversial discussions were necessary to achieve this success. I do hope that based on a better rapport world-wide, such results in future will take less effort to achieve. Other interesting co-operation projects between eco-labels - in Canada; the USA or Taiwan - also deserve mention.

There are a number of other co-operation projects which are already underway and are going to play a particular role in the discussions here at the Green Goods. At a time when both trade flows and environmental problems are becoming ever more global, the various environmental labelling systems have no other alternative than to intensify co-operation internationally. I was pleased to hear, therefore, that thanks to new information technology the exchange of information world-wide, via the Internet, is continuously improving. You may wish to get an impression of the spectrum of home pages that already exist by visiting the booths in the lobby.

Thank you for your attention.

The role of eco-labelling in promoting environmentally preferable products and services, *by Jean Cinq-Mars and Carlo Pesso,OECD*

Introduction

In 1971, Germany was the first country to suggest the concept of an eco-labelling scheme by including it in its Environmental Policy Plan. In 1976 the concept was discussed and examined at the OECD, and in 1978 Germany became the first nation in the world to operate a scheme capable of providing consumers with some comprehensive indication of the beneficial effects their purchasing decisions could have for the environment. Since then, eco-labelling schemes have spread across OECD Member countries and beyond. Today, 20 years after the German forunning experience, Brazil, Croatia, India, Indonesia, Malaysia, Taiwan and Zimbabwe have joined Austria, Canada, France, Germany, the Nordic countries (Sweden, Norway, Finland), the Netherlands, Hungary, Japan, South Korea, the United States and the European Union in operating multiple criteria labelling systems. Many other countries such as Colombia, Chile, China, or the Philippines are looking at ways to develop their own schemes.

If diffusion is a measure of success, then certainly eco-labelling schemes are a success, albeit not an easy one, nor a definitive one. For instance, while most labelling systems are government sponsored, others have been developed and are run by private organisations or NGOs, and at least one scheme has been privatised. One OECD Member country (Australia) has dismantled its scheme, others have or are re-engineering theirs. Furthermore, the increased globalisation of markets raises a number of issues related to the coherence the systems can express, the costs and benefits they can generate, trade effects, etc. All issues we are going to be looking at in this Conference.

So when, over a year ago, the German Federal Government suggested that the OECD co-organise an International Conference on Eco-labelling to mark the 20th Anniversary of the Blue Angel scheme, Member countries were extremely supportive. They felt such an initiative could contribute advancing the issues raised by the provision of adequate environmental information to the market place. Also they considered that the Green Goods Conference series was the correct setting for such an event to take place.

The Green Goods Conferences were initiated in 1993 so as to provide policy makers with an informal forum of discussion and exchange on matters related to sustainable product policies. Most importantly, these Conferences created a network of people who at various degrees and capacities are all contributing to the definition of strategies for sustainable production and consumption. So, previous conferences have examined subjects such as: integrated product policies (twice), extended producer responsibility, and green public purchasing. Their major characteristic is to be generative of new approaches, solutions and partnerships.

Previous Conferences had already drawn on an international audience, but it must pointed out that a very considerable effort was made to ensure that representatives non-OECD Member countries, and NGOs could attend Green Goods V. In particular, we must thank the Governments of Sweden and the Federal Government of Germany which have ensured the necessary financial support. We must also thank UNEP for their continued and very active role in underpinning these outreach efforts.

Sustainable consumption patterns

In 1993, OECD Environment Ministers decided to examine the relationship between consumption and production patterns and sustainable development. A work programme, concentrating on Sustainable

Consumption Patterns, was set up in the OECD Environment Directorate in 1995. Some of the key elements of that work programme were: a workshop on "Sustainable Consumption and Production: Clarifying the Concepts" (July 1995); a series of sectoral studies in the areas of transport, water and paper consumption; and a focus on governments, as major consumers of goods and services.

In April 1998, OECD Environment Ministers adopted a set of *Shared Goals for Action* as an expression of their commitment to action to implement sustainable development. This included agreement "to promote an integrated policy approach which encouraged coherence among economic, environmental and social policies by ... promoting sustainable consumption and production patterns, through regulatory, economic and social instruments, especially education and information, whilst giving particular attention to the global dimensions."

Building on the previous work undertaken in the OECD Environment Directorate, the project is now moving to a new phase in which a broad framework will integrate different conceptual approaches. Among these approaches lies that developed by, for instance, anthropology of consumption, which aims at examining consumption not as a mere instrument of sustention, but as the "joint production with fellow consumers of a universe of values" (Douglas, 1979). Altogether the program aims at providing recommendations on policy instruments for the management of sustainable household demand for OECD Member countries.

Consumption as a driver

The consumption of products and services in the OECD is estimated to be worth between 70 to 75 per cent of GDP expenditure. This can be broken down into private and public consumption, the first covering between 50 to 60 per cent of GDP (1/6 of which goes for new vehicles) and the second being responsible of 15 to 20 per cent of GDP. Furthermore, about 50% of consumption may be attributed to goods.

In a market economy, consumer desires and needs effectively drive the economic system. In other words, consumers directly and indirectly play a major role in determining the goods available on the market. A measure of this is provided by the rising importance given to consumer behaviour, a field interested in describing, understanding, predicting and influencing consumer behaviour. The Association for Consumer Research was only formed in 1970, but already at the beginning of the 1990's it included 1500 members from 30 different countries (Wilkie, 1994).

One such research, conducted in 1956 for a major consumer goods company based in the US, calculated that at the beginning of the century a family's annual soap purchases cost the equivalent of about two weeks average wages , while in 1956 the cost was only one or two days worth. On the basis of these results the company decided to diversify into specialised detergents, dishwater detergent, a wide range of beauty soaps, deodorants for men and women, etc. in order to capture at least some of the additional available income. (Hine, 1995)

Clearly consumer behaviour and choices also have a direct bearing on a number of public policy priorities. For instance, for health policy purposes, tobacco consumption and safe-driving are key to the development of appropriate preventive public health policies. Hence consumer behaviour can also contribute modulating the environmental effects associated with the phases of production, distribution, consumption and disposal of goods and services. In other words, if consumers choose environmentally preferable products they can influence the design and production of goods. In practice, this means that improvements in the environmental quality of consumption within OECD Member Countries may offer considerable opportunities for the environment.

Since 1985, consumer willingness to "buy green" in OECD Member countries has been steadily confirmed by opinion polls and qualitative market studies (OECD, 1991; Consumer Council, 1996). Beyond a generic and superficial propensity, market researchers were able to identify and describe a niche ready to spend more for a greener product. Furthermore, professional purchasers from both the private and the public sector are also demanding environmentally preferable products. For instance, according to a survey conducted by the German Federal Government in 1997 to describe procurement practices in public administration, 86% of the surveyed purchases of office supplies would satisfy criteria set in the eco-seal.

These opportunities have attracted a number of businesses. These firms are investing to develop improved products, and aim at reaping the benefits. However these largely depend on the information consumers have about a product, including how much they know about its environmental performance.

Environmental information and the market

Adam Smith had already noted that if "Consumption is the sole end and purpose of all production (...) in a mercantile system the interest of the consumer is almost constantly sacrificed to that of the producer" (Smith, 1776). However, consumers have been organising themselves, and if the first consumer organisations developed at the end of last century, they literally blossomed after the nineteen-sixties. In 1960, the International Organisation of Consumers Unions, better known as Consumers International, was born to co-ordinate the action of a few consumers organisations, by 1995 it was able to boast membership of 200 consumer groups from over 90 countries. One of the key concerns of consumer organisations has been the provision of appropriate information on the quality of products.

The issue of the availability of information on the market place has been the subject of much theoretical discussion among economists. Described as 'information asymmetry', the uneven distribution of information among economic actors, was identified as a major cause for 'market distortion', meaning that market forces are not working at their best. In other words, to ensure that the market works correctly by driving innovation towards environmentally preferable solutions, consumers must be able to access the necessary information at a reasonable cost. Not only is information necessary to facilitate consumer choice, but it is also considered an important tool to raise consumer awareness. Indeed, most consumers do not know about the consequences, nor about the relevance their act of consumption may have for the environment.

So in practice, Member countries have been developing various approaches in order to favour the diffusion of environmental information related to products and services, and to raise consumer awareness. Many of these initiatives emanate from the private sector, others have been promoted by national administrations. The most common, and by far the most successful, are described as "single issue labelling systems". The reason behind their success is that they generally clearly link a product or service to a widely accepted environmental priority (energy or CO2 abatement for climate change-- e.g. Energy Star program, CFC elimination for the ozone layer, lead free for health purposes, and, in certain instances, recycling content for environmental purposes). However these labels and criteria, taken by themselves, have a number of limitations such as the fact they may transform one undesirable environmental impact into another. For example, efficient energy use can be based on increased insulation, which in turn may generate problems in the waste phase (e.g. contamination of other materials, emission quality of incinerators, etc.). Minimum recycled content requirements also raise concerns on environmental grounds. Recycling may not always represent the best environmental option. Some critics consider that recycling initiatives are preferred merely because they have an identifiable impact within a normal electoral cycle, and because they are also visible, photogenic activities which politicians can personally participate in. By comparison, the benefits of durability are far less transparent to the general public and take effect more gradually.

To broaden the product base, and to overcome the limitations of single issue labels, Germany was, as mentioned earlier, the first country to develop a comprehensive approach. Eco-labelling schemes select greener products on the basis of multiple environmental criteria, so as to distinguish them from similar products through a logo. In doing so, they aim at providing the market place with a clear signal about the complex effects products may have on the environment.

Eco-labelling schemes

As described in a OECD review of eco-labelling schemes published in 1991 (Salzman, 1991), these were developed with five principle objectives:
i) to improve the image and the sale of labelled products;
ii) to increase consumer awareness;
iii) to offer exact and verifiable information about the environmental characteristics of products;
iv) to compel producers to take into account the environmental consequences of their products;
v) to protect the environment.

Product criteria, transparency and consultation

The same study identified a few key-factors which stand at the core of eco-labelling scheme feasibility. The first lies in the procedures for the identification of the products and related environmental criteria, an aspect which is closely linked to the existence appropriate science and mechanisms to ensure the transparency and consultation in setting the product category, the boundaries to the life-cycle, the appropriate thresholds for product environmental performance, and the scope of a product category.

The need to overcome the limits of single issue environmental criteria and labels has been the strongest driver for the development of "life cycle assessments" and "life cycle approaches". The first term comprising the efforts conducted by the scientific community, with the support of public authorities and the private sector, to develop a tool for the "objective" assessment of the environmental effects of products and processes over the entire "cradle-to-grave" lifetime of products. The second term covering the approaches encompassing the scientific methods together with the social, political and economic dimensions of products environmental effects.

Hence, across the OECD, governments have been actively supporting developments in the science of life cycle assessment. However, as the methodology currently stands, it seems unrealistic and perhaps undesirable that LCA can serve as the sole basis for determining what products are "best" for the environment. At most the science may be used to support or clarify issues that must finally be decided upon through transparency and consultation mechanisms such as those developed within eco-labelling schemes (Pesso, 1995).

Transparency and consultations procedures follow the same general pattern across the various schemes, with some practical variations. For instance transparency is either ensured through the publication and active distribution of information to interested parties, or through the establishment of inquiry points. Consultation processes are very similar: once product groups have been selected by the decision making body, representatives of various interest groups generally participate in the expert group responsible for the development of eco-labelling criteria. The draft criteria are then available for public review before the final criteria are adopted by the decision-making body. However, the lack of consideration given to some of the comments provided on the draft criteria has been a source of criticism. To overcome some of these limitations it has been suggested that an international centralised system of information should be set up to act as intermediary between eco-labelling programmes and foreign producers (OECD, 1997).

Trade concerns

The distinctive feature of eco-labelling schemes is that they have in-built mechanisms to ensure transparency in the selection and establishment of product criteria. Not only are interest groups involved in the expert groups that provide the draft-criteria, but they also participate in the decision-making procedure that finalises these criteria. Furthermore it is important to bear in mind that such schemes are voluntary, and that the total of labelled products within a certain category cannot surpass a 30% market share at most.

Even with such mechanisms in place, eco-labelling schemes have raised great concerns about their possible effects over trade. Industry alliances such as the "Coalition for Truth in Environmental Marketing Information", which in the US brings together 2900 companies selling 900 billion dollars worth of consumer goods every year, consider that eco-labels generate barriers to free trade because "their criteria are generally protectionist in nature".

Research conducted by the OECD so as to evaluate the market and trade effects of environmental labelling schemes found that very little data on the actual effects of schemes is available. Indirect evidence is given by producers in so far as they continue to apply and pay for eco-labels, showing that participating in the schemes must have some market value. Overall, except in regions where consumers already have a high level of environmental awareness, labelling schemes seem to be only moderately successful among consumers. They have a stronger impact when retailers require products to be labelled, as has been the case for the Swedish supermarket chain ICA, which asked that laundry detergents and home cleaning products qualify for an eco-label in order not to lose shelf-space (note: competing products continued to be traded). Considerable effects may also be generated by public purchasers who may require products at a performance level equivalent to labelled products (as described earlier). Such analysis indicates that eco-labelling is not causing any blatant trade distortions, although for practical reasons, domestic producers may be indirectly or unintentionally favoured simply because they are much closer to the entire process of criteria definition and selection. Although it has never been the case in reality, such practices may affect a second critical factor for environmental labelling schemes to function correctly, namely the fact that a label must never cover more than 30% market share.

The most controversial of the trade aspects raised by environmental labelling is, however, inherent to these systems. As seen earlier, eco-labelling schemes are principally meant to convey information from producers to consumers. Hence, life cycle approaches enable to convey environmental characteristics determined during the phases of production, i.e. eco-labels may be based on process and production methods (PPMs). This implies that label criteria developed on the basis of a environmentally preferable production method at a national level would also apply to a foreign producer operating within distinct environmental priorities. As a consequence the latter producer’s efforts and investments to meet a different set of environmental priorities would not be recognised for their true value, and the eco-label would end-up favouring the domestic producer.

This sort of scenario is particularly disturbing for developing economies. Many developing nations find it difficult to maintain many of their positions on the markets of developed nations, as product/material substitution and quality issues contribute to the fragility of their incomes. The addition of the environmental dimension to the list of the factors that affect competitvity is perceived as a menace. However this defensive posture is changing, and a number of nations have found that the labelling tool may rightly improve their position on international markets. Far from being a menace to trade, environmental labelling can become a booster (NF-Environnment/ La Redoute, 1997).

Much of the remaining trade debate has focused on whether the schemes are compatible with the Technical Barriers to Trade agreement (TBT) negotiated in the GATT, and in particular whether it is compatible with its Code of Good Practice which covers voluntary standards. The issue is still to be resolved, and is also going to be addressed in some detail by a number of presentations at this conference.

Conference objectives

A number of previous workshops and analysis conducted the OECD but also by UNCTAD, WTO and other organisations have pointed at the paths available to solve the issues just described. These lay in the achievement a greater harmonisation between schemes, in co-operation, in mechanisms such as 'mutual recognition' of eco-labelling schemes. Through this fifth Green Goods Conference, it is the objective and ambition of the organisers to revisit the issues and the opportunities offered by labelling schemes in order to develop the practical ways forward and to point at the solutions. This means, for example, to clearly a define the conditions determining transparency at an operational level.

In order to facilitate this task the OECD's Working Group on Pollution Prevention and Control, which has prepared this Conference together with our German hosts, has developed a framework for a final declaration. The framework provides the structure of what is expect to represent the major outcome of the Conference. So, over the next two days, Conference discussions and working sessions will provide the substance to the final declaration, which will then be submitted to the plenary on the third and last day of the Conference.

References:

OECD, (1995), Clarifying the Concepts, Paris, 1995
Douglas (1995), Mary and Baron Isherwood, The world of goods, N.Y.: W.W. Norton, 1979
Wilkie (1994) Willian L., Consumer Behaviour, John Wiley & Sons, Inc., 1994
Hine (1995), Thomas, The Total package, Little Brown and Company, 1995
National Consumer Council (1996), Green Claims, A consumer investigation into marketing claims about the environment,London, 1996Smith (1776) Adam, The Wealth of Nations
Salzman (1991) James, Environmental Labelling in OECD Countries, OECD, Paris, 1991
Pesso (1995) Carlo, The Life Cycle Approach, OECD, Paris 1995
OECD (1997), Eco-labelling Actual effects of Selected Programs, Paris, 1997
NF-Environnment/ La Redoute, 1997 -- Polish SME producing hoovers

The Environmental Marketing Challenge: Reaching the Consumer, *by Julie Winters, US Environmental Protection Agency*

I am delighted for the opportunity to speak with you today and want to thank you for the invitation. I would like to thank Germany and the OECD for hosting the conference. My name is Julie Winters and I am with the US Environmental Protection Agency, Pollution Prevention Division.

I am planning to talk with you about a United States government project to improve the environmental and health information on labels based on input from the label users -- the consumer.

This is a new way of doing business for the US EPA.

First I will provide some background and then discuss the connections between US labeling policy, the labeling project, and ***reaching the consumer***.

Background - US Environmental Marketplace Evolution

Consumer Awareness of Environmental Issues

Prior to the 1980's in the US, most of the environmental messages out in the marketplace centered on warnings of potential hazards to human health.

U.S. news coverage of environmental concerns has been increasing steadily since the mid 1980's.

Global issues such as climate change and stratospheric ozone depletion, national news stories such as the Exxon Valdez oil spill, and local issues such as drinking water contamination and municipal solid waste management have increased public awareness and concern about environmental matters facing the US.

National events such as Earth Day have emphasized choices that individuals -- consumers -- can make to decrease their impact on the environment.

Opportunity for Marketers

Two tracks of opportunities for marketers are worth noting.

First, the US marketplace exploded over the past three decades with products and product extensions available to the consumer -- consumer choice has steadily increased. Style, convenience and many other needs and wants created many niches and many opportunities for new products. Product companies have known for a long time how to ***reach the consumer*** and have been designing and providing products to meet identified needs, wants and desires.

Additionally since 1989, the US marketplace has seen a dramatic rise in the number of new and existing products making environmental claims (e.g., "ozone friendly," "recyclable").

US Label Policy

- US governments responded with guidance and programs designed to, both directly and indirectly, ***reach the consumer*** by:

1) disclosure of information to consumers (e.g., Energy Guide and Fuel Economy Information Program).
2) warning consumers of hazards (e.g., California's Prop 65, Vermont's Household Hazardous Product Shelf Labeling, and EPA's Pesticide Labeling Program).
3) highlighting a key single environmental issue for the consumer (e.g., Energy Star).
4) protecting consumers from false and misleading information (e.g., Federal Trade Commission's *Guides for the Use of Environmental Marketing Claims*).

The EPA is active in the first three approaches and played a significant supporting role to the FTC in writing the guides.

- Our new approach is a combination of information disclosure and hazard warning.

Reaching the Consumer

- As just mentioned, product companies have known for a long time how to ***reach the consumer***. It is their bread and butter. Their success is based on gaining and keeping market share.

- Increasingly, in the US Government, we are being guided by our highest levels of management to identify our customers, the product or service we provide them, increase the level of quality of the product or service we provide, and measure our success in quantifiable terms for doing all of the above.

- In the area of product labeling, many of the environmental labeling programs administered by the US EPA are directed toward providing information to the consumer.

- When I say the consumer, I mean the purchaser, potential purchaser, or user of the product/service.

- It is only now, over the past few years that we are realizing that in order to ***reach the consumer*** with our products --- or our labeling policies and programs --- we must, like product manufacturers learned years ago, first understand consumer attitudes and current behaviors with regard to the environment, human health, and products that integral to their lifestyle.

Consumer Labeling Initiative

- One example of the US government attempting to ***reach the consumer*** with product related messages about the environment and human health and safety is the Consumer Labeling Initiative or the CLI.

- We all use common household chemical products every day -- What we do with them is our responsibility. It is up to us to choose the right ones for our needs, store them properly, use them safely, and dispose of them with the least impact on the environment.

- The CLI has simple objectives:

1) Learn how to make important safe use, health, and environmental information on household product labels **(i.e., our product)** easier to find, read, understand, and use.

2) Conduct research directly with consumers to learn how to provide consumers with clear information **(i.e., our product)** they want and need on product labels.
3) Enable consumers to make informed choices among products based on their own needs and values, and to use and dispose of products safely.
4) Encourage consumers to *"Read the label, first!"* **(i.e., read our product)**.

- The scope of the project concerns, outdoor pesticides, indoor insecticides, and household hard surface cleaners.

- I also want to point out that the CLI is unique in that the federal, state and some local governments; other interested parties; and the industry who owns the primary share of the products in the three categories partnered together to conduct the project.

We realized that we had to work together for there to be real progress -- it is a win - win attitude. The product companies assigned those in the company who are the experts in ***reaching the consumer***, the market and product researchers, to the CLI.

- In working directly with consumers we found out
- what attitudes and information motivate them,
- when they look for, read, how well they understand, and how they actually use important safe use, health, and environmental information on product labels.

In other words, the consumers told us ***how to reach them!***

- We are now in the process of making changes, based on consumers' input, to the safe use, health, and environmental information on the product labels so that they can:
  - choose the product;
- use the product properly;
  - protect their personal health, their families and pets;
- store and dispose of a product correctly; and
- help the environment.

- Finally, I want to stress the importance of an education campaign along with providing better label information.

- The CLI is one example that takes into account and acts on:
- consumer awareness of environmental and health issues;
- the expertise of marketers; and
- US labeling policy

to ***reach the consumer***.

Finally, I would like to mention that the U.S. EPA now has available the document *Environmental Labeling Issues, Policies, and Practices Worldwide.* The document may be found on the Internet by visiting

http://www.epa.gov/opptintr/environmental-labeling

Environmental considerations and public procurement in EC law, *by Professor Dr. juris Hans Petter Graver*

1. Introduction

Environmental protection does not consist only of public regulations and control by private-sector players complying with them. All players in society have a responsibility to reduce the damage caused to the environment by their operations. Sources of environmental damage include the production of goods and services, extraction of natural resources, encroachment on nature, emissions, consumption of goods and services and the handling of waste. Damage to the environment caused by production and consumption does not become apparent nearly as much as do direct costs for producers and consumers. An important part of the reform of the market economy towards a better reflection of such costs is for purchasers of goods and services to make more demand for environmental quality in their purchases. That way, the environment will also acquire a direct cost and it will become profitable for producers and dealers to take the environment into consideration in product design, choice of raw materials and production. The effects of such demand-side behaviour will of course be greater if large-scale purchasers practise it.

The public sector is just such a large-scale player on the demand side for goods, services and various forms of work. Thus in Norway and other countries we see more and more that public-sector purchasers impose environmental requirements as part of their procurement practices. This is happening at a time when the trend in legal framework conditions has been towards making the conditions for contracts with the public sector objective and excluding from the assessment non-economic considerations, such as national and local industries and other political aspects.

The trend towards making the criteria for public-sector contracts objective may be traced partly to the liberalisation of international trade and the dismantling of measures that restrict trade. Norway is bound by international rules on public procurement through the Agreement on the European Economic Area ("EEA Agreement") and the World Trade Organization (WTO). An ever-more topical issue at the national and international levels is to what extent such rules prevent public contacting authorities from taking the environment into account in their projects, contract requirements and choice of suppliers. The view of the author is that many believe these rules to be more restrictive than they in fact are and that, consequently, unnecessary limitations are placed on the environmental requirements imposed. The topic of the present article is the relationship to the rules under the EEA Agreement, which are based entirely on EC law rules. The matter will thus be discussed in the light of EC law.

The issues discussed here relate to what applies to contracts covered by the additional acts to the EEA Agreement, i.e. directives on public procurement of goods, public procurement of services, public works contracts and procurement rules for contracting authorities in water and energy supply, transport and telecommunications. Some conditions must be met for a project to come within the scope of these rules: firstly, there must be a public contracting authority within the meaning of the directives; secondly, there must be a contract of the type covered; and, thirdly, the value of the contract must exceed the threshold set out in the directive in question. For public contracts which fall outside the scope of the directives, the general prohibition on discrimination set out in the EEA Agreement applies, as do the general prohibitions on restrictions on the free movement of goods, persons, services and capital. In

reality, this means that by and large one is subject to the same substantive restrictions, although not the same procedural restrictions.

2. Legal points of departure

Environmental protection is one of the essential objectives of the Community. With the Treaty on European Union, Article 2 of the Treaty establishing the European Community ("EC Treaty") added a new task for the Community: to promote "sustainable and non-inflationary growth respecting the environment". Moreover, in Article 3(k) EC Treaty the introduction of "a policy in the sphere of the environment" is set out as one of the Community's activities. Rules for the more detailed drawing-up of environmental policy and the Community's competence in this area may be found in Articles 130r, 130s and 130t EC Treaty. Environmental considerations as an essential objective have been recognised by the Court of Justice of the European Communities ("ECJ") in a long line of cases, see for example Case 240/83 *Procureur de la Republique* v *ADBHU* [1985] ECR 531; Case 302/86 *Commission* v *Denmark* [1988] ECR 4627; and, most recently, Case C-213/96 *Outokumpu Oy*, judgement of 2 April 1998, not yet published (hereinafter "*Outokumpu Oy*"). Environmental protection is also followed up in the Community's policy and action in connection with the environment and sustainable development (Fifth Environment Program, 1993 OJ C 138, p. 1).

The rules on public procurement are given in directives on public procurement of goods, public procurement of services, public works contracts and procurement rules for contracting authorities in water and energy supply, transport and telecommunications. The aim of the directives is to ensure that the rules on the free movement of goods, freedom of establishment and freedom to provide services are implemented effectively in the Community through the abolition of restrictions on those freedoms and through the co-ordination of national procedures for the award of contracts, see the judgement of the ECJ in Joined Cases 27-29/86 *CEI and Bellini* [1987] ECR 3347 (hereinafter "*CEI*"). The directives do not lay down a harmonised, exhaustive set of rules for the Community, but rather leave the Member States free to adopt and apply substantive and procedural rules for public procurement contracts, provided that the rules do not conflict with the fundamental freedoms in the Treaty, see judgement of the ECJ in Case 31/87 *Beentjes* v *Netherlands* [1988] ECR 4635 (hereinafter "*Beentjes*").

Generally speaking, national rules aimed at protecting the environment may be a restriction on the free movement of goods, services and establishment. Such rules may nonetheless be upheld, provided that they do not go further than necessary for serving their purpose and that they are neutral as to origin, see the article of the author *Grenseområdet mellom miljøbeskyttelse og proteksjonisme i EUs miljørett* (The boundary between environmental protection and protectionism in EC environment law), 1995 *Kritisk Juss* at 211-236. This implies that, as a rule, Member States can incorporate environmental concerns into public procurement as long as the measures adopted are neutral as to origin.

The issue of environmental concerns and pubic procurement is particularly topical now because new rules on public procurement are being drawn up in Norway based on NOU 1997:12 (NOU: Norwegian Official Report). In the view of the author, the proposals for new rules build on a far too restrictive understanding of the margin for manoeuvre the EEA Agreement gives Norwegian authorities. This may lead to rules that allow too little room for taking environmental considerations into account in public procurement. A further analysis of EC law is, therefore, called for before new Norwegian rules are adopted.

3. The importance of taking environmental considerations into account

It is important that public contracting authorities take environmental considerations into account in connection with public contracts. The choices made by the public authorities in their procurement practices will influence the extent to which public-sector activities damage the environment. In addition, public contracting authorities are big players on the market and should use the sway inherent in that role to influence production and product development. If the market players behave in such a way as to damage the environment without this being reflected as business costs, it may well ultimately become a cost for the public authorities in the form of new public regulation and investments. Socio-economic costs as a consequence of harmful effects on the environment may thus appear in the form of expenditure for the State and the municipalities in future. Public authorities also have an interest in avoiding criticism that may arise due to a negative environmental image of suppliers to public-sector businesses.

In the Danish "Action plan for a sustainable environmental/"green" policy for public procurement", the goal is: "… to reduce environmental damage, including environmental damage from energy consumption, resulting from public production and consumption, as well as to encourage the rest of society to also apply environment- and resource-friendly, including energy-efficient, products and production methods." This is to be ensured as follows: "… in public procurement and production, there shall, in addition to requirements as to quality, function, price, reliability of delivery, etc., also be requirements imposed to the effect that products and production methods must be environment- and resource-friendly, which includes energy efficiency."

In Norway, this type of policy is laid down in the Constitution and in the international co-operation in which Norway takes part. In the Norwegian public administration, a general principle applies that environmental considerations are to be integrated into all decisions. This follows directly from Section 110c of the Norwegian Constitution. In Report to the Storting (parliament) no. 46 (88-89) on environment and development, it is stated that "the consideration of sustainable development (shall) be incorporated into all societal planning and sector policies", and that "public procurement schemes shall be aimed at environment-friendly products". This is also one of the measures in Agenda 21 from the UN Conference on Environment and Development held in Rio de Janeiro. In Report to the Storting no. 58 (1996-97) on environmental policy for sustainable development, the following is stated: "… the Government wishes to integrate the environmental factor into the activities of the public administration. The public sector shall be a driving force and lead the way in the work to achieve an ecologically sustainable society, something that must also be reflected in the public sector's running of its own operations. An important challenge in the future will thus be to integrate environmental considerations into public-sector activities, including those linked to its role as consumer, producer, project developer and property manager."

This type of policy is also in keeping with Community law. The policy of the Community in environmental matters consists in particular of preventing, reducing and, as much as possible, eliminating pollution, preferably at source according to the polluter pays principle, ensuring that resources are administered in a sound manner and using clean or cleaner technology. The Community's requirements for production processes are partly based on the minimum standard rules under the authority of Articles 130r-t. They are also based on the idea that environmental protection requirements should be made part of the design and implementation of the Community's policies in other areas, and that industry itself is responsible for the effects of its activities on the environment. According to the case law of the ECJ, protection of the environment is one of the essential objectives of the Community, see most recently the decision in *Outokumpu Oy*. The Fifth Environment Programme emphasises at page 26: "… administrations need to critically analyse their own operations, e.g. public services, siting of offices,

purchasing policies, choice of vehicles and equipment, energy conservation, eco-audit and communication of information to the public". Further emphasis is placed on how "increasing demand for clean technologies and products will create new market opportunities, with particular advantages for innovative companies" and "that *all* enterprise will be expected to participate in the effort to move towards sustainability".

Environmental considerations can enter the public procurement picture in a number of ways. Firstly, it may crop up at the planning stage for the project in question. In Norway, a proposal has been made to enshrine in legislation a duty to take account of life-cycle costs and environmental consequences of purchases during planning (NOU 1997:21 at page 148). The planning stage is, of course, crucial both for the design of the actual project and for which environmental requirements will be incorporated into the tender documents and contract proposals that will be prepared. Secondly, environmental considerations may come up as direct requirements imposed in contracts in the form of use of environment-friendly goods or requirements as to the performance of the work that is to be delivered. Thirdly, environmental considerations may take the form of requirements as to bidders' technical qualifications. Generally, it must be possible to require that suppliers to the public sector have an active environmental image so as to avoid the public sector from being exposed to liability or criticism as a result of environmentally harmful action on the part of its suppliers. Lastly, environmental considerations may enter into the assessment of which tender is the most economically advantageous in the awarding of contracts. The planning stage will not be discussed further here; rather, how environmental considerations can be incorporated into the latter three situations in relation to the rules will be elaborated on.

4. Environmental considerations as contract requirements

The requirements the tenderer sets for the contract in the invitation to submit tenders and contract proposals are, of course, based on the project or products the department in question wishes to carry out or procure. The starting point then, naturally, is that the department in question may freely define its needs and wishes and sets the requirements the contract must meet to cover those needs. EC law does not limit the possibilities for defining the object or content of the contract and the contract may be drawn up so as to serve any public objective, see Krüger, Nilsen and Bruun, *European Public Contracts in a Labour Law Perspective*, Djøf forlag, Copenhagen, 1998, at page 141. This is also true of environmental requirements imposed on the contract performance regarding the functionality of the product or service. This starting proposition is clear and uncontroversial as long as the requirements imposed are transparent and neutral in relation to the nationality of the tenderer and the origin of the goods, products or services delivered. Two issues flowing from this proposition call for further analysis. The first is to what extent requirements may be imposed on performance that goes beyond the functionality the contract performance has for the department. The second is to what extent the existence of Community rules in the form of regulations and directives, as well as the existence of European standards approved by the European Committee for Standardization (CEN) or the European Committee for Electrotechnical Standardization (CENELEC), limit the freedom of the departments in defining their needs, wishes and requirements.

Thus, the first issue, to what extent requirements may be imposed on performance that goes beyond the functionality the contract performance has for the department, may be considered as follows. It may be required, for example, that high-tension lines shall be matted to reduce the danger caused thereby for local bird life. Requirements may also be imposed for products used in terms of content of environmentally-harmful substances which may become a problem for the purchaser when the lines fall or are to be removed. But may requirements also be imposed as to how the products are produced, for instance, that they must be produced with the lowest possible use of energy, with recycled raw materials or with the lowest possible discharge of environmentally-harmful substances during production? The

contracting authority is free to define the quality desired for the contract performance. But does this also include the environmental quality of the contract performance in the sense of how the production of it has damaged the environment? The question is virtually the same as asking whether it is possible to impose requirements as to the *social* quality of the contract performance in the sense of whether it is produced using child labour, whether the suppliers of raw materials have received equitable payment, etc.

These issues touch on whether requirements may be imposed for products that, *during their life cycle*, entail the least possible damage to the environment, regardless of where that damage will impact.

In its *Green Paper - Public Procurement in the European Union*, 27 November 1996, the Commission states at paragraph 5.49: "... environmental protection considerations can be incorporated into the technical requirements relating to the characteristics of the works, supplies or services covered by contracts, namely the technical specifications which purchasers must indicate in the general contract documents and with which tenderers must comply, in accordance with the Directives. Efforts should be made to develop European standards or common technical specifications which incorporate and promote environmental concerns while avoiding the negative implications for the single market that would result from establishing criteria that are over-specific. An example of such a specification could be a European eco-label, complying with Community law. In any event, purchasing entities can already encourage firms to adopt a more active approach towards the environment by ceasing to reject tenders for goods that incorporate reconditioned components or recycled materials despite the fact that their technical characteristics satisfy the requirements laid down in the contract documents."

The Commission explicitly mentions here "a European eco-label" ("un éco-label européen" in the French text) without linking it more specifically to a *Community scheme* for the awarding of an eco-label (Council Directive 880/92 of 23 March 1992 on a Community eco-label award scheme, hereinafter "Regulation 880/92"). Thus, it must be possible, within the framework of the rules, to require that tenders shall be based on the use of products and services which carry an eco-label where there is an independent third-party eco-label scheme or, possibly, that the tenderer is able to document in another way that the contract performance would meet such requirements. A recommendation to require compliance with criteria of independent eco-label schemes has been incorporated into a number of purchasing guidelines of German *länder* and municipalities, see *Eco-labelling: Actual Effects of Selected Programmes*, OECD/GD(97)105. If the contracting authority accepts an eco-label from one of the countries in the European Economic Area as documentation of compliance with the requirements, the rules on the free movements of goods will not be infringed. However, the rules can hardly preclude the contracting authority from imposing more stringent requirements, provided that compliance may be demonstrated objectively.

A particular issue is whether the specifications may contain requirements that directly affect environmental consequences in other countries. In so far as compliance with a European eco-label may be required, it is possible to do so indirectly, because both the EC eco-label and others, such as the Nordic Swan Label, have criteria based on a life cycle perspective and thus requirements relating to the environmental consequences associated with production processes, see, for example, Article 4(2)b of Regulation 880/92. Under general EC legal rules, it must also be possible to impose requirements as to the method of production beyond those cases where it is built into an eco-label scheme. It is generally accepted that Member States may, in certain cases, impose restrictions on the free movement of goods, services and persons to protect the environment in other Member States, see Peter Pagh, *EU miljøret* (EU Environment Law), Copenhagen 1996, at pages 185-191. In other words: the right the Member States have under the Treaty to protect the environment is not limited to the national environment in each Member State, see Ludwig Krämer, "Environmental Protection and Article 30 EEC Treaty" (1993) 30 Common

Market Law Review 111 at 136. It is true that Advocate General Léger generally argues that Article 36 EC Treaty cannot be applied extra-territorially by the Member States, see his Opinion in Case C-5/94 *The Queen* v *MAFF ex parte Hedley Lomas* [1996] ECR I-2553 (hereinafter "*Hedley Lomas*"). However, Advocate General van Gerven argues that a Member State may invoke protection of animal life in another Member State as grounds for limiting the free movement of goods, see his Opinion in Case C-169/89 *Van den Burg* [1990] ECR I-2143.

The Court has not directly addressed the question in its general form in terms of the relationship to Article 30 on the prohibition on quantitative restrictions on imports. However, in the Walloon waste case, the ECJ held that the usual principle of non-discrimination must be understood in light of general environmental principles established in EC law, *inter alia* that environmental problems should be rectified at source, see Case C-2/90 *Commission* v *Belgium* [1992] I-4431. Another principle in the same vein is the life cycle principle, see *inter alia* the Preface in *Life Cycle Assessment* from the European Environmental Agency, in which the LCA is recommended for use in public procurement.

As regards the relationship to the prohibition on discriminatory taxation found in Article 95 EC Treaty, there is long-standing case law to the effect that taxes can be differentiated according to production-related factors, including production in other countries, such as the nature of the raw materials used and the production method employed. This was again emphasised and reinforced by the ECJ in its decision in *Outokumpu Oy*. The Court in that case stated quite unequivocally that taxes may differentiate between products based on how they are produced and the raw materials used, in so far as the differentiation is based on environmental considerations. This means that products that are otherwise identical in terms of their composition or function may be treated differently if they are produced in ways that damage the environment differently. In other words, taxes can differentiate between products based *inter alia* on the extent to which recycled materials have been used in production or on the CO_2 emissions associated with production. Moreover, the Court's reasoning was to effect that it is without relevance whether the environmental damage has occurred in the country where the tax is collected or in another EU Member State. Although it is an open question whether this can be applied to restrictions having a more absolute effect than taxes, such as bans on imports or exports, the views expressed will be of great significance for restrictions having a more flexible effect along the lines of taxes, such as labelling schemes.

There are several types of requirements which may be imposed and which may have effects in other countries. It is immediately clear that, if the requirements are imposed to counteract environmental problems in the country where the contract is to be performed, they may be imposed on the condition that they are suitable for counteracting the damage and do not go beyond what is necessary to serve their purpose. The situation becomes more difficult when the background for the requirement is to remedy environmental damage in a country other than the country of purchase, e.g. in the country of production or the country from where the raw materials for the contract come. For example, it is conceivable that requirements as to use of resources might be imposed: that it should be economical in relation to the stock of resources and comply with principles for sustainability in the case of renewable resources. Or requirements might be imposed concerning how raw materials and energy are to be used, waste production and waste treatment and production emissions. Factors such as these are known as *process and production methods*, or PPM for short. An important distinction is drawn between product-related and non-product-related PPM requirements. The product-related requirements refer to the properties the product acquires and the requirements that must be imposed to counteract damage through the use and disposal of the product. The non-product-related requirements are set to counteract the harmful effects associated with resource extraction and use, pollution and other harmful effects resulting from production of the product.

It is not always easy to draw a precise boundary between product-related and non-product-related requirements. If we take the example of a requirement for use of recycled material in the contract, it will at first blush appear to be product-related as it concerns, after all, a property of the product. But in such cases a product is not preferred due to its properties or ability to satisfy function requirements. The reason it is preferred relates to raw material use during production, which may well have occurred and harmed the resources in a completely different country than the one where the contract is performed. It is a common international practice for public contracting authorities to impose requirements for use of recycled materials in contracts with the public sector, see OECD Paper "Trade Issues in the Greening of Public Purchasing", COM/TD/ENV(97)111/REV1.

In a way, one might say that all requirements imposed in the tendering process are product-related because the purchaser wishes to reduce as much as possible the environmental damage linked to its activities. In that light, it becomes irrelevant where the environmental damage takes place and unacceptable if the environmental damage becomes greater if the contract is performed by a foreign supplier than if it is performed by a domestic one. However, the requirements imposed must be relevant for the common environment, regardless of where they are imposed. There is not much point in imposing universal requirements for factors that have only local significance. The decisive factor for whether requirements may be imposed for the contract is that they must not go beyond what is necessary to protect the environment and they must not be unnecessarily restrictive of trade.

This means that requirements may be imposed when they are directly aimed at remedying environmental consequences in the country of purchase, for example, reducing harmful emissions or unnecessary waste from the contract. It must be possible, for example, to impose emission requirements on vehicles, even though they are more stringent than the emission requirements that apply or are usually imposed in a tenderer's country. It is more problematic to impose requirements that relate only to production abroad, even though it can affect the environment in the country of purchase, for example, in the form of pollution of common watercourses or acid precipitation. This is a situation with complex causes in which it is not easy to identify how much each production process has contributed to it. It is also an area where countries, as far as is known, have not employed restrictions on trade to influence each other's policies.

It is also possible to impose requirements aimed at protecting "the common heritage", such as threatened and migrating species (for example, migratory birds) and the ozone layer in the atmosphere. The situation is fairly clear in those cases where there are concrete, demonstrably harmful effects on the environment that can be limited by recognised means. It is more doubtful if the effects on the environment are more general and can be remedied by different means, for instance, climatic effects resulting from greenhouse gas emissions. The alternative to imposing requirements for emissions in other countries is to reduce them in one's own country. However, it might be observed that the point in relation to procurement is to reduce the damage from the public sector's activities and consumption and that, accordingly, it must be possible to go further in imposing general environmental requirements than what the public sector may do through imposing general restrictions that affect trade. The same arguments support the possibility of imposing general requirements calling for resources to be used in an economical and sustainable manner, and for resources to be extracted in a sound manner. An example of such a requirement is that timber be extracted in accordance with the requirements of the Forest Stewardship Council.

A particular issue is whether requirements may generally be imposed to the effect that the tenderer's production must conform to requirements under Community law, for example emissions. In other words, may requirements be imposed that comply with the level of protection in EC secondary

legislation on the environment, even though they might not implemented in legislation in a Member State? It is true that a State may not lay down restrictions on trade with another State solely on the grounds that the other State is not complying with the requirements of a directive, see the judgement of the ECJ in *Hedley Lomas*. In that case, the ECJ held that English authorities could not forbid the export of live sheep to Spain on the grounds that Spain had not implemented sanctions to ensure compliance with a directive aimed at ensuring humane methods for putting animals to death in slaughterhouses. Thus, one cannot generally omit to take into account offers from tenderers from a given country on the ground that their countries have not properly implemented a directive.

This is not the same thing as rejecting an offer from a business that, following an actual assessment, concretely and demonstrably does not fulfil the minimum requirements contained in a directive, such as emission standards based, say, on the business's own statements submitted pursuant to requirements set out in the tender documents. It cannot be relevant in this connection that the business is in a country that has not implemented the provisions of the directive, so that the business is on safe ground with respect to its own country's internal law. In situations such as these, it is not a question of the authorities in a country trying to influence environmental policy in another country. Rather, it is simply that their procurement practice is based on certain environmental requirements being imposed on suppliers, regardless of authorities' practice and rules in different countries.

The other main issue that arises in connection with setting the requirements to be included in a contract is whether Community rules limit the contracting authority so that requirements going beyond the scope of Community law requirements may not be imposed. The possibility of seeing to environmental considerations through national restrictions is subject to the clear rule that the competence of Member States is limited in those areas where Community rules have been drawn up, also known as the "occupying the field doctrine". In those cases, the Member States must accept that goods and services that meet those requirements may be brought into the national market and that they may not impose their own special national requirements that go further than the Community rules, unless authority to do so is especially conferred in the directive in question. Against this background, Said Mahmoudi, in a report for the Swedish public procurement committee (*Nämden for offentlig upphandling*), considers that public entities cannot go beyond what is contained in Community rules in the specifications and requirements set for the contract (printed as an appendix to the committee's report on ecologically sustainable procurement of 24 March 1998 – *Nämdens rapport om ekologisk hållbar offentlig upphandling*).

The question may be asked whether this is right. Public procurement decisions do not limit the access of products and services to the national market. Thus, in most cases, there will be a restriction on the free movement of goods which is much less far-reaching than a special national product requirement of general application. Nor does the fact that the Community takes over some regulatory power from the Member States when it draws up Community rules indicate that the contracting authority's freedom of action on the market is limited. Moreover, if the contracting authority were to be limited in its contract requirements to the freedom of action it has as a regulatory authority, it would not be possible to set requirements that differ from those set in other countries, for example, aesthetic requirements. Accordingly, the correct starting point must be that it is only when the contracting authority has set, say, the level of environmental protection that is to be fulfilled under the contract that prohibitions on restrictions as under Article 30 EC Treaty apply, see Sue Arrowsmith, *The Law of Public and Utilities Procurement*, Sweet and Maxwell, London 1996, at pages 584-585. This means that the purchaser can set the level but, if that level is attained through compliance with the requirements of a directive, then the purchaser is bound to use the directive as a basis for the specifications in the contract.

This starting proposition must, however, be tempered where there are European standards in a given area. In that case, it follows directly from the obligation under directives to use those standards as a basis that requirements other than those contemplated by the standards cannot be imposed for, say, safety or the environment. See, by way of example, Article 10 of Council Directive 93/31/EEC of 14 June 1993 concerning the coordination of procedures for the award of public works contracts, Official Journal L 199, 09/08/1993, pages 54-83.

The obligation to use European standards as a basis for specifications does not apply if there are "legally binding national technical rules and insofar as these are compatible with Community law". This is only natural, as otherwise States' legislative competence would be limited by that of standardisation organisations which are, after all, private legal persons without supranational competence. The legal situation then, is as follows: if there is Community legislation in the area that sets requirements based on environmental considerations, the States, as legislators, are bound by it by virtue of *inter alia* Article 30 EC Treaty. In their capacity as players who define the requirements for public projects and purchases, however, they are not bound by such rules when they set functions and levels for *inter alia* environmental protection covered by the contracts. Yet if there are European standards that *inter alia* define levels for environmental protection, they are bound by them when they, as contracting authorities, set the levels for the contracts. If the authorities wish to depart from the levels in the standards, they must do so by virtue of regulatory authority in the form of legally binding technical rules. Since the legislative competence of States is not limited by standards or procurement directives, it must be possible to set such legally binding requirements aimed solely at public-sector businesses. This must mean that, under Norwegian law, the government, through its authority to give instructions, can direct State-owned enterprises to use a higher level of environmental protection than what follows from product and process standards. Thus, only when a standard is incorporated or referred to in a Community rule, e.g. a directive, will the authorities be bound both as contracting authority and regulating authority.

In practice, this means, for example, that public contracting authorities cannot require contracts to conform to the requirements of an independent eco-label where there are European standards that depart from the criteria for attaining an eco-label. However, a general instruction can be given to State departments, ordering them to include requirements to meet criteria for products carrying an eco-label where they exist. In that case, the State authorities will have both the right and the obligation to do so, regardless of what European standards there might be in the area. Municipalities, by contrast, cannot require an eco-label where different standards exist, unless this is imposed pursuant to statutory authority.

With the Nordic Swan Label, this does not create major problems in practice, since the criteria do not overlap to any great extent with the European standards for product requirements. One area where questions may arise in future is the criteria for building boards, which are currently under revision. Under the current criteria, requirements are imposed as to the content of free formaldehyde of 8 mg/100 g of board, which is in conformity with EN 312-1. However, allowances are made for Denmark and Sweden due to stricter requirements imposed by the authorities there. The requirements will probably be made more stringent in the revised criteria, to bring them into line with the Danish and Swedish levels. If that happens, Norwegian public contracting authorities will be unable to require compliance with the Nordic Swan Label criteria as a basis on this point, unless requirements are introduced in Norway that conform to those in Denmark and Sweden.

5. Environmental considerations in the assessment of tenderer's technical capacity

The directives distinguish between criteria for assessing a contractor's suitability for performing the work put out to tender and criteria for awarding the contract. Criteria for assessing a contractor's

suitability are exhaustively regulated in the directives and are limited to criteria relating to economic, financial and technical capacity. This includes the ability to perform the contract within the parameters of the applicable authority requirements. It is nonetheless up to the tenderer to define through the task what is required in terms of economic, financial and technical capacity. The Commission states the following at paragraph 5.50 of *Green Paper - Public Procurement in the European Union*: "... the Directives allow, under certain conditions, environmental protection objectives to be included among the criteria for selecting candidates. These criteria are designed to test candidates' economic, financial and technical capacity and may therefore include environmental concerns depending on the expertise required for specific contracts."

Against this background, it must be up to the contracting authority to require that the work to be carried out or the product to be delivered is to be produced in an environmentally sound manner. There is an important public interest in ensuring that the public sector's behaviour in the market is as beneficial as possible to the environment. This does not just mean that the products delivered to the public sector are environmentally friendly; it also implies that the suppliers to the public sector behave in an environmentally aware manner in their operations. It is already well established in private industry that businesses wishing to promote themselves as being environmentally friendly impose environmental requirements on their suppliers so as to avoid criticism and negative comment due to the environmental conduct of their contract partners. Rational market behaviour and the public interest in being a driving force in the market coincide here.

The Commission adds that environmental requirements may be imposed as to the way the contract is performed, that is, not just on the finished product delivered. At paragraph 5.52 of the *Green Paper - Public Procurement in the European Union*, it states the following: "... purchasing entities can pursue environmental protection objectives through performance conditions imposed contractually on successful tenderers. In other words, a contracting entity can require the supplier whose tender has been selected to perform the contract in accordance with certain constraints aimed at protecting the environment. Clearly, such performance conditions should not be discriminatory or in any way disturb the smooth functioning of the single market. The conditions should also be mentioned in tender notices or contract documents to ensure that bidders are sufficiently aware of their existence. Lastly, verification of the successful tenderer's ability to perform the contract in accordance with the conditions should take place outside the contract award procedure."

The assessment of the contractor's suitability for meeting the environmental requirements set for environmental image among suppliers to the public sector will be part of the assessment of the supplier's economic, financial and technical capacity. Accordingly, it must be possible to impose requirements in the invitation to submit tenders concerning documentation of the capacity to comply with the environmental requirements. The documentation requirements listed in the directives on public procurement are not exhaustive and the awarding authority still has the right to set the level required for tenderers' economic and financial qualifications and technical capacity for participating in a bidding round, see the judgement of the ECJ in *CEI*.

Firstly, violation of environmental legislation in the country where a tenderer is established or in another country where the party in question has performed a contract will be grounds for rejecting the tender. The Commission states the following at paragraph 5.48 of its *Green Paper - Public Procurement in the European Union*: "... as with social objectives, environmental protection can be achieved through specific rules for the infringement of which a supplier or contractor can be convicted of an offence concerning his professional conduct or found guilty of grave professional misconduct. In such cases, the

Directives allow contracting authorities and contracting entities to exclude from contract award procedures any supplier or contractor who has been found guilty of breaching such rules."

Another way of setting objective requirements for tenderers' environmental qualifications is to consider them documented upon participation in eco-management and audit schemes such as EMAS or ISO 14001. Under these schemes, businesses can be certified if they meet the requirements of environmental management systems. The main elements of such requirements are that the business has a policy for its environmental work, that it has an active plan for improving its relationship to the environment and that it has a system for controlling and ensuring compliance with the environmental objectives it has set for itself.

A requirement of certification under an eco-management or audit scheme is non-discriminatory as long as the requirement is linked to a scheme that is already generally widespread and open for all businesses, regardless of nationality. In the European Economic Area, the European eco-management and audit system (EMAS) meets this requirement. Participation in EMAS is the same for all enterprises and prevents legislation on environmental requirements in the country of the contract from acting as a technical barrier to the exchange of goods and services in the internal market. EMAS is an integral part of the Community's environmental policy and is thus not contrary to the fundamental provisions of Community law. As mentioned earlier, the directives on public procurement are not exhaustive with respect to the right of Member States to impose substantive and material rules for public purchases, as long as all relevant provisions of Community law are obeyed. A requirement for participation in EMAS meets this condition.

The above-mentioned report of the Swedish committee on public procurement considers that EMAS registration and environmental policy cannot be imposed as a requirement on tenderers. This conclusion is based, firstly, on there being no connection between an enterprise's environmental work and the environmentally-friendly nature of its products. This objection is off the mark, however, because requiring participation is a requirement as to the environmental image of the enterprise which can be imposed in addition to the environmental aspects of the individual contract as defined in the tender documents. As mentioned earlier, good reasons can be given for imposing such requirements on tenderers' environmental image from a more general point of view. Secondly, the argument is made that registration requirements vary according to which Member State the supplier in question is located in. This overlooks the fact that it is precisely this aspect of the EMAS scheme that makes it compatible with Community law, as long as the environmental requirements for businesses are not harmonised in the Community. EMAS registration is based on the Community law principle that the home State has regulatory competence and that compliance with home State requirements shall be respected by the host State or the State where the product is delivered. Thus, this argument is based on a basic misunderstanding of Community law. Lastly, the argument is advanced that there are relatively few enterprises registered and that, accordingly, there is a risk that unregistered suppliers with environmentally-friendly products are excluded by such a requirement. In response, it may be said, initially, that the purchaser has an interest in protecting itself against suppliers that are "environmental bombshells", regardless of the product being delivered. Secondly, the objection may be overcome by opening the door to enterprises being able to demonstrate that they have met the environmental image requirement in ways other than through EMAS registration. It will then be up to the enterprise to supply documentation for this.

6. Environmental considerations in the choice of the most economically advantageous tender

The rules are based on the principle that the choice between bids from tenderers which are not excluded and which meet the requirements imposed are to be based solely on the lowest price or based on the most economically advantageous tender. In the assessment of what is most economically

advantageous, environmental considerations can of course enter the picture directly in the form of, say, the durability of the components used, energy consumption, waste production and waste treatment costs, etc. Various types of environmental damage will show up directly as costs for the contracting authority and will thus come directly into the assessment of which tender is the most economically advantageous. It is not disputed that such assessments are relevant to the choice of who will be awarded the contract. The Commission states the following at paragraph 5.51 of its *Green Paper - Public Procurement in the European Union*: "... during the contract award phase environmental factors could play a part in identifying the most economically advantageous tender, but only in cases where reference to such factors makes it possible to gauge an economic advantage which is specific to the works, supplies or services covered by the contract and directly benefits the contracting authority or contracting entity. In the case of contracts falling below the threshold for application of the Directives, environmental preferences may be used as an award criterion provided that they are non-discriminatory and open to all tenderers in the Community on the basis of the mutual recognition principle."

However, it can be appropriate to discuss whether such assessments are only relevant when it is possible to measure the economic advantage that the performance contemplated under the contract confers directly on the contracting authority. It can be important for the contracting authority to base the award on environmental considerations because not all environmental considerations can be specified equally easily in the technical requirements in the invitation to submit tenders.

The directives do not preclude the contracting authority from setting criteria for the award of the contract, as long as the criteria are aimed at identifying the most economically advantageous tender, see *Beentjes*. The advantages need not be measurable, however. Several sources have pointed out that "economic" is understood widely in this connection, and that both aesthetic and functional values can be brought into the assessment, see Lasse Simonsen, *Prekontraktuelt ansvar* (Pre-contractual liability), Oslo 1997, at page 693. It can be argued that "economic" refers to macro-economic guidelines which allow criteria that refer to environmental policy, labour market considerations, etc., see Kai Krüger, *Kommunale anbudskonkurranser etter EØS-reglene* (Municipal tender competitions under the EEA rules), *Lov og rett* 1996, page 627 *et seq.* at page 641. This view is disputed, however. In light of the priority given to environmental considerations in EC law, the view of the author is that it is quite possible that the ECJ will accept that socio-environmental effects are brought in as criteria for the award of contracts, provided that the possibility for this is mentioned in the invitation to submit tenders. Legally, there are stronger arguments for accepting that a contract is not awarded to a tenderer based on environmental considerations than for accepting that it is not awarded because the tenderer does not meet labour market objectives. Moreover, in the *Beentjes* case, it was precisely the ECJ that accepted that a tenderer could be excluded for not fulfilling a requirement for engagement of long-term unemployed workers.

6. Summary

We have seen in this discussion that environmental considerations can be incorporated into the planning of a project that is to be carried through and that general requirements can be imposed as to the tenderers' ability to reduce environmental damage caused by their operations. Moreover, environmental requirements may be imposed in connection with the drawing-up of the specifications for the individual project, for example, by requiring the use of eco-labelled products. Environmental considerations can also be used as criteria for the awarding of the contract, at least where it has direct financial consequences for the contracting authority, but probably also based on socio-economic considerations. The discussion has been based on the situation under EC law. The same rules also apply for the EEA. The relevant directives are part of the EEA Agreement and, on the basis of the Agreement's objective of homogeneity, are to be interpreted in conformity with the corresponding EC legal rules. It is true that environmental

considerations are in a stronger position in EC law than under the EEA Agreement, due to the strengthening of environmental considerations in the Treaty on European Union. It is, however, difficult to see why the EEA Agreement should be interpreted differently from EC law on this point.

From a Norwegian viewpoint, there is also the aspect that public authorities are under a duty to incorporate environmental considerations into their activities. This principle is laid down in Section 110c of the Norwegian Constitution and in the government's and parliament's policy on the environment. It is important that this be followed up in the upcoming rules on public procurement and that the duty to incorporate environmental considerations is enshrined in the rules to a greater extent than that suggested by the public committee that has drawn up the draft for new provisions.

Market dynamics and consumers – lessons learned within the Good Green Buy Scheme, *by Eva Eiderström, The Swedish Society for Nature Conservation*

Eco-labelling is, in most parts of the world, a relatively new instrument which globally demonstrates a multitude of approaches to the same fundamental effort – to mobilise consumers in order to stimulate dynamic development in the market place.

The goal of all schemes is to achieve a reduction of environmental degradation caused by consumer products. Sometimes the scope is wider and also encompasses being named a contributor in achieving sustainable consumption and production patterns.

The need and increased interest for market steering mechanisms like eco-labelling is coupled to the gradual turn towards market based mechanisms rather than command and control measures. This development is spurred by industry's wish to harmonise measures globally and also the increased globalisation which diminishes the possibilities of national governments to exercise regulatory control.

Regardless of whether this development is wished for or not, it is here, and the issue now is to utilise the mechanisms at hand in an optimal way.

Eco-labelling has to be regarded as a steering mechanism. It is a consequence of a continuing deregulation development and because of this has to be developed in such a manner that it can deliver at its optimum. We therefore enforce the position that as a steering mechanism, it should be constantly monitored, evaluated and measured in order to facilitate application that delivers the proper results. This in turn, calls for careful planning of what goals should be achieved through its operation and how the selection of product groups should be made in order to maximise effects.

Since it is a market based tool, careful observation of market development has to be an intrinsic part of the development of schemes and criteria. To our knowledge, this is one of the crucial points in achieving success in terms of market acceptance of a scheme. The understanding of consumer preference, and what market actors can be persuaded to do, as well as application of tools other than criteria in order to persuade them, another important factor.

Most schemes today, have originated within standards associations which demonstrates a crucial misconception of the tool. Show me a scheme which employs market economists instead of natural scientists and I will probably be looking at a successful scheme.

What is success of an eco-label? High credibility among consumers is one aspect, high visibility – substantial market share in targeted product groups another. The third and most crucial is achieving substantial reductions in environmental impacts. The latter issue is rarely evaluated, why? One reason is that most schemes do not operate by defining beforehand what goals they aim to achieve with the selection of product groups or by the development of criteria. Unless there are goals set up, it is impossible to measure to which extent any goals were reached. Apart from being very frustrating for anyone working within a scheme, this has also led to an open flank for criticism from opponents to eco-labelling. We need to be very self critical in this respect. What industry now is concentrating on is launching other initiatives like ”wash right” – the collective ambition to reduce by 10% the use of chemicals in detergents, in the hope that this will take the heat of the need to also substitute completely some of the same chemicals. The initiative is positive, which has been recognised by the EU and the British environment minister. But imagine what strength it would have had if the producers also had

declared ambitions to comply with eco-labelling demands in all of Europe by the same time as the current campaign goal is set.

Because of our lack of strategic planning in demonstrating goals achievements, as individual schemes of as collective, industrial efforts to prevent eco-labelling from being allowed to be a requisite in public procurement have much higher probability of being successful and to cause us to employ much more reactive efforts than a proactive strategy would have implied.

Still a third aspect is our inability, as a collective, to demonstrate that the aim of our schemes is not to prevent third world countries to be beneficiaries in this process. Since a good scheme should be market based this implies that anything done within the scheme has to be a reflection of the current market place and the current composition of its consumers preference. However, since markets often do not work in a perfect way but rather have in-built obstacles like oligopolies or even monopolies, there is no need to not be smart enough to break such resistance by building on new actors incentive to become represented by a highly sought for quality.

By definition, the methods of production and the sources of raw material for many substances and products can be promoted by measures not discriminating negatively third world origin. One example is Forestry Stewardship Council certification of wood products. By building on this standard in standards for wood based products like paper, furniture etc. efforts in developing countries are not restricted but rather given a priority since many third world countries have been much more apt in developing national principles and achieving consensus on certification.

Other examples encompass IFOAM-accredited certification of agricultural products as a base for textiles or chemical products. Not supporting this kind of effort by not demanding certification is not helping third world countries but rather the opposite. By giving preference to credible schemes originating from processes identical to the ones in the consumer country – mutual recognition is facilitated.

When it comes to mutual recognition of criteria and labelled products among national official schemes, we are further away from any such solutions. As long as schemes do not originate from processes which have basic understanding of market democracy, identifying the need to be representative of consumer and environmental interests outside of commercial actors, national official schemes will view each other from a protectionist angle.

Only when the goals and the priorities of schemes are fully transparent can mutual recognition perhaps become a reality. Remains to be seen though if mutual recognition is something that would benefit goals achievements or if it is only called for by the opponents who would rather produce only one type of product for the entire world instead of accepting consumer preference locally and consequently also accepting democracy.

20 Years of Experiences of the German Environmental Labelling Scheme "Blue Angel", *by Prof. Kurt Oeser, Chairman of the Panel of the German Environmental Label*

"*Eco-Label - because of ....*"

1. Opening Remarks

It is a great honour for me to present to you very brief the German "Blue Angel" Eco-label. You know that we are celebrating the 20th anniversary of our Environmental Labelling scheme.

I have heard from a lot of people that the German Eco-label, which was the only one in the world for 10 years, has given a lot of guidance how Eco-labelling should be work. I am sure the "Blue Angel" has also given much input for all parties or - a new term - stakeholders, which might be still convinced about the advantages of Eco-labelling for the whole society.

Some personal remarks about the so-called communication role of Eco-labelling: As the former environmental spokesman of the German Protestantic Church I am very much engaged in environmental matters since the beginning of our common task "environmental protection", or - in new words - "sustainable development" I am very happy about that link in the conference slogan "ECO-LABELLING FOR A SUSTAINABLE FUTURE". This brings an ambitious perspective for the Eco-labelling Movement for the next century that will be the century of sustainable development.

Eco-labelling is not the property of only one stakeholder, for instance government or environmental associations. It can only work if is accepted in general by all parties especially including industrial companies and retailers als well as consumer associtions. Eco-labelling gives us the chance to have a very sensful basis to discuss the perspectives together how products shall be improved from an environmental point of view. This is a common task and challenge for environmental protection as well as for sustainable development.

2. Introduction of the Blue Angel - Involved Institutions and Procedure

The German Environmental Label "Blue Angel" was founded 1978 by the Environmental Ministers of the Federation and the Federal States.

Involved Institutions are:

1. The Pluralistic Body for Decisions: **the Environmental Labelling Panel** (Jury Umweltzeichen). The tasks of the Environmental Labelling Panel are

- selection of the new product-categories on the basis of a statement of the Federal Environmental Agency
- decision on the criteria of the product-categories based on the results of the expert-hearings
- decision on the further development and improvement of the criteria.

As already mentioned, I have the honour to be the chairman of this panel from the beginning. And I am not the only person which works since many years in this panel or twice a year in regular meetings and sometimes also in extraordinairy meetings discussing principle items or very controversial affairs. These continuity may be also one important factor to reach acceptance and improvement of the scheme.

The 14 members of the Environmental Label Panel come from associations of environmentalists and consumers, industry, trade and handicraft, cities, trade unions, church, science and media. These members are called by the Federal Ministry for the Environment. Two members come from German states.

2. The Environmental Scientific Body of the Blue Angel scheme is the **Federal Environmental Agency** (FEA). Its work stands also for the endorsement to eco-labelling given by the government. To have such an institution available may be one another key factor of the Blue Angel. This stands also for the independency from consultancy work. The tasks of the Agency are

- evaluation of proposals for new product categories,
- elaboration of a first draft of the criteria and compliance verification
- to draft the revision of the criteria
- participation in the examination.

In the Federal Environmental Agency one section is responsible for the management of the scheme. This section is supported by experts from several technical sections.

To my personal opinion, the most characteristic factor of the Blue Angel scheme is the cooperation between this scientific body and the **certification body**, the **RAL German Institute for Quality Control and Labelling**.

3. The tasks of the RAL is to prepare and to sign contracts with the awarding companies. The environmental label can only be used on the basis of a legal contract. In the examination of the applications, the Federal Environmental Agency and the Federal State, in which the product is manufactured, have to be involved by the RAL.

The certification of the environmental labelling by the RAL is a **self-financing system**. To cover the administrative costs, fees are charged for completing the contracts. The amount is based on the estimated annual turnover of the labelled product. Compared with other labelling schemes, the fees are very low and

have no importance for decisions to award the "Blue Angel" (or do it not). This has been confirmed by the already mentioned assessment report.

Because of this cooperation **potential target conflicts** between the continious improvement of the criteria and the economic side of an eco-labelling scheme can be balanced very well. We have had a lot of discussions in our panel addressing this issue.

It is also the work of the RAL to make sure that all criteria and verifications are ready for certification. I know a lot of examples, in which criteria have to be improved again and again to make them certifiable.

There is a **controversy in legal terms** whether the German Blue Angel is a state or a private label. However, compared with the Eco-Label of the European Community, it is clearly a private label:

- a private board decides on all important activities
- the application of the Blue Angel is based on a private contract.

The Environmental Label is designed on the basis of the **environmental sign of the United Nations**. In the outer circle of the "Blue Angel" there are references to the special environmental attributes of the product such as "low energy consumption", "low pollutant" or "low noise". The term "environmentally friendly - ..." was changed to "eco-label - ..." in 1987 as the result of a long principle discussion.

An environment-related product labelling scheme can only be successful, if it is not only accepted by the producing companies, the consumer associations and environmental protection groups, but has their active support too. Decisive for this aspect is, in addition to transparent regulations, the opportunities for associations and participants to contribute their points of view to the environmental label procedure and to take part in the decision-making process. This process is organised in connection with the cooperation principle of German environmental policy. The decision-making process includes the following two steps:

1) Development of the criteria and 2) application by companies

I will not present the flow chart of this procedure.You can find all details in all information papers about the Blue Angel. I will underline only one point:

It is often critizised that no environmental experts - from a technical point of view - are sitting in the environmental label panel. But in the criteria development process for each product category we have the procedural step of the **expert hearing:** Here the experts from the industrial companies as well as from all other interested parties such as consumer and environmental associations or experts from test institutes or universities have the chance to give comments and to discuss the level of criteria or the way to verify them. It is the goal of the hearings to find acceptable compromises but we also have to handle controversial issues of some come criteria or of a whole product category. I think, after all our experiences we have won, the environmental label panel has a good feeling wheater the discussion a controversial issue has come to an end and has to be decided or has to be given back to the expert hearing or the Federal Environmental Agency. To implement such decisions we need a strong majority.

This process has only been changed since 20 years by minor points:

- broader composition in the EL Jury with representatives from industry, trade, handicraft and cities
- experts from environmental and consumer associations attend the expert hearings too.

And we all have no ideas how to improve this process.

3) Principles of the German Environmental Labelling Programme

The selection of product-categories and the development of the criteria is guided by the some general principles which are similar to other environmental labelling schemes:

- approach of comparative assertions with other products fulfilling the same function
- life-cyle approach considering all aspects of environmental protection along the life-cycle of a product including the use of raw materials
- approach of significance in technical terms, characterized by a particularly high degree of environmental soundness
- approach to review and to improve the criteria following the technical development in one product-category or including more environmental aspects
- performance approach without reducing their fitness for use and product safety significantly.

The realization of these approaches is to be done and to be evaluated too in the continious work in the selection of product categories and the development and improvement of the criteria.

Please excuse me not to go in further details addressing the scientific tools and specific items of the scheme. You can meet in the conference several experts from the Federal Environemtal Agency as well as from the RAL to answer all your questions.

I only want to mention one important point. Since the beginning of the 90ies we have had a lot of discussion in the Panel how to use the "life cycle assessment tool". We say "Ökobilanz" in German. We discussed this not only in general terms but also - even more - with practical examples, for instance the case which hand drying systems should be included in eco-labelling or should we also include one-way polyethylen bags for milk in addition to resusable bottles. After long discussion we followed the recommendations raised by so-called LCA-studies: in the case of hand-drying sytems electrical dryer als well as cotton towels have to be added to the product category recycling paper towels. The same we decided in the milk packaging issue. But we have also underlined some concerns against the LCA studies: These are fears of too much automatism and mechanism in the panel decisions processes by results form LCA. We have also heard that a lot of discussions inside LCA can be compared with value-based panel decisions.

After all it is accepted that LCA should be used as a tool for more scientific environmental labelling. But that LCA studies cannot substitute panel decisions which conclusions should be taken into account in eco-labelling schemes. A wide field. Some of you are very familiar with this discussion.

4) Statistical Overview

At the end of 1997 the following balance was drawn:
- criteria are available in 79 different product-categories
- 944 companies are involved
- 4.485 products are certified

14 % of the companies and 16 % of the products come from importing companies. But in reality the share of importers is higher because a lot of non-domestic companies have concluded contracts for use of the label in the name of their German branch offices. I know that this point is discussed very controversial in terms of trade barreers. I would like to inform you only which very important companies from the US are using the Blue Angel in Germany:

Companies from United States Companies (Examples)

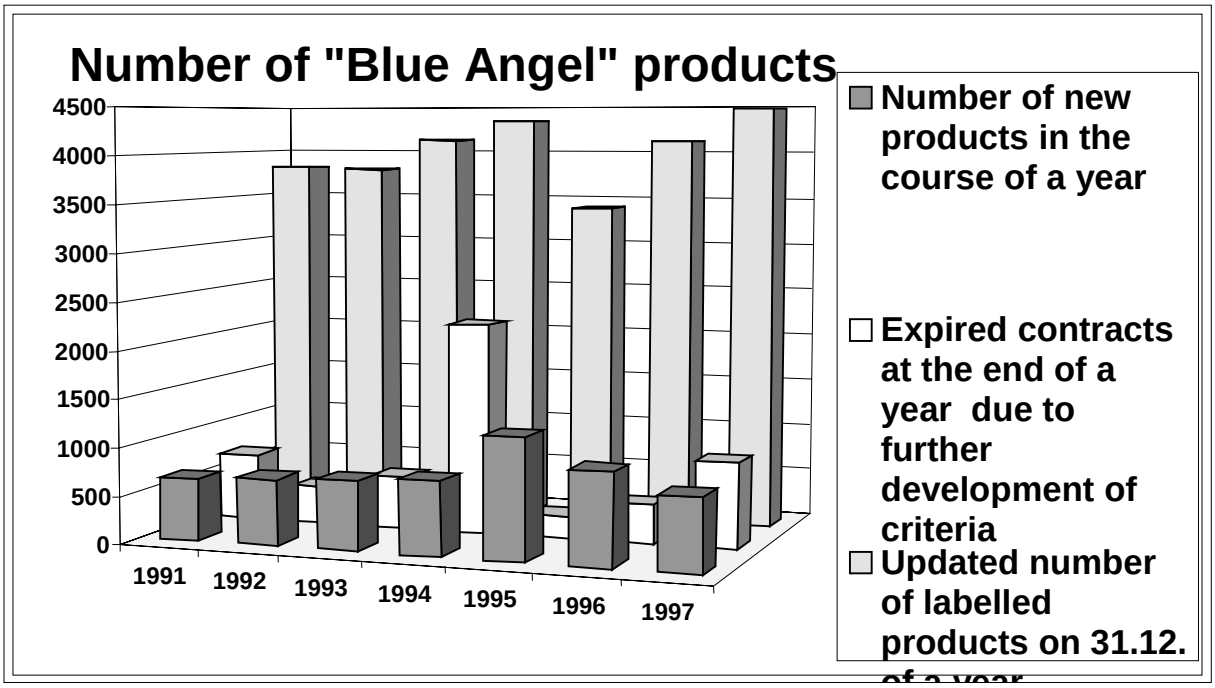
• Casio Computer Kimberly Clark GmbH • Cherry GmbH • Compaq Computer GmbH Dell Computer Corporation	• Hewlett Packard GmbH • Johnson Wax • Lemark International Inc • Texas Instruments

Companies from 18 different countries have been awarded. Most of them come from France, United Kingdom, Netherlands, Austria and Switzerland.

Please consider the offered information which are the product caterogies the Blue Angel have developed crietria and which are the product categories the Blue Angel can be seen very often in advertising and in the shops. But do not only consider the numbers of certified products. Sometimes an eco-label in a narrow market with only few producers can be contribute more for environmental protection as in product categories in which several hundreds products are certified.

In 1997 762 improved or new products by 143 companies were certified. But in the beginning of 1998, the scheme starts with only 3588 products. Now - Mid October - we count 4028 Products from 837 companies. So in 1998 450 new or improved products were certified, this means 2 and a half product each working day. I have to thank the certification body of the Blue Angel, the RAL and all other participating bodies that this has been made possible.

The following figure informs about the dynamic process of the "Blue-Angel"-scheme in numbers of certified new products and also expired contracts. There is no stagnation in the Blue Angel scheme.



Source: Federal Environmental Agency / RAL 1997

Each year appr. 20-25 % of the contracts have to be cancelled because of criteria improvements in specific product-categories or because of the complete expiry. Then it is up to the companies to verify the new criteria. But also certifications in new product categories contribute to the annual numbers documented in the figure below. At the end of the year 1994 40 % of the product contracts were cancelled because of an unusual high number of improvements. Over the next years it was not possible to compensate this statistical loss.

5. Target Groups - How They Evaluate the "Blue Angel"

5.1 Private Consumer

According to a continiously conducted poll, a range from 65 % (1992) to 48 % (1998) - West Germans - and from 45 % to 31 % - East Germans - stated that environmentally friendly products can best be identified by the Blue Angel. This recognition was compared with other inscriptions like "environmentally friendly", "bio" or "eco" in advertising. 59 % (1993) to 47 % (1998) of West Germans and 29 % to 32 % of East Germans consider the Blue Angel in their purchasing behaviour. Although this reduction needs some attention and further action the Blue Angel is still considered as the most important and credible information tool for environmentally sound purchasing. The rermarkable reduction is explained as follows

- numbers between 92-94 and 96-98 cannot be compared directly because the performing institute was changed
- environmental awareness to act has become less important in general, e.g. the willingness to pay more money for environmental sound products
- the increasing development of other eco-labels e.g. for textiles or organic food, which pressures the competition among different labelling schemes as well as contributes to a growing confusion because of too many labels.

From three projects from the 80ies and early 90ies it is known that appr. 80 % of the private consumers connect the Blue Angel with general terms of environmental protection issues. A majority also knows, that the use of the Blue Angel is controlled. But a majority however is also convinced that other labels and advertising actions of environmental claims are controlled too. This discriminates the position of offical protected labels. This situation underlines also the importance of the current activities in the framework of ISO TC 207 Subgroup 3 Environmental Labelling especially the ISO 14021 "Self-declared Environmental Claims"

5.2 Industry and Trade

In industry, trade and handicraft the Blue Angel is well known and introduced. There is an official declaration of the associations of large sized retailing companies available, in which they claim the preferable purchasing of Blue Angel products as an action by retailers how to contribute to sustainable development.

Assessment by the Awarding Companies

A very new and yesterday published research project has assessed the importance of the Blue Angel on the viewpoint of those companies, who use the label in advertising [1]. Some selected results (*presented by charts, not included*):

- a majority has evaluated the advantages of the Blue Angel in positive terms, e.g. benefits for consumer information and the environmental standard or positive comments from all involved clients in one product life cycle;
- the competition factor is the most important factor, why companies have an interest to use the eco-label;
- the eco-label Blue Angel has contributed to some improvements in the market position;
- the Blue Angel has received good notes according to the overall assessment of the companies;
- but the expected increase of turn-overs were only realized by those companies, who came first with the Blue Angel logo in one product-category on the market.

But three main weak points were identified:

- The tendency to make criteria sets more and more complicated. This is an outcome of the international agreed life-cycle approach of environmenetal labelling. But the verification shall be organised with less bureaucratic procedures in future.
- There is a growing concern of too much labelling initiatives with different criteria, not only in European countries or in the European Community. Coordination and cooperation among eco-labelling schemes is missed. But in the moment there is no clear strategy how to solve this. All labelling schemes have their own independent bodies for decision-making. And I am not sure that we will accept every compromise reached in international working groups afer long discussions. This results underlines the importance of this conference.

[1] Institut für Umwelt-Markt-Gesellschaft (imug): Assessing the Success of the German Eco-label. Examination of the effectiveness of the label from the viewpoint of companies using the label and chosen expert; commissioned by Federal Ministry for the Environment, technical supervision by Federal Environmental Agency, Berlin 1998 (UBA-TEXTE 61/98)

And: The public relation work for the Blue Angel has been criticized as not being sufficient enough. But in the framework of the 20 years anniversary of the Blue Angel a series of activities are organised in 1998.

5.3 Public Procurement

A strong impetus to the growing importance of the environmental label was especially given by public procurement. In the German states and in a lot of cities there are guidelines implemented, which require the inclusion of the awarded criteria for the environmental label as a recommended method to consider environmental aspects in public procurement. The increasing number of labelled products in the 80ies went similar to the implementation of such general guidelines.

6. Reached Effects and Selected Success Stories

A distinction has to be made between general effects and specific effects, addressing certain product-categories. Another distinction concerns direct and indirect effects.

Some **general effects** to which the Blue Angel might have contributed:

- Growing consideration of environmentally oriented product improvement in strategic planning as well as in technical realization by the industrial companies.

- Increasing use of environmental claims in advertising as a marketing tool with the effect to win the purchaser‘s attention of the environmental quality of products.

- General introduction and implementation to consider environmental aspects in purchasing decisions.

Some **specific effects, related to product-categories**:

- In the case of **heaters** environmental labelling has improved the environmental quality in terms of lower pollution and energy saving several times and has also prepared higher legal standards.

- The market share of Blue Angel **paints** is above 60% in the do-it-Yyurself-sector, but until today only 20 % in the handicraft sector. 1981 the market share for low polluting paints was appr. 1 %. Also the criteria profile for paints has improved several times.

- There is to observe an increasing market share of **recycled paper products**, e.g. for sanitary paper products amd for administrative paper products.

- Within the Blue Angel criteria a very complex **ecological product standard** for **office equipments** such as copiers, computers and printers was established. This standard includes a wide range of different environmental requirements.

- In some product-categories, the Blue Angel projects have been the first attempts to define an **environmentally sound product profile**. Those criteria are considered as an ecological standard, e.g. for different lubricants such as rapidly biodegradable hydraulic fluids or environmentally sound sanitary additives for mobile toilets and.

- Significant events in terms of **trade barriers** did not happen. This claim is verified by an OECD-Report on eco-labelling. In this report a comparable high share of importing companies in the Blue Angel programm is documented.

- Some Blue Angel criteria documents have found **worldwide attention**, e.g. for copiers, computers and printers. Other eco-labelling schemes have included some criteria sets in their own criteria documents. Some companies use the Blue Angel also in marketing claims outside Germany and even outside Europe.

- The exteded use of **thermal insulating products** in existing buildings is a priority in measures to reduce global warming effects. The Blue Angel has defined a cancerogenic index in order to save the controversial discussed glass wool (from waste glass) for this application.

- The Blue Angel has contributed to achieve an increasing market share of **returning bottles** for milk and juce.

- The Blue Angel has also prepared the growing general acceptance of the **use of recycled materials** by consumers as well as by producers. Examples are paper products made of waste paper; toys, boxes, bags and other plastic products made of recycled plastics, products made of waste rubber etc.

- A look to the official certification list may help to identify other success stories. The Blue Angel has an importance in all product-categories in which several companies are listed.

High expectations exist to realize important effects in two new established product categories including technical specifications for ambitious environmental goals: **televisions** (energy saving, recyclebility, hazardous substances and low radiation) and **tires** (low-noise level and energy saving). But I am sorry also to mention that one year after our panel decisions no products are certified in this important product categories and so I will finish with some weak points.

7. Some Weak Points

1. Although the Blue Angel is accepted in the German public opinion there are often claimed critical points to consider such as

- selection of product-categories
- level of decided criteria
- the period of validity of some criteria
- the extended time table of some decision-making processes

These discussions may happen in all labelling schemes. It is impossible to satisfy each intersted party and I do not want to bore you with details.

2. Also the concerns addressing **negative secondary effects** are widely discussed such as

- the consumers may use labelled products without the necessary care to avoid environmental effects in the use phase

- the consumers may consider Blue Angel products to be environmentally sound in all items

3. Some **specific product-categories did not realize the expectations**. Some industrial branches seem to have a common understanding not to apply the Blue Angel:

- the chemical industry does not award the Blue Angel for detergents although the environmental performance of detergents has been improved several times in the past

- there is no actual interest of the **automotive industry** although there are criteria documents for busses and smaller trucks, e.g. with gas driving systems, municipal vehicles or car-washing services available

- The discussion to include (or to do it not) low polluting and energy saving **cars** in theBlue Angel programme raised nearly unsolvable controversies in the Environmental Label Panel some years ago. Today only the promotion of public transport facilities are supported by the Blue Angel. But in the light of very important improvements we have reopend again this discussion with an open end until today.

- Also the **industries for houshold equipments** have no strong interest for the Blue Angel as well as for the European Eco-label, which provide criteria documents for washing machines, dishwashers and refrigerators.

4. We have still a l**ack of important product-categories**: Until today it was not possible to cover some important product-categories by Blue-Angel criteria. This concerns e.g. textile products, houshold equipments (exception of refrigerators) or more daily products such as cleansing agents. One effect of this situation is the introduction of other labels which claim comparable environmental standards.

5. There are more concern about **too much and too different environmental-oriented labels** in Germany. Most of them are independent organised by third parties for specific product-categories e.g.

- organic food
- environmentally and social sound products from third world countries
- wood including timber from sustainable tropical forest management
- local and regional products
- textile products
- energy saving products ("Energy 2000")
- facilities for holidays and tourism facilities.

The competent organisations are free to organise their own labelling scheme in competition with other schemes. But the **real problem of misleading** consumer is raised by **self-declared environmental label by single companies**, which are understood in general to be independent.

Another important point to discuss is the introduction of the **European Eco-label** as an official European addition to the Blue Angel.

6. A last essential point concern the general exclusion of requirements addressing environmental aspects of the production phase only - the so-called **production and process methods or "not product related PPM"**). You may discuss and - so I hope - solve the problem in some working group discussions.

You know that the German "Blue Angel" scheme has the approach, not to include those PPM-related criteria because of several reasons such as avoiding trade barriers, taking into account results from LCA

studies and information responsibilities in terms of confidential data or information. In order to check the compliance with environmental legislation of German companies the German states participate in the award process.

8. Future Developments for the Blue Angel Programme

1. More efforts have to be done to **improve the public relation work** of the Blue Angel scheme in order to increase the attention by consumers.

The new **Internet Homepage** for the "Blue Angel"-scheme was established in October 1997 to improve the information transfer: http://www.blauer-engel.de
It is interesting to know that 40 % of the visitors come from foreign countries.

2. **Too much different labels**: The Blue Angel programme has to accept the competition raised by other environmental-related labelling activities. This "labelling market" should be evaluated and compared by independent bodies. The Federal Environmental Agency itself supports the implementation of some additional labels. The only solution how to solve confusion are well prepared information campaigns to achieve correct understanding.

3. Further development of product-categories concerns the long list of **test orders**. The Environmental Label Jury has decided on so-called **test orders** for numerous other product-categories

New perspectives may come from the inclusion of services such as Car-Sharing organisation or textile cleanig services. A very new discussion is raised to include also touristic facilities.

So the Blue Angel has a lot of potential for improvements and further developments. But the scheme has also an interest and is prepared to contribute to any activity for more international cooperation.

Integrated Product Policy and Eco-labelling, *by Frank Hess, European Commission, DGXI*

Ladies and Gentlemen, in my presentation I am going to talk about a new policy approach that is called Integrated Product Policy and about its links to the subject you are all familiar with: eco-labelling.

1.Introduction: Why do we need IPP?

The traditional focus on production processes may no longer be appropriate and the relative importance of consumption-related emissions and wastes has been rising. In spite of the trend towards dematerialization and eco-efficiency, production and consumption patterns still damage the environment at one or more stages of a product's life, from its conception through to its final consumption and disposal. The substances contained in a product usually comprise only a few percent of the total mass moved and consumed for production and supply of the product. The traditional end-of pipe approach in environmental policy has reached its limits.

It is obvious that the current production and consumption patterns are not sustainable. Market forces alone often are not sufficient. On the demand side, consumers are not sufficiently informed and even if informed may not act in an environmentally friendly manner; on the supply side environmental product management may not lead to maximisation of profits. Hence, the market does not reflect the externalities.

Market inadequacies are the reason for the need for governments to implement an IPP. At present there is a lack of an institutional framework for environmentally oriented vertical cooperation between companies. They do meet only in the market place but it is our belief that neutral mediators, usually government but not necessarily so, are needed to provide for balanced representation of actors and to explore and support cooperative working methods.

Therefore the Commission is developing a strategy on product policy. It should contribute towards sustainable production and consumption of goods and services, without which it would be necessary to act ex-post as in the case of the management of waste in order to limit damages even more costly to society.

IPP is not something completely new at the Commission level. But why do we need product policy at a European and probably also at a global level instead than just at a national level?

The variety of national approaches taken creates some familiar arguments in support of EC intervention. These are:
barriers to trade could emerge if different approaches develop across the EU, creating a fragmented product policy context;
the differentiated picture will widen _: the implementation of IPP shows a clear regional divide within the Union.
impacts on the internal market would result, distorting patterns of trade, production, and consumption. Industry might also suffer from the lack of a level playing field.
Environmental objectives related to IPP cannot be reached in a satisfactory manner at either national or regional level when a production process may include companies from several Member States, when products are exported. Adverse effects of poor product management may not be perceived where the product is produced and even consumed, but may affect collective welfare throughout the EU and even outside its borders. That is why it is essential for the EU to ensure that Integrated Product Policy will

comply with the rules of international trade. Several firms have also expressed the wish that the EC take action to introduce a coherent international framework;
Conversely, promoting environmentally superior products in industry may enhance Europe's international competitiveness, particularly as firms plan their strategies and develop their technologies in a Community-wide context.
Incentives to industry will in many instances be more effective if applied Community-wide.
An additional argument for an EC product policy is that the range of issues associated with products are important in the context of developing strategies for sustainable development.

2. What is IPP about?

Integrated product policy is a relatively new area of environmental policy. It addresses the whole life-cycle of a product, thus avoiding shifting environmental problems from one medium to another, as opposed to specific product policy, which addresses just one particular environmental effect.

Let me at this stage make a distinction between Integrated Product Policy and Product management which follows a distinction established by two researchers Mr Rubik and Mr Oosterhuis: IPP is the area of competence of government and governmental institutions and encompasses the formulation of objectives and the setting of policy framework by selecting and implementing instruments.

Product management is the area of actions and measures taken by the actors who are involved in the life-cycle of a product.

Life-cycle thinking should be at the basis of IPP. It should be clear that just as it is essential to avoid shifting environmental problems between different media during the production process (integrated pollution control), it is equally essential to avoid shifting environmental problems between the various stages within the life-cycle of a product. The potential for an optimal IPP is greater the earlier in the functional chain the matter is being addressed.

Besides the focus on life-cycle-thinking, there is another crucial element in IPP that distinguishes it as a new way of looking at environmental policy, that is the focus on actors along the product chain and the relationships between them. The analysis of those relationships can tell us what the best options are to change the product chain in a way that supports sustainable development. The actors in a product chain are linked through a series of market transactions.

From an environmental policy perspective, there are 5 major elements in a product chain: the environmental (and possibly other) objectives, the markets in the product chain, the actors, policy instruments and the products themselves.

IPP seeks to overcome the obstacles generated by the market through self-organization by the actors. This policy approach may be characterised as enabling, primarily concerned with capacity-building,

A strategy on life-cycle oriented product management should involve all actors in the product chain:

- designers
- producers (suppliers, manufacturers)
- transporters, distributors/ retailers
- consumers (both private as well as public)
- waste management companies.

Other actors such as the media, financial institutions and research institutes might also play a considerable role.

However, primary responsibility should fall on the producer who is in a position to influence the designers, the suppliers of raw materials as well as the actual manufacturing process and to a certain extent the consumption phase. He is therefore the crucial link in the product chain.

In order to minimise environmental pollution of products all actors in the chain must be aware of the environmental issues at stake: information must be gathered and made available to the others in the chain. The information can be passed on voluntarily, for example by making agreements within the sector or by public authorities requiring compulsory labelling or product data sheets. Wholesalers and retailers play a key role as ecological gatekeepers in the product chain. Eco-labels convey that kind of information to them as well as to consumers.

Access to information is essential in order to avoid the shift of environmental problems from one stage to another in the product life. In addition all actors should as far as possible reduce the environmental effects for their own link in the chain which includes the consumption phase.

The European Commission may, according to the consultants that worked for us (Ernst & Young and the Science Policy Research Unit), take four key roles in integrated product policy:

- to define a common understanding of integrated product policy, and to articulate a common vision of what it is setting out to achieve. A key task in this is being clear about objectives;

- to encourage the diffusion of best policy practice beyond the 'heartland' of member states and so to harmonise the 'product policy context' across the EU;

- to support the effective implementation of product policies through the integration of product policy aims in EU policy more generally, and

- to develop specific integrated product policy measures where action at an EU level is justified

In addition to that, I see the following role:
to acquire knowledge on environmentally weak points in production life cycles and to pass it on to actors., helping them to overcome information gaps and barriers.

Three basic strategies for integrated product policy have been distinguished by Mr Rubik and Mr Ooesterhuis:
Lowering the product throughput
Changing the product with regard to its environmentally harmful features
Changing the product treatment, that is use and disposal into an environmentally sound direction

The instruments encompass amongst others economic instruments, new forms of co-operation and direct regulatory instruments. The most important ones besides eco-labelling are: Environmental agreements, the greening of public procurement, EMAS, the greening of standardization, legal approaches, fiscal measures, producer responsibility, etc.

New orientations

In addition to traditional instruments, the concept of producer responsibility should be further developed. The current, narrow, focus only holds the producer responsible for products in the production phase. Extended producer responsibility refers to an extension of the producer's responsibility to the other stages in the product life-cycle. Finally, the concept of "shared responsibility" needs to be further explored, referring to the widening of responsibility to other actors in the product chain. Let me also briefly mention a few other new instruments that we may wish to explore. eco-leasing, sharing, pooling, least cost agencies, product information centres

The Challenges in Framing IPP

The transition towards product-oriented policies faces diverse practical, political and legal obstacles. First, it implies a transition from intervening directly in the frequently local environmental impacts of single sites with well-known technological and environmental characteristics operated by single industrial firms, to influencing indirectly the imprecisely understood and frequently regional and global environmental impacts of globally-spread product systems involving many stakeholders distributed across many countries.

Second, the recognition of products as a key focus for environmental policy is far from pervasive in EU or wider international policy making circles.
Third, the global scope of product systems and environmental impacts raises the issue of the trade-off between promoting the internal market and securing high levels of environmental protection.

Other deep-seated problems are related to the issue of consumer sovereignty, the diversity of products of the market, the range of actors engaged in producing and consuming products, and the problem of reconciling differing social attitudes to environmental risk.

Finally, as mentioned before integrated product policy represents a new role for governments and the European Commission. Product policy cannot be devised and implemented in the same way as traditional process-oriented policies.

The policy process needs to become more transparent, open, interactive and co-operative, placing greater stress on voluntary actions and market instruments, with public authorities taking the role more of facilitators and arbitrators, rather than merely enforcers of rules laid down in legislation. Specific actions should involve all actors in the product chain. Close cooperation, where the EU would take the position of a facilitator and initiator of processes rather than following the traditional control and enforcement approach, will need to take place with those actors :

In a way, the experiences that we have with Eco-labelling schemes point already in this direction. Many stakeholders are involved and a lot of consultative procedures are foreseen in some of the schemes, notably in our own scheme. However, with very few exceptions, the authorities are continuing to sit in the driver seat of the Eco-labelling schemes. A major reason may be that they still need to fund those schemes.

3. Links between Eco-labelling and IPP

In this respect, I would like to mention our own experiences in promoting the European Eco-label scheme. We have recently changed our focus and try now to bring all interested actors together around the

table in a network approach, but only those that are really interested. First results for Italy and the Benelux countries have been encouraging and we intend the duplicate our experience in Austria and Germany.

At the European level no explicit policy related to products and the environment yet exists, but we have the intention to establish a broader policy. Several existing measures including the EU Eco-label, the Packaging and Packaging Waste Directive) could form elements of a European IPP.

At the member state level a few states have articulated comprehensive policies on products and the environment, notably the Netherlands and Denmark, with significant policy developments also taking place in Sweden, Finland, Austria and Germany. Most EU states do however not have explicit product policies.

Eco-labelling focuses on products and so does IPP. Both IPP and eco-labelling adopt a life-cycle perspective on them.

Eco-labelling has given us a lot of experiences about the use of LCA in policy making. We have acquired a great deal of knowledge on the application of LCA and are now clearer about its benefits and its limits. It can help us to identify major environmental problems. But it cannot substitute policy decisions.

Eco-labelling can provide a valuable input in establishing IPP. However, IPP provides a wider analytical framework, covers more issues and offers more instruments.

Eco-labelling is a core instrument of IPP and necessary for the successful implementation of IPP.
Eco-labelling is an instrument that works on a purely voluntary basis. IPP has also a strong focus on the use of voluntary instruments, but in addition it may also to some extent use legal and mandatory requirements.

Eco-labelling is an instrument that aims to cover the top environmental category of the market for specific product groups. IPP is concerned with making all products greener. There appear to be some market constellations, especially in transparent homogenous oligopolistic markets, where the use of eco-labelling might sometimes not work properly and therefore other instruments under IPP such as environmental agreements might be more effective.

With the use of other instruments in Integrated Product Policy, the effectiveness of eco-labelling is likely to be enhanced. Both eco-labelling and Integrated Product Policy make a contribution to more sustainable production patterns.

4. The cases of industry and consumers

European industry has been responding to market pressures from consumers and competitors, taking advantage of technological and market opportunities. Industry is also responding to the increasing responsibilities which are being placed on them to manage and reduce environmental impacts across life cycles (producer responsibility, integrated chain management) through regulations and voluntary agreements.

Given the differing technological and market contexts in which firms operate, the attitudes and actions taken in managing the environmental impacts of product systems vary greatly across different sectors.

An insight that we gained from our experiences with the Eco-labelling schemes is that the traditional horizontal organization of sectoral associations may be necessary but not sufficient to implement

environmental objectives since they usually represent the smallest common denominator and need to consider their environmental laggards.

When it comes to Eco-labelling, industry usually has been taking a negative stance. This is especially true when it comes to industry associations . The use of an Eco-label clearly singles out a few companies in comparison to the rest. It may indicate the consumer that within a company some of the products are environmentally-friendly while others are not. But does this really explain the resistance? First of all, no one stops companies from turning all their products into green products and that is what IPP is eventually about. But o.k., let me take for a second the hat of a company manager and let's assume that just a few of my products are green. So what? The brown consumer does not care anyway and the green consumer may wish to purchase my green eco-labelled product.

Industry has been constantly arguing that mandatory environmental policy instruments are not what they want since these are in their views not effective nor cost-efficient and do not leave enough room for flexibility. My colleagues and I can subscribe to some of the skepticism about the traditional regulatory approach. This is one of the reasons that led the Commission to adopt the IPPC directive and to introduce the EMAS system. It is disappointing to see that the industry does not use the voluntary instrument of Eco-labelling as enthusiastically as we had hoped for.

The results of the study on IPP suggests however that industry is supportive of risk-based approaches to reducing the environmental burden associated with final consumption, but that this is only possible if basic environmental objectives are clearly articulated by policy makers, and if a 'level playing field' exists, within the EU and globally.: IPP needs to take into account the limited adaptive capacity of industry due to cost reasons in order to maintain their international competitiveness. It is our intention to provide for a changing but predictable regulatory environment. This will ensure the minimisation of adjustment problems and lead to reductions in the cost of adjustment.

Consumers

Consumers can play an important role in influencing the environmental behaviour of manufacturers, and do play a fundamental role in determining broader environmental impacts through patterns of consumption. The consumer's influence runs throughout the entire product life cycle; affecting patterns of purchasing, use and product discard. However, the role of consumers in their responsibility for managing the consumption and disposal phase of products has so far not been properly analysed.

The types of consumer of particular relevance to the product policy context are individuals (acting as private consumers), professional or corporate consumers (often in the supply chain of manufacturers), and agencies of government who carry out public purchasing.
Public procurement officers and professional purchasers have usually higher bargaining power and therefore a much greater leverage effect in their decisions.

A number of factors combine to create obstacles to environmentally-conscious purchasing, use and product disposal amongst all three classes of consumer. These include lack of knowledge, perceptions of cost, additional complexity, and inertia. The most important factor in all areas is the need for the sensible provision and use of environmental information.

But let us be realistic: when it comes to ensure acceptance in the market place for green products, a crucial rule is to minimize the sacrifices private consumers must make in order to buy and use them.

5. Conclusions

We all know that eco-labelling is not only an instrument that addresses the production process but that it is also a core tool for sustainable consumption. What can IPP contribute in addition to that? Eco-labelling does usually not look at issues such as symbolic value of products, the psychological dimension of consumption, lifestyle issues etc. IPP, if it wants to contribute to Sustainable Development, has to. This would mean enhancing the symbolic value of buying eco-labelled and other environmentally sound products, using the advertising industry to help us promoting consuming less, consuming second hand products, consuming products for a longer time and tell the consumer where to return the product to after its end of life.

A lesson from experience of the European Eco-label is that the introduction of a single isolated instrument lessens its chance of becoming very effective policy. Using eco-labelling under the umbrella of integrated product policies will, however, greatly enhance its effectiveness and secure its success in the long run. If eco-labelling can be linked for instance to public procurement as it is apparently being done in Canada, all of us will have made a major step forward. Another possibility would be to offer tax incentives to eco-labelled products.

Eco-labelling might despite of its high value for consumers not be the appropriate instrument for passing information along traders because we would need some much more specific data than can be expressed in a swan, a seal, an angel our flower, or whatsoever. Eco-labelling normally does not address the social component of sustainability and maybe it should not since there are social labels, an open issue. But IPP cannot ignore those issues.

I think there is big potential for synergy between Eco-labelling and IPP: We need a drastic reduction in material intensity of production and consumption, we need durability, ease of repair and disassembly, recycling-oriented production, recovery of materials, increased energy efficiency of products, you name it. Eco-design of products is one of the essential links of IPP and eco-labelling. The criteria that I just mentioned should increasingly become part of eco-labelling criteria.

Eco-labelling has been invented twenty years ago in Germany and we have a great deal of experience with it. Eco-labelling has taught us a lot about how cooperation may work and how it does not. At the Commission it has been besides EMAS the most important instrument in product-related issues. We should learn from it since IPP is still a new concept that has to prove its effectiveness and viability. I trust it will do so.

Eco-labelling for a sustainable future: a developing country's perspective, *by Heather Bailey, Environment 2000, Zimbabwe*

Introduction

Zimbabwe is a landlocked country in Southern Africa. As a former British colony, it gained its independence in 1980. From the 1960's to 1980 Zimbabwe, then Rhodesia, went through a period where the minority government declared UDI which resulted in a long civil war, and consequently Zimbabwe was subject to trade sanctions. In 1980, a one-party socialist government was elected to power, and remains in power today. It enacted economic policies resulting in restricted trade with other countries. From 1992 Zimbabwe entered in to an Economic Structural Adjustment Programme which bas encouraged trade liberalisation. Two impacts directly relevant to the issue of eco-labelling have occurred:

1. Many sectors in Zimbabwe have expanded their exports particularly to Europe. This bas gradually brought exporters in contact with eco-labels from Europe.

2. Liberalisation of the economy bas removed the protection of the Zimbabwean industrial sector and of the Zimbabwean dollar. In a bid to become more competitive on the world market, industry bas streamlined its operations, shedding substantial numbers of jobs. Secondly the country bas, and continues to suffer, high levels of inflation. As a result, the majority of local consumers' spending power bas been considerably eroded.

Who *is Environment 2000 ?*

Environment 2000 (E2000) is a young and dynamic non-profit organisation, staffed primarily by Zimbabweans, that works with all sectors of the community to facilitate the protection of the environment; promoting sustainable utilisation and sustainable development. Known as a pressure group, Environment 2000 stimulates awareness and action on environmental issues.

The Environmental Labelling Programme (ELP) is one of several programmes of E2000. Launched in 1991, the ELP is endorsed by the Ministry of Mines, Environment and Tourism. Organisations of all kinds in Zimbabweare increasingly concerned to achieve - and demonstrate - sound environmental performance by controlling the impact of their activities, products and services on the environment. They do so in the context of increasing concern by the regulatory bodies authorities, competitors and customers (primarily overseas) about environmental matters and the need for sustainable development. To foster this approach E2000 launched the ELP, which acknowledges and advertises - through the Management Label - an organisation's commitment to sound environmental performance. The Management Label is based on the Environmental Management Systems (EMS) approach. E2000 also endorses environmentally more sound products through its Product Label. The Product Label can only be applied for once the applicant bas achieved the Management Label. Environment 2000's ELP is, in comparison to other Environmental Labelling Programmes, a very small programme. Only very recently bas a full-time member of staff been appointed to run the Programme.

Since 1997, an increasing number of single industry international environmental labels have been taken up in Zimbabwe on certain export products. Prior to April this year, there were

1)calls within the ELP Committee for the ELP to become a National Programme, however we were unsure of industry's response. An unsolicited opportunity arose to clarify this issue at a workshop on *"Challenges and Opportunities for Zimbabwean Exports arising from Environmental Requirements in Europe* " hosted by the German Development Institute and Zimtrade (a government sponsored trade promotion organisation). Here, producers from the different sectors and support institutions present agreed upon the need for a National initiative - facilitated by E2000 - to co-ordinate environmental certification efforts in Zimbabwe to ensure that they are:

• appropriate to local conditions;

• achieve internationally recognised standards; and

• are affordable

Another very recent development, is the formation of a working group to develop a National Accreditation Body. E2000 is a member of that working group. At present, due to the lack of a national accreditation body, laboratories and certification bodies requiring to be accredited have to seek accreditation elsewhere.

Issues

EMS Influence

We have observed that E2000's ELP is significantly different from other multisector/product Environmental Labelling Programmes, in that there is a strong EMS influence. There are two main reasons why we have undertaken this approach:

We feel that at the company level, **an environmentally responsible product does-,** not automatically mean that the company manufacturing that product is environmentally responsible itself. To illustrate this point, take the hypothetical example of the Zimbabwean Hardwood Furniture Maker:

> *A hard wood furniture maker produces, amongst other things, furniture made from discarded wooden railway sleepers, and seeks to have it endorsed. Alife-cycle assessment of this product shows that it is an environmentally superior product to other hard wood furniture, and is suitable for labelling.the manufacturer also makes teak furniture from "no questions asked" timber sources. They are unlikely to put the teak furniture for ward for labelling as it will not meet the criteria. If the furniture maker is not required to achieve the management label first, then they are in a position to abuse the concept of "eco-labelling for a sustainable future ". If, on the other hand, they do implement an environmental management system, they will have identified teak supplies as a key area of environmental impact, and would take action to ensure that all their hardwood supplies came from an environmentally sustainable source.*

In Zimbabwe we have not had a long history of systematised management, of the ISO 9002/ISO 14001 type, and therefore producers tend to find it difficult to achieve consistent product standards, and this poses a monitoring problem. upon the ELP. Having an environmental management system in place will support the manufacturer to consistently achieve the product performance standards, and will assist them to prove to external bodies - such as the ELP - that their product consistently meets the product label standards.

ISO 14001 has been one of the first, if not the first for most sectors, international environmental certification schemes in Zimbabwe. Industry has the opportunity to become involved in the process of developing the standard through the Zimbabwean ISO 14000 technical working group. E2000 is an active member of this group and also actively promotes ISO 14001 in Zimbabwe. This early exposure has influenced our appreciation of this type of standard and its place amongst other environmental standards and certification approaches. For example, the Forestry sector in Zimbabwe, which is subject to environmental certification pressures, particularly from buyers in Britain, for Forestry Stewardship Council (FSC) certified timber products, has found it desirable to implement an environmental management system in order to support the performance standards required by FSC certification.

International Labels - A Power Imbalance

In general, the balance of power between the agents of the intentional environmental label (be these the labelling organisation, the certifier, or the buyer demanding a particular label) and the producer and other Zimbabwean, stakeholders is heavily skewed towards the former party. This is not surprising, as most Zimbabwean exporting sectors are comparatively small. For example, the organic agriculture sector which is seeking certification comprises of only nine sites each of which is no bigger than. 100 hectares. The total area under commercial forest plantations in Zimbabwe is just over 118 thousand hectares, which is less than on forestry company, Mondi, owns in South Africa. As a result, our exports are more important to us than they are to the importing country, i.e. it is a buyer's market. Naturally, the buyer develop/follow environmental standards which they consider important, engage assessors/certifiers that they have confidence in, and that they feel their customers will have confidence in. This raises several issues of concern for Zimbabwean stakeholders:

1. Appropriateness of standards to local conditions

The standards of international environmental. labels are usually formed from an euro-centric point of view, and can thus not be expected to reflect the realities on the ground in Zimbabwe. Take for example, the Dutch MPS cut-flower environmental scheme. It is a performance standard based on criteria on the use of pesticides, energy, fertilisers and the production of waste, with a particular emphasis on pesticide and energy use. In Zimbabwe the use of energy is less of an issue, because the use of generated energy is minimal in the production of flowers due to more favourable natural conditions. However the efficient use of water, an issue not addressed in the original standard - is a primary environniental priority in Zimbabwe. The response of international labels to this issue varies from no stated intention to co-operate to a very active policy of developing appropriate local standards. For example, the Flower Label Program of BGI (the German Flower Importers and Wholesalers' Association) formed as a reaction to the objections raised by environmental and human rights organisations supporting the European flower campaign has stated in talks with Zimbabwean producers that there will be no negotiation on their - quite frequently specific and occasionally out of context -standards. More positively, the Dutch MPS Industry to Industry label which developed out of an existing broader context Flower and Environment Programme, intentionally implemented a pilot project in Zimbabwe to adapt the MPS standard -which they acknowledge as being euro-centric - to the local conditions. Currently they have not made explicit moves to involve stakeholders, other than the local flower industry. In contrast, the FSC has a clear intention that local interpretation of the FSC's 10 Principles should occur through a formal, local stakeholder consultation process. The mechanism through which this occurs is a National FSC Working Group, which should meet a balance in representation between environmental, economic and social interests. This strong commitment to 'grassroots' involvement is an example that other environmental labelling programmes could turn to provide a sound mechanisni for local involvement in standard setting.

2. Cost of certification

Without exception, all international environmental labels operating in Zimbabwe use certifiers who are foreign, for example:

Forestry - UK and Switzerland;

Horticulture - assessors from individual supermarket chains in Europe (mainly

Germany and UK);

Cut-flowers - Holland and Germany;

Organic agriculture - UK, Germany and Madagascar.

For the forestry sector a local branch of the certifier operates in Zimbabwe, but the local branch feels its parent organisation is reluctant to transfer the necessary skills to the local branch. The local branch's charge out rates are approximately 20% of its European counterparts.

To date, there has been one initiative for organic cotton certification between a Swedish certifier and donor to train and accredit local certifiers. Unfortunately the programme was terminated when the local counterparts indicated that they would like to certify beyond Zimbabwe's borders.

Charge out rates for international certifiers, certifying in Zimbabwe range from US$300-US$400 per day (organic agriculture) to £500 per day (forestry). To put this into context, 1 earn £9.50 (before tax) per day. Further, the label applicant has to cover the costs of getting the certifier to Zimbabwe. The cost of certification is a serious barrier to certification for small producers. Given the continuing depreciation of the Zimbabwe dollar costs will continue to spiral upwards, more and more producers arc likely to give up the idea of certification and pursue less desirable markets.

The way forward should be a commitment to training local certifiers to the desirable standards, and accrediting them to the necessary parent body.

3. The role of the certifier

The role of the certifier in Zimbabwe is in certain cases, greater than is normally expected. In some instances the certifier promotes the environmental. label on behalf of the environmental label parent body, as bas occurred for FSC and Greenglobe (a new international tourism label).

In certain instances the (sole) certifier bas developed the standards on behalf of the environmental labelling body, e.g. Greenglobe. This is likely to, result in a conflict of interest where the certifier plays both rulemaker and referee. Having invested in developing the standard, the certifier will discourage the environmental labelling programme from accrediting other certifiers.

Certifiers normally interpret the international standard to local conditions. They are often under no obligation to consult local stakeholders, and frequently this is not feasible: consulting stakeholders takes time, and the certifiers time is costly - who, is going to pay? Whilst international certifiers are experts about the standard they are certifying to, they are newcomers to Zimbabwe, and they run the risk of taking issue with trivial issues, and likewise being unaware of significant local issues. On occasion, certifiers do

use local experts, which assists in making meaningful interpretation of the standard. Once again, training local certifiers, and accrediting them to the parent body is desirable.

Harmonisation of Existing International Labels

There bas been a 'mushrooming' of environmental labels - particularly single industry ones - in Europe, mostly operating in competition with each other. One of the well known impacts is that of saturation of the 'environmental label' market and confusion of the consumer (and in time distrust). Perhaps a lesser known impact is at the applicant end of the process. Producers in Zimbabwe are finding that the label they apply for is not transferable between different markets. The choice exporters have to make, who desire to supply the better markets, is either to keep markets open by seeking more than one label or to limit oneself to one market and one label: For example, organic producers which are certified to a single standard - EU Reg. 2092/91 - carry two certification marks, being Eco-cert which is recognised in Germany, and Organic Farmers & Growers UK which is recognised in the UK market. This means that they follow the same standard at the same sites but which require separate audits by the respective certifiers from the UK and Germany for the different labels! The horticultural producers face a far greater multiplicity of standards, as they supply different market chains who all have their different standards (and their own inspectors and inspection procedures!). To rationalise the situation at the Zimbabwean end, they have developed their own code of practice which incorporates the requirements of the different buyers. They would like to turn this code of practice into a National Horticultural Label to rationalise marketing requirements and also to capture the local market (since most exporters supply the local market anyway), however challenge is to get this label and local certifiers accepted by European clients. The cut-flower growers also face a similar dilemma. Most of their flowers are sent to the Dutch flower auctions, however the main consumer is Germany. The Dutch Auction Floors have an environmental certification and in Germany, the German Flower Importers and Wholesalers' Association have their own label which the German supermarkets are being encouraged to recognise. Some producers, seeing saturation on the Dutch Auction Floor would like to supply the German supermarkets directly. However, the antagonism that exists between the two labels means that the producers do not have the freedom to supply different markets at the same time using one label.

One gets the feeling that the ultimate aim of eco-labelling - protecting the environment - is being submerged by the protection of a variety of other agendas. This, sometimes ridiculous multiplicity of labels, is probably not only a significant problem for exporters from developing countries, but affects all suppliers to markets where environmental. certification operates. This is an issue of global significance, which requires all players to get involved.

Zimbabwe is relatively new to this issue, and therefore we do not have the answers, however there are some potential ways forward:

1. GEN's efforts with mutual recognition, which is making concerted efforts towards finding feasible and acceptable mechanisms for mutual recognition; and

2. ISO 14024 Standard - which defines the core principles by which labelling Programmes should operate i.e. a code of practice. It includes important issues such as stakeholder involvement, minimising barriers to trade, facilitating mutual recognition. his standard has potential to streamline the number of Type I labelling programmes.

Co-ordinating locally-based and internationally based environmental certification efforts in Zimbabwe - the National Environmental Labelling Programme

As indicated earlier there has been a general consensus for the need to develop a National Environmental Labelling Programme to co-ordinate locally based and internationally based environmental certification efforts in Zimbabwe. One of the expectations is that it should create a stronger voice for Zimbabwe regarding the issues raised in this paper. The nature of this Programme is not yet clear. A first step that needs to be taken is a clarification of expectations of the different stakeholders.

Some fundamental questions need to be answered during the process of developing the National Programme:

- Should we bring the national label and internationals initiatives together?
- If yes, how can this be done?
- And will international labels co-operate?

In Conclusion

It is evident that eco-labelling is here to stay, and is becoming an increasingly important tool in developing countries to (i) stimulate the development of environmental performance standards; and (ii) to communicate to customers these environmental performance achievements. it also has great potential for better stakeholder involvement in standard setting. However, it is important to realise that different conditions and priorities exist within different countries, which (ought to) determine the way in which environmental labelling functions, and this needs to be respected. Furthermore, certain single issue/industry labelling programmes which are supra-national, such as the FSC, which are de-facto 'close cousins' to Type 1 eco-labelling programmes (but which seem to have fallen between the gap between Type 1 and Type II labelling) need to be recognised for the role they play and more formally brought into discussions on labelling programme codes of practice and systems for mutual recognition.

International players, if they want to protect the credibility of eco-labelling need to urgently find and commit themselves to mechanisms which will address the issue of the power imbalances between the Developed Country (net) 'consumer' of products (i.e. our natural resources) and Developing Country 'providers'. Likewise, Developing countries need to assist this process by organising fora within their countries where stakeholders can come together to communicate what is needed for their country.

EXPERIENCES WITH EXISTING ECO-LABELLING SCHEMES

Eco-labelling and Consumer Choice: Theory and Practice, *by Julian Morris, Director, Environment Unit, Institute of Economic Affairs*[2]

Introduction

This paper discusses the potential role of different types of eco-label in providing consumers with reliable information concerning the environmental impact of the products that they purchase. Three types of eco-label have been identified by ISO: Type I eco-labels are single 'seal of approval' marks (such as the EU Eco-label, the Blue Angel and the Nordic Swan); Type II eco-labels are self-declared environmental claims by manufacturers, which may but need not be certified by third parties; Type III eco-labels are multi-attribute, lifecycle assessment-based eco-profiles. It is argued that, of these, Type II eco-labels are most likely to provide reliable information to the consumer and thereby ensure that the consumer is able to influence the protection of the environment through his decisions regarding the purchase, use and disposal of products. Type III eco-labels might provide some relevant environmental information although there is a possibility that poorly marketed Type III eco-labels will be confused for Type I eco-labels. Type I eco-labels are likely to provide misleading information to many consumers and may result in environmentally and economically harmful technological lock-in.

Consumer Decision-making and the Environment

For any particular consumer want, there are typically several different products available, varying according to price, quality (which may be subdivided into many different characteristics), and quantity. Given such a cornucopia of choice, how do people decide which product to purchase? We cannot say precisely which factors determine an individual decision, but psychological research suggests that people generally use 'information proxies' - especially brands and, to a lesser extent, certification marks (Robertson, 1987). These proxies enable consumers to avoid the laborious task of analysing each product by trial and error. However, they must relate to information that has already been provided or acquired in other contexts, especially advertising and past experience of other similarly branded or certified products, in order for them to have meaning to the consumer (Beltrami and Stafford, 1993; Schiffman and Kanuk, 1994).

Information proxies are especially important for purchases of costly durable goods and goods whose effects may not be knowable by the consumer (Klein and Leffler, 1981). Since the environmental impact of a product is typically not directly observable by the consumer, branding and/or certification, when

[2] The opinions expressed herein are those of the author and not of the Institute, which has no corporate view, its Advisors, Trustees, or Directors. Address correspondence to: julian@iea.org.uk

combined with advertising and other kinds of information provision, are appropriate ways for consumers to acquire such information (Morris, 1997).

A relevant question is: what kinds of environmental information are most likely to be used by the consumer? Market research suggests that the demand for products that have a lower environmental impact is small, especially if those products are more expensive (Morris, 1997, pp. 10 - 12). In any case, I argue below and elsewhere (Morris, 1997) that it is not possible to provide a general 'seal-of-approval' Type I eco-label that will provide truthful information to all potential consumers. Nevertheless, it might be possible to provide consumers with reliable information about the impact on the environment of a product at one or more of the stages in the product's life-cycle using a Type II or Type III eco-label. Whether or not this is the case depends on how such information is interpreted by the consumer, which in turn is a function of how the information is presented. If the information provided is clear and unambiguous, then it may indeed be beneficial, since it should enable people to use products that are likely to have a lower environmental impact given the particular circumstances in which they are used and/or disposed of. For example, people living in areas where low-level ozone is a problem can choose to buy low-VOC paints, varnishes and solvents – if they are able to identify these products and understand why (or at least when and where) it might be beneficial to use them.

However, there may be more significant demand for information about certain kinds of environment-relevant information. Many of the key environmental impacts of products occur during the use and disposal phases. If consumers must pay for these impacts (for example, through their electricity, gas, water, waste and sewerage bills), then they will have an incentive to purchase lower impact products.[3] Furthermore, manufacturers and other organisations will, in turn, have incentives to provide such information.[4]

Problems with Type I Eco-labels

Beyond the provision of such additional specific environmental information, there is a question as to whether it is desirable to provide an overall environmental 'seal of approval'. The answer to this is, in most cases, probably not. The reason is twofold: first there are problems of accuracy, second there are problems of interpretation. The problem of accuracy is manifold but includes especially difficulties establishing criteria that are accurate for each consumer and difficulties associated with changes in technology.

Establishing criteria that are accurate for each consumer means knowing that under any actual circumstances of production, distribution, use and disposal the eco-labelled product will be environmentally superior to similar non-eco-labelled products. This, in turn, implies having knowledge about the emissions associated with each product at each stage in its life-cycle. It also implies having knowledge about the impact of these emissions. Finally, it implies that these impacts can be compared or weighed-up against one another and against other effects, such as differences in the pattern of resource use. Unfortunately, it is not possible to know any of these facts. Emissions during distribution, use and

[3] A problem arises from the fact that in many cases consumers are not required to pay for the use of discrete amounts of such things as waste disposal and water (being charged, instead, a flat annual fee). This problem can only be remedied by introducing appropriate charges; merely providing information regarding possible impacts is not enough because most consumers will still have perverse incentives to buy cheaper, less efficient products.

[4] If a consumer is interested in how much water a particular product will consume during use then that consumer is likely to search for such information. If neither the manufacturer nor an independent third party organisation provides such information, the consumer is likely to assume that the manufacturer is not interested in providing the information and conclude that the performance of that product is lower than that of the competitors' product, which is labelled with the information.

disposal will depend on how, when and where the product is distributed, used and disposed; these facts are known only by the distributors, users and disposers of the product, not to the manufacturer, still less the person setting the criteria for the eco-label authority. The impact of emissions will also depend on where and when they take place, facts which are not known to the person setting the criteria. The relative importance of different impacts is a matter of subjective evaluation and will depend on the tastes of those affected, not on the tastes of those setting the criteria.

Companies are constantly developing new technologies. Because of commercial pressures to reduce cost, many such technologies use fewer resources during production and/or distribution and/or use than earlier ones. Criteria for eco-labels are either based on technologies that are available or on someone's estimate about what can be produced. They are unlikely to be based on technologies that are in development (although this is not impossible). Even if they are based on certain technologies that are in development, they are likely to exclude other technologies that are also in development and which might provide environmental benefits. Moreover, the criteria are likely to exclude technologies that have not yet been conceived (and hence are not even in development). The problem is that it is not possible to know *a priori* which technologies are superior (commercially or environmentally), so criteria can never provide appropriate dynamic incentives to produce superior technologies.[5] Furthermore, changing criteria to take account of improvements in product technologies is a costly and time-consuming process - and is likely to slow down the process of product development. Where a manufacturer has both eco-labelled and non-eco-labelled products on the market, it is likely to include new technologies in the non-eco-labelled product earlier than in the eco-labelled product. This is likley in some cases to result in the rather bizarre situation that for most consumers a non-eco-labelled product is environmentally preferable to an eco-labelled product from the same manufacturer.

An interesting example of the impact of lock-in by eco-labelling occurred in Sweden, where detergent manufacturers were essentially forced (by a coalition between an environmental organisation and various retailers) to put eco-labels on their products. As a result, the detergent manufacturers did not introduce various new technologies (in particular, certain types of the surfactant LAS) which are more efficient and potentially have a lower environmental impact (Ericson, 1998).

The problem of interpretation is twofold. First, there is the problem of understanding: where the only environmental information provided on the product is a Type I eco-label, how does one ensure that those consumers for whom the seal does not apply understand that the seal does not apply to them? Perhaps the answer lies in having both Type I and Type II (or Type III) eco-labels. Unfortunately, this runs into the second problem: confusion. Consider a product that has specific information about the environmental impact of a product during the use phase (a Type II eco-label) but also claims to be environmentally superior to other products in its class (it has a Type I eco-label). For any particular consumer the product may be inferior environmentally (that is to say: given the particular location of the consumer, his use of the product and her method of disposal, another product would have a lower environmental impact according to her own subjective evaluation). Which label is the consumer to believe? It seems likely that she will prefer to believe the Type I eco-label because it requires less thought. That consumer will be misled.

[5] If it was possible to have such knowledge, research budgets could be slashed! As one sage noted: it is easy to predict the past; the future is more problematic.

Problems with Type II and Type III Eco-labels

There are clearly significant problems associated with Type I eco-labels and whilst Type II and Type III eco-labels are not perfect they seem to be at least superior in many respects. Nevertheless, there remains the possibility that Type II and Type III eco-labels might be confused for a Type I eco-label (Wynne, 1993). This problem is less likely to arise for a voluntary eco-label, since manufacturers and third party certifiers will have strong incentives to explain the meaning of the information provided. The problem is more likely to arise with a mandated eco-label, since manufacturers will have little individual incentive to explain the meaning of the label and government may not have the resources to do so.

Conclusions

Governments around the world have blithely assumed that the lack of producer demand for Type I eco-label schemes is an instance of 'market failure'. This is not so: the lack of support for such schemes by producers in most countries results from valid concerns regarding the truthfulness of the information that would be provided and the impact on product development that would occur. The analysis presented here suggests that eco-label schemes should not be encouraged by governments. Specifically, governments should not sponsor such schemes, nor should they encourage or require procurement of products that are thus labelled. This is particularly true for Type I eco-labels. Provision of environmental information should be voluntary. There may be a role for the state in ensuring that manufacturers' claims are valid.

References

Beltrami, R. F. and Stafford, E. R. (1993): 'Comprehension and Perceived Believability of Seals of Approval Information in Advertising,' *Journal of Advertising*, vol. 22 (3), pp. 3-20

Ericson, P. (1998): *Eco-label Case Study No.1: Detergent Eco-labels in Sweden*, London: Institute of Economic Affairs.

Klein, B. and Leffler, K. B. (1981) 'The Role of Market Forces in Assuring Contractual Performance,' *Journal of Political Economy*, vol. 89, pp. 615-41.

Laric, M. V. and Sarel, D. (1981): 'Consumer (Mis-)perceptions and Usage of Third Party Certification Marks, 1972 and 1980: Did Public Policy Have an Impact?' *Journal of Marketing*, vol. 45 (3), pp. 135-42.

Morris, J. (1997): *Green Goods? Consumers, Product Labels and the Environment*, London: Institute of Economic Affairs.

Robertson, K. R. (1987): 'Recall and Recognition Effects of Brand Name Imagery,' *Psychology of Marketing*, vol. 4, pp. 3-15.

Schiffman L.L. and Kanuk L.L. (1994) *Consumer Behavior*, London: Prentice Hall.

Wynne, R. D. (1993): 'The Emperor's New Eco Logos?: A Critical Review of the Scientific Certification Systems Environmental Report Card and the Green Seal Certification Mark Programs,' *Virginia Environmental Law Journal***,** vol. 14, pp. 51-149.

Eco-labelling scheme: an Indian experience, *by Ajay Aggarwal[6], M.Q. Ansari[7] & Sudhir K. Ghosh[8]*

Introduction & background

The Government of India launched the Ecomark Scheme in 1991 for easy identification of environment-friendly products. Any product, which is made, used or disposed off in a way that significantly reduces the harm it would otherwise cause to the environment, could be considered as an environment friendly product. Any product with the Ecomark will be the right environmental choice.

An earthen pot has been chosen as the logo for the Ecomark scheme in India. The familiar earthen pot uses a renewable resource like earth, does not produce hazardous waste and consumes little energy in its making. The logo for the Ecomark Scheme, signifies that the product which carries it does least damage to the environment.

There are three national level committees involved for the development of Ecomark criteria and award of the eco-logo:

i. Steering Committee, in the Ministry of Environment & Forests,

ii. Technical Committee, in the Central Pollution Control Board, and

iii. The Bureau of Indian Standards.

Status of Indian Eco-labelling scheme

The Ecomark Steering Committee set up in the Ministry of Environment & Forests (MoEF), in the first meeting held on March 14, 1991, recommended to take up sixteen product categories for the development

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6. Shri Ajay Aggarwal, Environmental Engineer, has been working in the Central Pollution Control Board (CPCB) since 1991. He has been actively associated, since inception of the scheme, with the technical and scientific matters of the Ecomark Technical Committee, set up in CPCB for the purpose of development of Ecomark criteria for various product categories. He also assists in the development of ISO 14000 series documents, in India. He completed B. Tech. degree in Civil Engineering from Institute of Technology, Banaras Hindu University and M. Tech degree in Environmental Engineering from I.I.T. Kanpur. Previously, he was working in Tata Consulting Engineers, Bombay.

7. Dr. M.Q. Ansari, Senior Scientist, has been working in the Central Pollution Control Board (CPCB), since 1989, and has been actively involved with the development of criteria for some of the important export oriented products like textiles, leather. He is also involved with the development of standard methods for environmental parameters and accreditation of environmental laboratories. He completed Ph.D. degree from Central Drug Research Institute (CDRI), Lucknow, in Microbiology. Previously he was working in National Institute of Cholera and Enteric Diseases, Calcutta.

8. Dr. Sudhir K. Ghosh has been working in the Central Pollution Control Board (CPCB) since 1984. He is head of the Division of Planning and Co-ordination as well as the Member Secretary of the Ecomark Technical Committee. He is doctorate in Plant Pathology and was awarded the French Government Postdoc Fellowship to carry out research on the plant diseases caused by mycoplasmas and allied pathogen. Previously, he was the head of the Division of Plant Pathology in the Kerala Forests Research Institute, India.

of Ecomark criteria, in the first phase. The Ecomark scheme is primarily a movement of consumers. Therefore, this scheme is confined to consumer products.

The first licence under the Ecomark scheme was granted in 1994, to a synthetic detergent meant for washing woollen and other delicate fabrics. However, till date this product is not being marketed with eco-logo, as the new owner of the brand has different business considerations from those of the parent company.

Issue of concern

Despite the fact that the scheme has been in operation for the last six years and the eco-guidelines have been developed more than 500 products, the scheme is yet to take-off in this country.

Though the Industry supports the objectives of the Eco-labelling scheme as one that encourages manufacturing of more environmentally improved products, there seems to be some difference of opinions in the mind of Indian industry about the approach in the development of Eco-standards. It looks that the industry in a seller oriented market like ours, is not sure about the impact of such schemes in their commercial benefits.

Recommendations for better implementation of the scheme

The Central Pollution Control Board organised a one-day Conference on "The Future of Eco-labelling in India" and tried to seek reasons for the scheme not taking off. The Conference was attended by the representatives of industries, consumer groups, government bodies and the subject matter specialists. The recommendations emerged for the better implementation of the scheme are as follows:

i) *Reorientation of rationale for Ecomark Criteria*

So far, the criteria for eco-labelling were mainly based on product composition. Henceforth, the criteria should be based on the life-cycle analysis studies of the product. Besides, the product's impact on health and safety may also be taken into account while developing the Ecomark criteria.

ii) *Priority product categories for Eco-labelling*

The emphasis on selection of product categories for laying down Ecomark criteria should be based, primarily, on products which have potential for adverse impact on environment due to their extensive use.

iii) *Incentives*

Appropriate incentives may be given to the manufacturers atleast at the initial phase of the scheme so that extra cost, if any, incurred on manufacture of environment-friendlier products is neutralised.

iv) *Mass awareness programme*

Long and short term awareness programmes should be launched to popularise the Ecomark Scheme and to develop a strong market force for Eco-labelled products.

v) *Preferential Purchase Policy*

Government should insist on bulk purchase of Eco-labelled products by Railways, Defence and other Public Sector units.

vi) National Eco-Labelling Board

To simplify the procedure and to bring all the activities of eco-labelling under one umbrella, the creation of an independent 'National Eco-labelling Board', in future was recommended. The Board should be financially a self-supporting registered body or Trust. It can start with the seed money from the Consumer Welfare Fund or the Industry Associations.

Conclusion

At present, none of the products is marketed under Eco-labelling scheme in India. One must appreciate the fact that the success of the Ecomark Scheme depends upon the industries' willingness to get their products labelled with Ecomark. This issue has been debated in the various meetings of the Ecomark Committees as well as in the various seminars held on the subject. The Central Pollution Control Board (CPCB), based on the issues emerged during a Conference on 'The Future of Eco-labelling in India', has recommended a set of suggestions for the better implementation of the scheme. Hopefully, the scheme will take-off in near future, by way of better understanding among the industry, consumer organisations as well as government bodies.

OPPORTUNITIES AND CONCERNS RAISED BY ECO-LABELLING SCHEMES

Contribution of the EU Committee of the American Chamber of Commerce in Belgium, *by Enrique Tufet-Opi, Lawyer*

The EU Committee of the American Chamber of Commerce in Belgium is the representative organization for European companies of American parentage with members of industry who manufacture and market products both inside and outside the EU. It has actively participated in consultation on eco-labels. For example, it contributed position papers to the EU Commission's consultation process when the eco-label was first proposed and in its implementation in the ensuing years.

We wish to take this opportunity to comment on what we believe are critical factors for a successful eco-label scheme.

The EU Committee believes that four principles should be the basis of any eco-label scheme:

1. First and foremost, eco-labelling schemes should be non-discriminatory and they must ensure that products from any country of origin can meet environmentally-based criteria. Environmental criteria that could become trade barriers must be avoided.

2. All stakeholders should be involved in the process of developing criteria.

   As an example of this, the proposed revisions to the criteria-setting process, including the proposed European Eco-label Organization (EEO), should guarantee that non-EU nationals can participate both through actual participation in the EEO itself and through an adequate notice and comment process. The EU Committee supports the European Commission's proposal to provide equal treatment to all parties as outlined in Annex IV of the proposed regulation. Only through the involvement of all stakeholders in the criteria development process can it be assured that EU eco-label criteria are non-discriminatory and do not restrict free trade.

   A self-declaration scheme, as is currently envisaged in ISO 14020 and 14021, has an important role in eco-label schemes. We believe Type1, third party verification scheme is unnecessarily expensive and burdensome on industry and question whether costs are proportionate to the benefits. Self-declaration has worked effectively in programs such as the US Energy Star program and has been advocated by the EU-US Transatlantic Advisory Committee on Standards, Certification and Regulatory Policy.

4. Regional and national eco-labelling schemes with different product requirements and/or standards in different jurisdictions have effects which, in certain cases, can result in the fragmentation of world markets; as well as leading to confusion for the end consumer. As noted above, the EU Committee prefers that schemes adhere to International Standards. Within Europe, for example, it believes that, if there is to be a harmonized EU eco-labelling scheme, then national schemes should eventually be phased out.

In addition to these four fundamental points, the EU Committee also believes that any eco-labelling scheme should be transparent, should not be administratively burdensome for industry and should not inhibit innovation.

The EU Committee believes a need to assess the real contribution of eco-labels to solving environmental problems or to promoting environmental progress, and welcome the opportunity to debate this at the OECD conference.

Sustainable consumption and eco-labelling, *by Frieder Rubik, Institut für ökologische Wirtschaftsforschung (IÖW) gGmbH*

The recent environmental discussion looks also on the consumer side and their importance for a sustainable development. The catchword of „sustainable consumption“ was introduced. OECD (1997, p. 21) defines sustainable consumption according to the Oslo symposium of 1994: „the use of services and related products which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of future generations“.

Eco-labelling is an important tool within the set of product-policy instruments (see Oosterhuis/Rubik/Scholl 1996). Altogether, these instruments should contribute to a greening of the economy by considering the whole life-cycle of products. Eco-labelling is especially oriented - among others - to inform and support consumers in their choice of products to favour environmentally more friendly products. The criteria for labelling of products are in most cases based on some important environmental aspects. The success of the German eco-label is a result of its more easy to manage criteria selection. The problems of the European eco-label scheme are a result of the claim to consider the whole life-cycle of products. Obviously, there exists a trade-off between the necessary claim/approach and the manageability of an eco-label. This trade-off is also relevant for the sustainability debate and the role which eco-labels can play in the sustainable consumption debate.

However, given the case that eco-label should support the approach of sustainable consumption, the question is how eco-labelling can better support the strategy of sustainable consumption? Which roles play eco-labels at the moment? Do the criteria consider the topic of sustainability? What can be learned? What should be improved? What should be done?

The presentation is based on an empirical research which considers experiences with the German „Blue Angel“-label. This - ongoing - research which takes part within a research project on behalf of the German Federal Environmental Agency (UBA) evaluates the state of sustainable consumption at the example of selected consumption areas (detergents/cleansing products, heating).

The presentation stresses especially the contribution of the eco-label to sustainable consumption. It develops proposals for improvements. The proposals presented are:

Take a look at the users: The intention of the eco-label (easy to understand, a qualitative and clear mark) should not be changed. However, the claims and needs of different user groups (private consumers, trade, public procurers, business as procurer) have to be considered. Therefore, a double strategy is necessary: the existing eco-label (ISO-label Type I) should be supplemented with a more quantitative information (ISO-label Type III). This double strategy can realise a double dividend: continuation of the successes with regard to consumers, but also specific additional information for specific information needs of other important actors.

Integrate eco-labelling in the plethora of product-policy instruments: eco-labelling can be improved by a clarification of its relationship with other instruments of product-policy. The strengths of eco-labels can be supported, the weaknesses reduced.

Consider the sustainability approach in the concept: sustainability is based on three „columnus“, namely ecology, economy and social issues. It should be refelected if and how the eco-labelling approach can answer to this demand. Is an approach called „Sustainable labelling“ a new challenge?

Literature:

OECD (1997): Sustainable consumption and production. Paris: OECD

Oosterhuis, Frans / Rubik, Frieder /Scholl, Gerd (1996): Product Policy in Europe: New Environmental Perspectives. Dordrecht (NL): Kluwer Academic Publishers

Eco-labelling and the World Trade Organization, *by Doaa Abdel Motaal*[9]*, WTO*

I. Context of Discussions on Eco-labelling in the WTO

Eco-labelling is discussed in the World Trade Organization (WTO) in the Committee on Trade and Environment (CTE) and the Committee on Technical Barriers to Trade (CTBT). In the CTE it is examined within the broader context of all product-related environmental requirements, and in the CTBT within the context of the Agreement on Technical Barriers to Trade (TBT). At issue in the WTO is the extent to which eco-labelling schemes are covered by and are consistent with the provisions of the TBT Agreement. From an environmental perspective, the WTO consistency of these schemes is important to establish in order to provide environmental policy makers with the security that their policies do not run counter to international trade rules, and cannot be reversed by WTO member governments. From a trade perspective, ensuring their WTO consistency is needed to prevent them from becoming barriers to trade.

In its conclusions and recommendations to the 1996 Singapore Ministerial Conference, the CTE stated that "Well-designed eco-labelling schemes/programmes can be effective instruments of environmental policy to encourage the development of an environmentally conscious consumer public".[10] However, a number of concerns were expressed regarding the employment in these schemes of criteria related to processes of production that do not affect the final product; the extent to which they discriminate between imported and domestically produced products, as well as between various imported products; and their transparency.

Two main questions have been raised by WTO members (quite different ones) with respect to eco-labelling schemes. The first has been related to the coverage of the TBT Agreement, where some members have questioned the extent to which the Agreement covers measures such as eco-labelling schemes. The second has been related to the consistency of eco-labels with the provisions of the TBT Agreement, where other members have argued that they are inconsistent and that the issue is not one of "coverage" at all. Discussed with respect to both these viewpoints has been the extent to which such schemes differentiate between products on grounds that are accepted by the WTO. As this is an issue of fundamental importance to the international trading system, it has proved to be extremely controversial.

Until today, no firm decision on the WTO coverage and consistency of eco-labels has been taken. However, the extensive discussions undertaken in both the CTE and CTBT on this subject have served to flush out the links between international trade rules and eco-labels, and have raised awareness of the need to make both trade and environmental policies compatible as well as mutually supportive.

II. The Agreement on Technical Barriers to Trade

Legal analysis of the WTO consistency of eco-labelling schemes has taken place under the framework of the TBT Agreement, and has involved discussion of (i) the meaning of voluntary product requirements under the Agreement, and (ii) the concept of 'like products' incorporated in GATT Article I, the most-favoured nation clause (m.f.n.), and Article III, the national treatment clause, which together constitute the

[9] This document is prepared on the sole responsibility of the WTO Secretariat, and has not been written on behalf of WTO members.

[10] CTE (WT/CTE//1). Report (1996) of the Committee on Trade and Environment. November 1996.

WTO's principle of non-discrimination. The non-discrimination principle is itself embraced by the TBT Agreement.

As most eco-labelling schemes are voluntary, discussions have focused on the rules of the WTO in relation to voluntary measures. Under the TBT Agreement, technical requirements are divided into two categories, those that are mandatory (known as 'technical regulations'), and those that are voluntary (known as 'standards'). A standard is defined as a:

> "Document approved by a recognized body, that provides for common and repeated use, rules, guidelines or characteristics, for products or related processes and production methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method."[11]

The first issue addressed within the context of the TBT Agreement has been the extent to which eco-labels fall under the purview of the Agreement by meeting its definition of a standard (i.e. the Agreement's coverage). Prior to examining why this has been a controversial issue, the provisions of the TBT Agreement with respect to standards will be briefly laid out.

Provisions of the TBT Agreement with Respect to Standards

While technical regulations are dealt with through the main body of the TBT Agreement, standards are addressed through a Code of Good Practice that is annexed to it (Annex 3). The Code is open to acceptance by governmental as well non-governmental standardizing bodies at the national and regional levels. Under Article 4.1 of Agreement, members are requested to take "such reasonable measures as may be available to them" to ensure that local and non-governmental standardizing bodies accept and comply with the Code. In addition, the Article states that "The obligations of Members [i.e. WTO Member governments] with respect to compliance of standardizing bodies with the provisions of the Code of Good Practice shall apply irrespective of whether or not a standardizing body has accepted the Code of Good Practice." Until today, no formal disputes have arisen in the WTO with respect to the Code.

The TBT Agreement subjects standards to a number of principles. First, they must prepared, adopted and applied in a non-discriminatory fashion. In other words, they must not accord less favourable treatment to like imported products, or to imported *vis-a-vis* like domestically produced products (the Agreement therefore incorporates both the m.f.n. and national treatment clauses). Second, standards must not constitute unnecessary obstacles to international trade.

Third, if international standards exist, standardizing bodies must use them, unless they are deemed to be either ineffective or inappropriate. Such a call for harmonization is made in order to avoid creating undue layers of technical requirements, and to encourage the adoption of ones approved by the international community. Fourth, WTO members are encouraged to enter into mutual recognition agreements with respect to the conformity assessment procedures they apply to their standards. Finally, the Agreement calls for the transparency of standards through the establishment of a procedure for their notification when they are still at a draft stage, and through the creation of enquiry points to respond to questions posed in their regard.

[11] Annex 1 of the Agreement on Technical Barriers to Trade on *Terms and Their Definitions for the Purpose of this Agreement.*

Concerns Raised Under the TBT Agreement

As voluntary product environmental requirements, it would seem logical that eco-labels be considered 'standards' under the TBT Agreement. However, disagreement has arisen on this issue in the WTO because of the fact that most eco-labelling schemes are based on product life cycle analysis (LCA). LCA is a tool which examines the environmental impact of products during the sourcing of raw materials, production, consumption and disposal. Particularly controversial in the WTO has been the fact that LCAs extend their assessment of environmental impacts to the production stage. While WTO members agree that processes and production methods (PPMs) that have a impact on the final product are allowed by the TBT Agreement (referred to as incorporated PPMs), there is disagreement as to whether PPMs with no effect on the final product are (unincorporated PPMs).[12]

According to the Agreement, a standard is a document that sets out rules for products or *related* processes and production methods, and it is the term 'related' that has been interpreted by some WTO members to exclude unincorporated PPMs. While WTO members agree that incorporated PPMs are clearly covered by the Agreement, there is disagreement on unincorporated PPMs (such as in LCAs). Those who believe that they are not covered, argue that eco-labels are neither consistent nor inconsistent with the Agreement, they simply fall outside its scope. Questions have also been put forward on the extent to which eco-labels are approved by "recognized bodies" (i.e. on how eco-labelling organizations themselves are to be considered), which are the words used in the Agreement's definition of a standard.

The second, and quite different, issue raised in the context of the TBT Agreement has been the compatibility (and consistency) of LCA with the concept of 'like products', a concept that forms the backbone of the WTO's non-discrimination principle. Under the m.f.n. clause, WTO members must accord treatment that is no less favourable to 'like' imported products. Under the national treatment clause, they must accord treatment that is no less favourable to imported products than that which they give to 'like' domestically produced products. As previously stated, the principle of non-discrimination is itself incorporated in the TBT Agreement. Some WTO members have questioned the extent to which the trading system (particularly the TBT Agreement) allows for the likeness of "products" to be extended to cover the likeness of "PPMs" (i.e. the extent to which products may be differentiated based on production criteria that do not affect their characteristics). Those who have argued that it does not allow for such a distinction between products, have stated that eco-labels based on LCA are inconsistent with the TBT Agreement.

Examined in a number of different disputes under both GATT and the WTO, the concept of 'like products' has been assessed on the basis of product physical characteristics, end-use, tariff classification, competitiveness and substitutability, etc. However, there is disagreement as to whether the 'likeness' of products can be stretched to factor in unincorporated PPMs. Thus, while eco-labelling schemes that do not address PPMs, or that are based on incorporated PPMs are clearly allowed by the TBT Agreement, this situation is much less certain with respect to schemes based on unincorporated PPMs.

A number of other concerns were raised in the WTO with respect to eco-labelling schemes. Concerns regarding the ability of eco-labelling schemes to discriminate between products from different sources, and to be developed in an untransparent (opaque) fashion, were expressed. If eco-labelling schemes would be deemed to fall under the purview of the TBT Agreement, they would have to comply with its provisions

[12] An example of an incorporated PPM would be cotton grown using certain pesticides and which itself contains pesticide residues. An example of an unincorporated PPM would be cotton grown using certain pesticides but which does not itself contain any pesticides residues.

and that, in and of itself, would serve to ensure that they be prepared, adopted and applied in a non-discriminatory and transparent way. However, this issue has not yet been resolved.

The concerns raised with respect to discrimination have included the fact that eco-labels may discriminate between imported and domestically produced goods if local industry influences the choice of products they cover, as well as the selection of criteria on which they are based. Criteria could, for example, be selected which foreign producers could not reasonably meet. Eco-labels may also discriminate against foreign producers in the process of conformity assessment by, for instance, placing undue restrictions on the conformity assessment bodies to be used. In short, they could become the subject of protectionist abuse. The concerns raised with respect to transparency have included that a lack of transparency could prevent foreigners from participating in product selection and criteria development. A situation which could result in exporters being faced with 'surprise' standards and, thus, 'surprise' adaptation costs.

With respect to transparency, discussion has also been undertaken on the extent to which the transparency provisions of the TBT Agreement would need to be modified to deal with eco-labels, if it was to be decided that they fall within its scope. For instance, while the TBT Agreement calls for the notification of standards at a draft stage to allow WTO members to comment on them and to have these comments be taken into account, one WTO member argued that this would not work for instruments based on LCA, since the expenses involved in conducting LCAs (even when still at a draft stage), would make their revision economically unrealistic.

'Like Products' and Life Cycle Analysis

As is clear from the above presentation, the issue of how to distinguish between products, and the methods that are and are not accepted by the WTO, has been at the heart of the eco-labelling debate. The issue of LCA and its coverage by the TBT Agreement, is reflective of how products are defined differently for different purposes. From an environmental perspective, LCA is an important environmental policy making instrument. In the context of eco-labelling, it provides consumers with information about, amongst other things, PPMs, so they may distinguish products that have harmed the environment during production from those that have not.

A number of arguments, however, may also be made to support the prevention of product differentiation on the basis of unincorporated PPMs. The first of these is a political one, and has to do with the need to preserve territorial sovereignty. To prevent discrimination between products on the basis of unincorporated PPMs, is to prevent intervention from the outside in rules-setting within national boundaries. It is precisely due to the ability of the WTO to offer such security to its members, that its membership has expanded to embrace the large number of countries that it currently does. Had this principle been put into question, the benefits brought about by the 50 years existence of the multilateral trading system may not have been reaped.

The second argument is an economic one. The prevention of product differentiation based on unincorporated PPMs allows countries to set standards, whether environmental or otherwise, that are appropriate for their level of development, rather than having inappropriate ones imposed on them from the outside (with respect to the environment, this is an argument that environmental economists themselves make). In other words, it allows countries to trade their developmental needs against their needs for environmental protection in a manner that is consistent with how they themselves value these needs (and not on the basis of how others value them for them). The third and final argument is an environmental one. By preventing the imposition of one country's environmental standards on another, differences in environmental absorptive capacities, priorities and problems in different parts of the world can be taken into account.

III. Viewpoints Expressed in the Committee on Trade and Environment

Most of the substantial discussions on eco-labelling in the CTE have taken place prior to the 1996 Singapore Ministerial Conference. It is the main views expressed in these discussions that are presented in this section.[13] While it is often stated that a North-South divide characterises trade and environment discussions in the WTO, this assertion is frequently a misrepresentation. Numerous standpoints have been taken in the CTE on the extent to which eco-labels are covered by and are consistent with WTO rules, and several proposals have been put forward on how to accommodate the trade concerns which they raise. While it may be argued that there is a distinctly Southern in the CTE on this issue, it cannot be stated that a distinctly Northern viewpoint has emerged.

Important to note, is that during the CTE's discussion of this issue, a number of delegations stressed the utility of eco-labelling schemes as instruments of environmental policy.

A number of different positions on eco-labelling were taken in the CTE, which have included that:

(a) Eco-labels **are both covered by and are consistent with** the TBT Agreement;

(b) Eco-labels **are not covered** by the TBT Agreement, but **scope needs to be created** for them;

(c) Eco-labels **are not covered** by the TBT Agreement, and **creating scope for them could endanger the trading system**. Tremendous care should be exercised in how this issue is addressed in future. A combination of increased transparency, equivalence and mutual recognition could help alleviate their effects on trade.[14]

(d) Eco-labels **are inconsistent with** the TBT Agreement, and **should not find any accommodation** within the WTO system. A combination of increased transparency, equivalence and mutual recognition could help alleviate their effects on trade.

The principal advocate of position (a), a developed country, argued that despite the WTO Secretariat's finding that the negotiating history of the TBT Agreement upholds the view that unincorporated PPMs are not covered by the Agreement,[15] all standards (whether based on incorporated or unincorporated PPMs)

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[13] These have been extrapolated from the following summary records of CTE meetings: WT/CTE/M/5 (30 November 1995), WT/CTE/M/6 (17 January 1996), WT/CTE/M/7 (22 March 1996), WT/CTE/M/8 (11 April 1996), WT/CTE/M/10 (12 July 1996), WT/CTE/M/11 (22 August 1996), and WT/CTE/M/12 (21 October 1996).

[14] Equivalence means the acceptance by a country of another country's standards or regulations as equivalent to its own, even they are different, provided that they adequately fulfill its objectives. Mutual recognition in the context of eco-labelling schemes generally means that, if certain conditions are met, qualifying for the eco-label of an exporting country becomes an acceptable basis for the award of the eco-label used in the importing country.

[15] CTE/CTBT (WT/CTE/W/10). Negotiating History of the Coverage of the Agreement on Technical Barriers to Trade with Regard to Labelling Requirements, Voluntary Standards, and Processes and Production Methods Unrelated to Product Characteristics. August 1995.

fall under the scope of the Code of Good Practice, including eco-labels. However, it stated that there is a need to amplify existing transparency provisions in their regard.

It argued that greater transparency is needed with respect to: (i) the design of eco-labelling programmes, their statutory or regulatory basis and procedures for input from interested parties, (ii) the selection of products being considered for an eco-label, (iii) the LCA used to develop criteria, (iv) draft criteria for new or revised product groups, and (v) documentation on how the criteria are to be implemented. While the existing transparency provisions of the TBT Agreement could adequately address these different stages, it argued that they also need to be tailored to the specifics of eco-labelling schemes. For instance, while standards under the Agreement must be notified at a draft stage to provide opportunity for comments, it questioned whether this would work with eco-labels based on LCA.

The position of another developed country was in between (a) and (b). It argued that the TBT Agreement could be interpreted to cover the use of certain standards based on unincorporated PPMs in voluntary eco-labelling programmes, provided that these programmes were developed according to multilaterally agreed guidelines consistent with the basic obligations of GATT and the TBT Agreement. Guidelines developed by the International Organization for Standardization (ISO) on environmental labelling, could for instance be used. In reaction to this proposal, concerns were expressed (particularly by developing countries) about the use of ISO guides on the grounds that not all WTO members participate in ISO, and that its decision making process is not consensus based.

Another developed WTO member adopted a position that was more clearly in line with position (b). On the basis of the document prepared by the WTO Secretariat on the negotiating history of the TBT Agreement, it argued that unincorporated PPMs do not appear to be covered by the Agreement. However, it put forward two proposals for addressing the issue: (i) seeking full coverage by the TBT Agreement of voluntary eco-labelling schemes based on LCA, or, in the alternative, (ii) negotiating a Code of Conduct specifically targeted at eco-labelling schemes. The advantage of the latter, would be that it would allow WTO members to tailor a new instrument to suit eco-labels.

Other developed countries took position (c). One argued that while eco-labels addressing incorporated PPMs are clearly covered by the TBT Agreement, a broad interpretation of the Agreement to cover unincorporated PPMs raises concerns. Expanding the scope of the TBT Agreement to cover such PPMs could have far reaching ramifications for the entire WTO system, extending beyond the issue of eco-labelling. However, it argued that information was the most important issue relating to voluntary labelling, and requested the CTE to increase the transparency of voluntary eco-labelling schemes, including those that are based on unincorporated PPMs.

Another developed country (also taking position (c)) was of the view that eco-labels based on unincorporated PPMs raise significant trade concerns. When based on the environmental conditions and priorities of importing countries, they risk being ineffective and irrelevant to the environmental protection needs of exporting countries. The schemes can be based on criteria which foreign producers cannot reasonably satisfy. Therefore, unincorporated PPMs can affect the competitive opportunities of foreign producers and can mislead consumers into rejecting products that are environmentally equal or superior to domestic products. It argued that work is needed on the transparency and mutual recognition of labelling schemes.

Most developing countries adopted position (d), arguing that the TBT Agreements prohibits the use of standards based on unincorporated PPMs. This is the case as its definition of standards does not embrace those that are based on such PPMs, and because GATT/WTO jurisprudence on the term 'like products' does not allow for product differentiation on these grounds. They argued that it is unacceptable for

products to be judged based on environmental impacts that could be limited to exporting countries alone. Accommodating unincorporated PPMs under the TBT Agreement would amount to creating scope for the extraterritorial imposition of national standards, and this would have significant consequences for the trading system as a whole. A need to provide developing countries with technical assistance to meet the requirements of eco-labelling schemes was also mentioned.

Several developing countries stressed the importance of the role that equivalence and mutual recognition could play in helping them more easily meet the requirements of foreign schemes. One delegation pointed to the proliferation of different schemes for the same products based on conflicting criteria, and the dangers that such a situation could pose.

IV. The Triennial Review of the Agreement on Technical Barriers to Trade

At the end of 1997, the CTBT conducted its first Triennial Review of the TBT Agreement. A number of issues emerged from the Review which may be important to future discussions on eco-labelling in the WTO. Most notable amongst these were two of the proposals that were made in follow-up to the results of the Review.

One WTO Member argued that improvements could be made to the process of international standards development. While the TBT Agreement contains transparency provisions for standards, technical regulations and conformity assessment procedures, for instance, it does not contain similar provisions for international standards. It stated that greater transparency is necessary, and that attempts must also be made to ensure that the international standardization process represents the interests of all parties concerned. While the premise of the TBT Agreement is that international standards are rebuttably presumed not to create unnecessary obstacles to international trade, it contended that there is a need to examine the difficulties and trade effects which they create. The proposal was supported by a large number of delegations, and the considerations which it raised were included in the results of the Triennial Review.[16]

With respect to eco-labelling, this proposal could have interesting consequences. ISO's Technical Committee 207 on Environmental Management has been working on, amongst other issues, the development of international standards in the field of eco-labelling. These have ranged from general principles that eco-labelling schemes may follow, to principles on how to conduct LCA. While a developed country had argued in the CTE that the TBT Agreement should be interpreted as creating scope for eco-labels based on multilaterally agreed guidelines (such as ISO standards), numerous countries (particularly developing countries) rejected the proposal on the grounds that the process of international standardization was not sufficiently representative and was not consensus based. If the process of international standardization was to be reexamined, however, it is possible that agreement on the use of international eco-labelling standards could in future be obtained. However, while this is a very significant development, it does not promise to deliver short-run solutions.

During the Triennial Review, another important proposal emerged. A WTO member argued that while the TBT Agreement calls upon WTO members to give positive consideration to accepting as equivalent the technical regulations of other members, the Code of Good Practice does not contain a similar provision with respect to standards. It urged the CTBT to examine this issue further, and its concerns were expressed in the results of the Triennial Review. Once again, this is likely to be a significant development

[16] CTBT (G/TBT/5). First Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade. November 1997.

for eco-labelling schemes since a number of delegations highlighted that equivalence and mutual recognition could be key to alleviating their trade effects.

With respect to the transparency of eco-labelling schemes, the CTBT (within the context of the Triennial Review) concluded that:

> "In order to improve the transparency, acceptance of, and compliance with the Code [of Good Practice], the Committee agreed to the following:
>
> ...(e) without prejudice to the views of Members concerning the coverage and application of the [TBT] Agreement, the obligation to publish notices of draft standards containing voluntary labelling requirements under paragraph L of the Code is not dependent upon the kind of information provided on the label" (see footnote 7).

The exact meaning of this decision can, of course, only be interpreted by WTO members themselves. However, it represents an attempt by the CTBT to address the transparency concerns that had been raised with respect to eco-labelling schemes, without prejudging whether or not they are allowed or covered by the TBT Agreement.

V. Moving Forward

In its conclusions and recommendations to the Singapore Ministerial Conference, the CTE stated that the starting point for addressing eco-labels in the WTO should be to increase their transparency. To some extent this appears to have been achieved by the CTBT in its above-mentioned decision on notification. However, while concerns were voiced in the CTE on the extent to which existing transparency provisions were suited to the set-up of eco-labelling schemes, these have yet to be addressed.

A number of delegations indicated the importance of equivalence and mutual recognition in addressing the trade concerns raised by eco-labelling schemes. The United Nations Conference on Trade and Development (UNCTAD) has conducted important work in this area, which may eventually contribute to resolving the issue.[17]

With respect to eco-labelling criteria based on unincorporated PPMs, UNCTAD argues that when these PPMs result in intrinsically local environmental problems in the producing country, the eco-labelling programmes of importing countries could accept as equivalent PPMs that are friendly to the domestic environment of the exporting (producing) country. These would be more suited to the producing country's environmental and developmental conditions. In addition, UNCTAD argues that in LCA, equivalencies may also be considered between product and process-related criteria. It states, for example, that with respect to waste generation, the volume and type of waste generated during production could be weighed against the recyclability and biodegradability of the product after disposal.

The framework laid out by UNCTAD for establishing equivalence could be extremely useful in addressing unincorporated PPMs that create local environmental problems. On the basis of equivalent criteria, mutual recognition agreements between existing eco-labelling schemes could also be negotiated. The development of international guidelines on equivalence and mutual recognition would be extremely useful in this regard.

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[17] UNCTAD. Trade, Environment and Development: Aspects of Establishing and Operating Eco-labelling Programmes. March 1995; and, Eco-labelling and Market Opportunities for Environmentally Friendly Products. October 1994.

With respect to unincorporated PPMs which create transboundary or global environmental problems, UNCTAD states that these would best be addressed through multilateral environmental agreements (MEAs). MEAs allow for the cooperative design of multilateral solutions to problems of international concern. They would be much more likely to achieve better and more coordinated results than a series of unilateral attempts through a divergence of eco-labelling schemes.

A large number of options, therefore, remain to explored for the successful resolution of eco-labelling discussions in the WTO. Regardless of which of these options is chosen, however, it is clear that greater national coordination between trade and environment policy makers needs to take place. Only through such coordination can problems be addressed at an early stage, and can trade and environment policies come to complement each other.

Contribution by AIM (European Brands Association), *by Katrin Recke*

Introduction

AIM is the European Brands Association and represents, through its member associations and companies, 1600 manufacturers of branded consumer goods - the well-known brands bought every day by millions of consumers. It is these branded daily consumer goods which are the current focus of Eco-labelling initiatives, and AIM therefore considers itself as an important stakeholder in the debate.
AIM has assembled the experience of those of its member companies who have been involved in Eco-labelling schemes at European and national level. This experience stretches across a wide range of categories, covering detergents, cosmetics, paper products and batteries. It includes extensive experience of AIM members in the development of criteria against which products should be assessed, and actual market experience of using Eco-labels in Sweden and Germany.

Success factors for eco-labelling schemes

AIM members fully support the basic objectives of Eco-labelling: reducing environmental impact of products and providing consumers with relevant information. But AIM has, nevertheless, become convinced that, for fast moving consumer goods at least, current routes chosen to achieve these objectives are fundamentally flawed.
AIM has established the following requirements which any proposal for Eco-labelling or similar schemes should fulfil if they are to be successful and meaningful.
1. Does the content of the proposals make a measurable contribution to solving real environmental problems ?
2. Does the initiative take account of the entire life cycle of the product involved and is there consensus among all stakeholders on the overall rationale on which the proposal is based ?
3. Does the proposal involve all participants, over the entire life cycle in the reduction of environmental impacts, and is this shared responsibility transparent and practical?
4. Does the proposal encourage continuous improvement and not inhibit the development of innovative solutions ?
5. Does the proposal allow voluntary participation and is it non-discriminatory?
6. Does the proposal conform to EU and WTO legal frameworks and in particular not impede the free movement of goods?
7. Does the proposal operate at a cost proportional to the real benefit delivered and is bureaucracy minimised ?

Shortcomings of current Eco-labelling schemes

When assessing current Eco-labelling schemes, branded goods manufacturers conclude that the above requirements are not necessarily fulfilled:
Existing eco-label mechanisms to help the consumer make environmentally based decisions tend to be oversimplistic and therefore do not bear any relation to the complexity of environmental science.
The contribution of Eco-labels for fast-moving consumer goods to solving global environmental problems seems negligible.
The criteria so far developed focus too narrowly on product design and ignore other factors, such as the way in which the product is used.
All current Eco-label schemes work on a pass/fail basis of environmental hurdles for product composition, thus creating *de facto* product standards which can inhibit the manufacturer’s ability to innovate.

Current Eco-labelling schemes in Europe are regarded abroad as creating a technical barrier to trade under the WTO agreements.
The development of criteria and administration of Eco-labelling represents a heavy bureaucratic burden on both authorities and business and the associated costs are out of all proportion to the achievable benefit.
Alternative ways of providing consumers with environmental information
Based on this analysis and on the above-mentioned requirements, AIM believes that other routes to achieve environmental impact reduction and to inform consumers need to be explored, such as possibly:

A. Environmental claims (ISO type II approach)

This approach would consist of harmonising at European and international level all claims related to the environmental properties of a product. Once this list is agreed, it would be left to industry to use those claims which are appropriate for their products. Whenever a claim is used it has to be substantiated and verifiable.

B. Eco-profiles (ISO type III approach)

This approach consists of laying down a number of environmental criteria on which industry has to demonstrate progress. These environmental criteria should reflect the main environmental problems society is facing today. It does not fix any environmental pass/fail hurdles, but prioritises and harmonises the presentation of information to consumers.

C. Environmental management, including product impacts

This approach is based on self-regulation and is inspired by environmental management systems, reflected in ISO 14000 and EMAS. It consists of expanding on the product-oriented section of environmental management systems, which are today mainly focussing on processes. The Dutch government, supported by the Dutch industry, is currently examining this type of approach, which is based on entire LCA and company-determined continuous improvement.

D. Voluntary codes of conduct

This approach is based on a partnership model between manufacturers, consumers and third-party stakeholders and envisages progress in reduction of environmental impact by the identification of issues to be addressed, the harnessing of manufacturers' product design expertise, together with the application of environmental science and consumer involvement. Environmental concerns, improvement opportunities and consumer information schemes are identified through a dialogue process between manufacturers and stakeholders.

Environmental labelling in product chain management, *by Eva Heiskanen, Helsinki School of Economics, Dept. of Management*

It is increasingly understood that market-driven environmental improvements in products require the co-operation of many actors in the product chain: manufacturers and their suppliers, trade and organizational buyers, and final consumers. Environmental information needs to be incorporated in the everyday information flow between economic actors. Economic actors also have to agree on what constitutes an environmental improvement. Such management of environmental issues in an interorganizational context may be termed product chain management. The present paper investigates the role of environmental labeling in product chain management: how it contributes to the flow of environmental information, and how it helps build consensus on environmental goals

The observations presented in this paper are based on a research study ”Environmental Improvement in Product Chains”, conducted in Finland and Sweden by the International Institute for Industrial Environmental Economics, Lund, the Helsinki School of Economics and Business Administration, and the Finnish National Consumer Research Centre. The study investigated the environmental awareness and priorities, current information flows, and perceived roles of different actors in the product chain of consumer products. Actors included in the study were product manufacturers, retail buyers, salespeople, and ordinary consumers. The products considered included detergents, clothing, electrical and electronic appliances, furniture and paper products.

One important issue in the study was environmental labelling. The Nordic environmental labelling scheme has been in operation since 1990, as the first multi-national environmental labelling scheme. It operates in Sweden, Finland, Norway and Iceland, and more recently, in Denmark. The aims of the system are to promote environmental product development and to advise consumers to choose products with the lowest environmental impact within a product group. The system is governed by national environmental labelling boards, and by a common Nordic board. These boards approve the product groups to be included in the scheme, as well as the labelling criteria to be used. The labelling criteria are revised approximately every three years.

In Finland and in Sweden, the system is operated by the national standardization bodies. Producers may apply for use of the label (the Nordic Swan) if their products meet the pre-set criteria (existing for 44 product groups by the end of 1997). Labelling costs for licencees consist of application fees, annual licence fees (about 0.4% of turnover), and costs for testing and control that the labelling criteria are met. By the end of 1997, about one thousand licences to use the label had been awarded. However, in some product groups, very few labelled products were available.

Our study found that the role of environmental labelling varies between product groups. In some product groups, the Nordic Swan has gained a clear position in the everyday information exchange between market actors. This was the case, especially, for detergents and paper products. In Sweden, the retail trade has been very active in requiring environmental labels for detergents, and activity is rising in Finland, too. In contrast, no Nordic Swan labelled clothing are available in Finland, and only few in Sweden. For this product group, the Öko-Tex label is more influential. Few manufacturers of electrical and electronic appliances were interested in the Nordic Swan, either. This is due to the limited scope of the Nordic market: appliance manufacturers were more interested in the EU Eco-label, or labels applying to even broader markets. Some Swedish computer manufacturers oppose (third-party) environmental labelling, and are actively developing environmental declarations instead.

Environmental labelling seems to have a role in developing a shared understanding of what constitutes an environmentally sound product. At least in Finland, the labelling criteria were mainly considered reasonably relevant by all actor groups. While a large number of environmental aspects were seen as relevant for each product group by the different actors, a few commonly acknowledged aspects were found in each product group, and these mostly corresponded to the labelling criteria for the Nordic Swan. However, there was little consensus on long-term development priorities, which are not addressed by the labelling criteria, either. Consensus was not complete, either, as some critical comments were voiced also about the scope and relevance of the criteria, especially by manufacturers. In spite of this, many manufacturers stated that they use the criteria as benchmarks in product development, even when the label is not applied for.

Among many actor groups, knowledge regarding environmental labels was scarce. This applies, especially, to wholesale dealers, retail salespeople, small manufacturers and ordinary consumers. On the basis of the study, we recommend * targeted communication to the wholesale and retail trade, as these are the actors that will inform customers on environmental labels, and may also influence its popularity among manufacturers * more marketing about the purpose and usefulness of environmental labels to manufacturing companies, focusing on the purspose and benefits of the label, and on providing responses to potential reservations * activities to improve the credibility of environmental labels among consumers, including more information on the bases of the criteria for different product groups, and on how the verification process works.

Furthermore, the environmental labelling organizations should acknowledge their role in developing environmental criteria which market actors use as benchmarks, even when they do not apply for licence to use the label. The labelling process serves as one forum in which the various actors can work toward consensus on environmental goals and priorities in the different product groups. A large body of environmental information on each product group is assembled in the labelling process. Hence, the criteria should be marketed as an information source for purchasers and product developers.

BUSINESS AND INDUSTRY ADVISORY COMMITTEE TO THE OECD

COMITE CONSULTATIF ECONOMIQUE ET INDUSTRIEL AUPRES DE L'OCDE

BIAC statement

TO THE INTERNATIONAL CONFERENCE ON ECO-LABELLING FOR A SUSTAINABLE FUTURE

Berlin, 26-28 October 1998

The globalization of markets and trade has driven world economic growth, and augmented the sharing of environmental policies, practices, technologies and expertise across international boundaries. Increasing amounts of more accessible information about the environmental practices of corporations and the characteristics of products, greater multi-stakeholder cooperation, and rising public awareness of environmental issues have contributed to this trend. The development of new instruments by business - mainly within the framework of ISO - (i.e. EMS, LCA, risk-assessment etc.) supports the management and improvement of the ecological profile of products. By enhancing their ability to assess the environmental impacts of products – within single enterprises and along the entire life cycle – enterprises also create a broader basis for providing reliable and differentiated information on the ecological profiles of their products to their customers, to authorities and the public.

As a result, the market can now, more than ever, be an essential enabling vehicle for sustainable development, motivating cost effective approaches to environmental protection, driving innovation, and opening new opportunities to improve people's lives. However, it has also presented new challenges for governments, business, and other elements of civil society, as traditional policies and practices applied at a national or regional level may struggle to address environmental and social issues on this new global playing field.

In fostering progress towards sustainable development within a global economy, each societal partner has a variety of essential roles to play, roles that may go beyond current established practice. No single sector of society can stimulate change alone, nor can any single policy provide a panacea. This is particularly true for the use of market-oriented policy tools, such as environmental labels.

The stated objective of environmental labeling is to provide information to the public and to business-to-business customers about the environmental impacts of products and the ways they are designed, produced, distributed, used and disposed of. Such information can facilitate_environmental progress by enabling more informed consumer decisions. This overall objective is supported by most, if not all, manufacturers. However, it is essential that the information that consumers receive is credible, fact-based, not misleading, scientifically relevant, and accurate. This standard should be applied to all types of environmental labels.

Today, there are two primary forms of environmental labels – "seal-of-approval" programs, and "self-declared" environmental information. Manufacturers' experience around the world with some types of environmental labels, especially government sponsored seal-of-approval programs, has identified a

number of trade, consumer and environmental concerns with such programs. These may indicate that broad-scale use of such labels in their current form could be counter-productive, and has become more problematic in light of the trend towards more open markets and trade. In order to adequately address the potentially negative effects of government-sponsored seal-of-approval programs, they must meet a number of requirements:

- Their choice of criteria must be objective, based on scientific evaluation and analysis, not subjective judgement;

- They should educate consumers about the actual environmental attributes or tradeoffs associated with the products they purchase, and should not mislead consumers to buy products which may have an equal or greater environmental impact than their unlabelled counterparts.

- They must be based upon proper consultation with and participation from all stakeholders, including business;

- They should avoid the creation of potential barriers to trade by the use of criteria which are either intentionally or unintentionally protectionist in nature or contrary to WTO rules (which are not yet well developed in this area). This is particularly problematic where a program's criteria are based on a product's processing or production methods.

- As voluntary programs, they must avoid becoming commercially mandatory, for example, via government procurement or mandates by retailers.

Taken all together, these aspects have to be carefully considered in order to avoid hampering innovation for both environmental progress and product performance and to provide more informed consumer decision-making. We note that these concerns have been identified and discussed in a variety of fora, including the European Union, the WTO Committee on Trade and Environment, UNCTAD, OECD, ISO and the Trans-Atlantic Business Dialogue (TABD). In addition, the growing number of national and regional programs has raised challenges stemming from competition among various programs, causing confusion for consumers and manufacturers alike.

Because of their accountability to their citizens, governments therefore must ensure that there are sound science-based, cost-effective, voluntary frameworks that:

- assist customer and consumer choice;

- stimulate innovation; and

- resist protectionism and market distortion.

For both consumers and customers, making sound decisions means becoming informed about the environmental burdens and benefits of the products and services they use. Thus, based on experiences with virtually all other aspects of developing and selling products, industry believes that the preferred alternative to government sponsored seal-of-approval environmental labels is the direct sharing of factual environmental information with consumers and customers. For the market to function properly, enlightened consumer choice based on factual information is vital.

One key responsibility of companies in this context is to provide credible, relevant and accurate information about their products. For governments, strong enforcement of "truth in advertising" laws, especially as they apply to environmental information, (e.g., U.S. Federal Trade Commission (FTC) Environmental Marketing Guides, Canadian guidelines, and recent United Kingdom rules) is essential for the market to function properly. In addition, the appropriate use of new communication media like the Internet for factual information, third-party verification of information to the extent it is expected by consumers, and partnership with NGOs are all potentially useful and effective tools to help ensure the accuracy of information in the marketplace.

Conclusion:

Based on concerns with seal-of-approval environmental labeling programs, better approaches to informing consumers are needed. Labeling programs should assess their effectiveness, to better understand their achievements relative to consumer awareness and the environmental benefits which can be credited to their existence. Programs should focus on developing ways to provide relevant and factual information to consumers that help resolve the problems associated with traditional approaches.

For its part, business should become more pro-active in providing accurate and relevant information to consumers and society. Consumers and other stakeholder groups also must become knowledgeable enough to make informed decisions. Governments must enforce existing "truth in advertising laws" for all forms of environmental labeling, and support a full range of voluntary approaches that work with the market. In this way, all actors can work with, not against, trends of more open investment, better information flows and expanding global trade, which can help disseminate sustainable development practices, and improve the ability of the marketplace to enable environmental protection.

The Business and Industry Advisory Committee to the OECD (BIAC) was constituted in March 1962 as an independent organisation officially recognised by the OECD as being representative of business and industry. BIAC's members include the industrial and employers' organisations in the OECD Member countries. In the framework of its consultative status with the OECD, BIAC's role is to keep the OECD informed of the private sector's response to different policy options.

PROMOTING ECO-LABELLING SCHEMES

Promotion and diffusion of the Eco-label: a "network" model application in the EU, *by Marco Frey and Fabio Iraldo*

1. Introduction

IEFE (Institute for Energy and Environment Economics) of the Bocconi University, in partnership with CEEEM (centre for Environmental Economics and Environmental Management) of the University of Gent, recently carried out a project to promote and diffuse the EU Eco-label in Italy and Benelux (The Netherlands, Belgium and Luxembourg) on behalf of European Commission DGXI.E.4.

In order to fulfil these tasks, IEFE and CEEEM carried out two main activities:

1) an in-depth assessment of the past and current developments of the scheme in the target-countries. This assessment was a necessary step to point out, examine and evaluate difficulties and drawbacks encountered in the application of the Eco-label. Although the assessment mainly focused on companies, behaviour and strategies of all the other actors involved in the implementation of the EU scheme were investigated.

2) pilot activities to experiment ways, operational tools and practical solutions to favour and facilitate Eco-label adoption by companies and to promote the diffusion of the scheme in the EU.

As a result of the project, the promoters have defined a general strategy which aims at stimulating and supporting companies to adopt the Eco-label. The strategy focuses on actors and factors that can motivate a company to apply for participation in the scheme and can provide it with an adequate support in all the different steps the company should take in order to achieve successful results.

This paper provides a description of the results achieved by conducting the pilot project, as well as some preliminary indications and suggestions regarding the application of networks for the development and adoption of the EU Eco-label by companies.

2. What is hindering Eco-label development?

The preliminary investigation and assesment carried out within our project basically confirmed what had already emerged from studies previously conducted within target-countries: the persistence of "controversial" attitudes towards environment-friendly products among consumers and producers.

On the one hand, according to many previous surveys, the large majority of consumers is indeed deeply concerned with ecological issues but notwithstanding, small percentages of them are willing to give up personal preferences or to pay a premium price in order to purchase environment-friendly products. Consumers show a growing interest in environment and in natural products mostly when related to personal health and safety (e.g. health food, homeopathic remedies,…).
On the other hand, in the past companies reacted to these behaviours by developing and stiffening the following attitudes:

- "safe-face" environmental attitudes – some companies in their advertisement campaigns quoted, directly or indirectly, ecological themes or they mention their backing of some of the activities carried on by environmental groups
- "naturalistic attitudes" – some companies promoted their products stressing natural qualities (e.g. beauty products with natural ingredients) or products whose ecological properties are related to the "individual", emphasising supposed advantages for the user (e.g. his/her health) rather than the advantages for the environment
- eco-marketing attitudes – very few companies carried out environment-oriented marketing strategies, exploiting relevant opportunities such as environmental labels (with the significant exception of the Netherlands, where the use of eco-labels is relatively more diffused)

Today, only a small number of enterprises is "courting" those consumers who show a real interest in ecological issues (those willing to pay a premium price for products having a reduced impact on environment) by offering environment-friendly products certified by a third-party label.
Even the companies that are interested in adopting these marketing tools, are hindered by the consumer limited response (as they acknowledge it).
The examined countries showed a lack of demand (or perceived demand) for eco-labelled products together with the scarce proneness of industrial companies to undertake proactive "green marketing" strategies based on the supply of eco-labelled products.
Although these dynamics, once again, were less evident for the Netherlands, we can say that in all target-countries, the virtuous circle "demand-supply-demand" of green products, which is crucial for the development of eco-labelling, is yet to be created (Italy, Belgium, Luxembourg) or consolidated (the Netherlands).
In these situations, the EU Eco-label can be a great opportunity for companies that are ready to challenge the market and seek competitive advantages by innovating their marketing strategies. There is no doubt that the adoption of an eco-label-based marketing strategy in these countries is today a risk-prone operation implying the experimentation of new tools and channels to target and reach consumers, which are not yet mature and sensitive under the "ecological" point of view. Nonetheless, there are companies that are willing to take the risk.
The assessment performed within the scope of our project, proves that these "proactive" companies are still few, and have to tackle relevant difficulties and drawbacks. Most companies whose products are eligible for the EU Eco-label, in fact, are very "cautious" about adoption.

Indications and suggestions emerging from the preliminary assessment of the situation in Italy and Benelux clearly confirm that the "cautious attitude" of the interviewed companies towards the Eco-label is strongly determined by three different factors:

a) lack of information regarding the scheme (and the connected opportunities)

b) perception of the Eco-label as a weak marketing tool

c) “political” opposition to the Eco-label

a) The lack of detailed and product group-specific information turned out to be a relevant barrier for companies that were interested in obtaining the EU Eco-label, but not fully aware of its implications.
First of all, many companies were not informed about the Regulation requirements (both the criteria as such, and their “translation” at the operational and technical level). Secondly, many companies were not able to estimate costs connected to participation (both because they did not exactly know the fee-system and because they found it hard to evaluate the necessary investments to comply with the criteria). Thirdly, many companies were not aware of the possible business and competitive benefits linked to the Eco-label adoption, because they lacked information on market opportunities (e.g.: how to use and promote the Eco-label, if and how their customers would have valued such a choice, etc.). As we will see, this barrier is mostly due to a problem of communication and interaction between the actors involved in the EU Eco-label implementation.

b) In industrial sectors characterised by a “diffused” and fragmented competition, as well as by the presence of SMEs (e.g. textile, paints and paper industries), the main curbing factor seems to be the Eco-label scarce value perceived on the market (in terms of both promotional capacities and its real competitive advantage). More than participation costs, skepticism and uncertainty about the marketing potential of the Eco-label play a crucial hindering role especially for smaller companies. Many innovative and risk-prone SMEs operating in the above mentioned sectors, in fact, are willing to invest financial resources in eco-marketing strategies; but these companies choose to adopt the Eco-label only if they can rely on its effectiveness as a marketing tool.
For many companies, doubts regarding this effectiveness rise from:

- the customers and consumers’ unavailability to pay a premium price for green products
- the scarce information and knowledge of the Eco-label shown by customers and consumers
- the lack of cooperation (or communication) with traders and retailers concerning possible Eco-label promotion initiatives
- the better marketing performance of other environment-oriented instruments (including national labels and the backing of environmental groups activity)
- the underestimation of the consumers’ availability to attribute value to third-party certification

According to our assessment, doubts and uncertainties regarding Eco-label marketing potentials represent the most relevant barriers to its diffusion in many industrial sectors and countries. As we will see, these barriers could be overcome by a tighter cooperation and communication between the company and some external actors interested in the EU Eco-label (commercial partners, customers, stakeholders, etc.).

c) By assessing the Eco-label “state of the art” in Italy and Benelux, we also identified many cases in which adoption was hindered by different kinds of opposition to the scheme. We may group these cases under the category “political” opposition. This opposition is significantly present in sectors where a relatively small number of large producers operate, or where competitors are particularly “loyal” to (or influenced by) their trade association. For these very reasons, this opposition is usually expressed through the trade association official position.

In some industrial sectors (e.g.: light bulbs producers in Italy), for example, we reckoned a strong opposition against the Eco-label criteria, which are considered unfit for the current technological capacities or ineffective as to their environmental improvement potentials.

In other sectors (e.g.: the Italian white appliance industry), the producers are ready to obtain the Eco-label from the technical point of view, but they do not believe it is the proper instrument to stimulate the improvement of environmental performance by companies and, above all, none of them is eager to unbalance on its own the competitive (and oligopolystic) equilibrium of the sector.

Similar situation of “political opposition” to the Eco-label can be found in sectors (laundry detergents and, partially, indoor paints), where sectorial trade association are hindering the diffusion of the label among national producers.

Political opposition is a barrier that could hardly be overcome by means of a pilot project: this is the reason why we simply acknowledged its presence, and drew the conclusion that some actors (i.e. national trade associations) could not be usefully involved in a supportive network.

In few words, the preliminary investigation and assessment of the current situation, carried out within our pilot project, emphasised that barriers to the Eco-label diffusion could be extremely different and numerous, and that they vary according to the features and specificities of the industrial sector, markets, institutional and social framework in which the company operates. This did not help in identifying a common strategy for the promotion and the diffusion of the Eco-label.

The only clear indication was that the identified barriers had to be overcome by implementing sector- or market-targeted policy actions, aimed at many different actors involved in the Eco-label system: guaranteeing the transparency of the scheme, sensitising and informing consumers, raising companies awareness, assuring Eco-label visibility on the market, granting support and facilitation to SMEs, enhancing eco-labelled product competitiveness, strengthening stimuli deriving from national and international competition, seeking opportunities and optimal channels for eco-labelled product distribution, valuing services connected with eco-labelled products, and so on.

The results of the preliminary assessment suggested general aims and actions, that needed more operational indications to be tailored to each national, sectorial and market context.

The only way to obtain these indications was to focus on the main actor of the whole Eco-label system: the company. It is the company that should be convinced of the opportunity to adopt the Eco-label and use it as a marketing tool. It is the company that perceives consumer trends and may stimulate them towards more “ecological” patterns. It is the company that makes the first move and challenges the sector or market immobility. It is the company, finally, that makes all the necessary efforts to obtain the Eco-label and value it on the market.

A lot can be done to promote the EU Eco-label by sensitising and informing consumers, as well as all the other institutional and social actors involved in the scheme. But the key that may open the market-door to the Eco-label remains its success among companies: this should be the first aim of any voluntary environmental policy.

These are the reasons why we concentrated our strategy on the company, taking it as a focal point for the Eco-label development.

In order to define a common promotion and diffusion strategy, we analysed and experienced “in-field” what is needed to prompt and incentivate companies to adopt the Eco-label:

- what information do they need to become interested in (and attracted by) the Eco-label?
- what can convince them of the opportunities and benefits they could gain?
- what do they need to overcome the above mentioned barriers?
- how can they be supported?

As we will see, by answering these questions we also found motivations, ways and operational tools to involve all the other institutional and social actors who normally interact with a company that develops an eco-label-oriented strategy.

3. EU Eco-label adoption by companies as a "strategic process"

The second phase of the IEFE-CEEEM pilot project was devoted to carrying out "in-field" activities with selected companies. These companies expressed the intent of participating in the project to prepare the adoption of the EU Eco-label. The "in-field" activities were aimed at supporting these companies (from now on the "focal-companies"), among the first to approach the EU scheme in the target-countries. In Italy, for example, the first three companies to apply for the Eco-label took part in the project activities and were supported by researchers throughout the adoption process.

The starting point was different for the focal companies: some of them had just heard about the EU Eco-label, some expressed a general interest towards the scheme, some were conducting technical and financial analyses to verify the feasibility of adoption, others had already obtained the Eco-label and were defining appropriate marketing strategies and/or searching opportunities for new products.
This implied a specific support for each focal company. Nevertheless, the in-field activities have been a great occasion for experiencing different activities and aspects of Eco-label implementation by companies, in different phases of the adoption process.

The experience gained by cooperating with focal-companies, in fact, proves that the application of the Eco-label is a *gradual process*. This process may lead a company to the adoption of the label and to its fruitful utilisation "on the shelves", but this is only the final result of many other steps. Only if a company is able to move each single step, it will apply for the Eco-label and, hopefully, reach the goal of a successful participation in the scheme.
As it clearly emerged from the activities of our project, we can identify and analyse five steps that characterise the adoption process (see figure 1). These steps are a mere simplification of many activities we experienced together with the focal companies and should be not considered as strictly subsequent. A company can take these steps in different logical or temporal orders but, nonetheless, our experience shows that each step is necessary to successfully approach the Eco-label.

First step: the company shows a general interest towards the label as a marketing tool, thanks to the information collected about the Eco-label "business opportunities" or following specific requests by customers and/or consumers.

This step is crucial, because the quantity and quality of information gained by the company determines its attitude towards the Eco-label. Sometimes we acknowledged the effects of "biased" or uncomplete information on interested companies. Especially small and medium enterprises must rely on external expertise and consultants to collect information on environmental voluntary instruments, such as the eco-labelling schemes. Providing information focused on the Eco-label requirements, the technological

implications for products/processes and the costs of participation in the scheme is certainly useful for interested companies. But emphasising only these aspects sometimes produces a "counter-effect" on companies, because they stress just the necessary efforts. In our preliminary assessment we reckoned a lack of information regarding potential benefits, achievable improvements and possible competitive advantages connected with Eco-label adoption. As we will see, it is essential that information provided by external actors is correct, detailed and complete and discloses to companies also opportunities and benefits of the scheme, in order to strengthen their general interest and avoid hampering influences.

Second step: the company normally performs a feasibility study in order to analyse and evaluate the conformity with the relevant environmental criteria and the technical capability to comply (or, eventually, the necessary efforts).

Technical feasibility is generally considered by companies as a preliminary condition to invest time and money in further developing an Eco-label-oriented strategy. The experience of our pilot project demonstrates that the technical analysis is a competence- and expertise-intensive activity which often requires external support. This is mainly the case with SMEs, traditionally suffering from a lack of specialised technical and human resources.

We should not undermine that the technical feasibility is strictly connected with the tightness of the Eco-label criteria. This implies that if the company faces technical problems in complying with the criteria, it may react in four different ways:

- adapting its product/processes by means of technological upgrading and product innovation
- temporarily renouncing to Eco-label and defining a longer run project for product improvements
- waiting for the criteria to be revised (and hoping in a less restrictive version) and/or deciding a "political opposition" to the scheme (see section 2).
- definitely renouncing to apply for the label

In the first case, SMEs usually need support also in identifying technical and technological solutions, planning the necessary improvement actions and implementing them.

Third step: the company usually feels the need to carry out a sort of "cost-benefits analysis" of the Eco-label.

The depth and accuracy of this analysis depends on the company size, capacities and resources; but nevertheless we may say that every company interested in the Eco-label deals with the estimation of participation costs, as well as with the evaluation of its benefits or opportunities (competitive advantages, image improvement, more effective product management, response to consumer trends, market share enlargement, better relations with stakeholders, etc.).

Whilst cost estimation is rather simple and practicable in terms of provisional budget (even when the company has to consider the necessary investments for technology upgrading and the financial effort for future marketing activities), the evaluation of potential benefits is complex and uncertain, especially for SMEs. Companies tend to undervalue benefits when they cannot exactly quantify them. This happened with some of the project focal-companies, which attempted at estimating benefits achievable through the adoption of the Eco-label.

In order to point out and measure these benefits, companies should:

- identify existing business and market opportunities
- be aware of hidden opportunities
- evaluate indirect benefits, such as potentials for improvements in the company's image, in the relations with its stakeholders, with respect to its social acceptability, and so on.

A relevant bulk of information and data is necessary to perform such an evaluation. The smaller is the company, the more it needs support for this activity.

At this point, the company takes a *"wait-or-go"* decision regarding application for the Eco-label, basing on the information and indications that result from the first three steps.

Fourth step: once the company has decided to "go" for the Eco-label, it needs to complete all the necessary application procedures (contacting the competent bodies, filling in and submitting the application form, selecting an accredited laboratory, passing the tests on products, etc.).
Although this step may appear easier and more "straightforward" than the others, it is not free from practical problems and operational difficulties. Companies often find it hard to deal with the bureaucracy implied by Eco-label adoption. Our preliminary assessment highlighted situations in which the "red tape" requirements prevented companies from developing their interest towards the Eco-label. In some countries (such as Italy) this has also to do with the diffused company's attitude of dissatisfaction and mistrust towards public administration bodies (even when they govern a voluntary scheme).
In countries like Italy, SMEs are not used to interact with public administration beyond the traditional "command and control" relationship. This is the reason why these enterprises have to tackle additional difficulties in approaching the Eco-label. To be successful in these countries, the scheme must be capable of attracting the thousands SMEs that operate in all industrial sectors. Therefore, application procedures and verification requirements should be kept very transparent, simple and understandable. Our experience shows that this is not often the case. As a result, many companies seek external support to carry out the application procedures.

The *fifth and final step* is to be taken after the Eco-label has been obtained. In order to gain the expected benefits, the company has to design, develop and carry out an effective marketing campaign, focusing on its eco-labelled products.
This campaign should target different stakeholders, and base on both commercial and "social" activities. As all the focal-companies realised during the project, the success of labelled products depends on consumer and public awareness of the Eco-label. Furthermore, these companies have understood that waiting for consumers and society to mature and develop this awareness on their own (or thanks to public sensitisation) could turn into a lost opportunity. If a company wants to achieve positive results with the Eco-label in the short run, it should become actor and promoter itself of awareness-raising campaigns addressed to all its stakeholders. This could be performed by:

- promoting the labelled products, together with the Eco-label itself, through advertisements, marketing initiatives, etc.
- selecting the most appropriate and viable distribution channels and retailing strategies for the labelled products
- sensitising business partners on the Eco-label environmental guarantees and "image" potential advantages (e.g.: suppliers, service providers, banks, insurance companies, etc.)

- diffusing information about the Eco-label and valuing it with all the social and institutional stakeholders (e.g.: public administration, authorities, trade unions, NGOs, local communities, universities and schools, etc.)

According to our project experience, a strong commitment to promoting the Eco-label awareness among consumers and other stakeholders is definitely a "win" strategy. The companies that firmly took this step by investing time and money in marketing campaigns were the most successful and satisfied with the Eco-label adoption. But, once again, we should acknowledge the impossibility for many companies to cope with the costs of a proactive marketing strategy. In particular, SMEs must face up to their lack of resources. As we noticed in section 1, many SMEs are very innovative companies, prone to explore new improvement opportunities and ready to move to the environmental-excellence frontier, in order to gain competitiveness. These features portray the companies that today are more frequently approaching the Eco-label scheme in countries like Italy and Belgium. When it comes to marketing and promotion strategies, though, SMEs still lag behind in terms of capacity to mobilise financial means, business contacts, media and information channels, retailers' interest, etc. In this perspective, SMEs meet relevant difficulties in taking this final step, which should instead provide them with the strongest motivation to approach the Eco-label.

Only the companies which positively complete the "five-step" process, described above, are fully successful in adopting the Eco-label.
Our project experience shows that few companies are able to achieve this result by relying only on their own resources. As we emphasised, relevant barriers and difficulties hinder the positive development of the process. Many companies give up the process and decide to "wait" as soon as they face a barrier or a complication that makes a step too difficult to take on their own.
During the project, in Italy and Benelux we reckoned a lot of unsuccessful stories regarding companies that renounced to participate in the EU scheme owing to their lack of information, adequate resources or technical competence to tackle the difficulties linked to Eco-label adoption. To a wider extent, this probably explains the partial failure of the scheme in these countries.
The most important suggestion emerging from the project is that companies need support to fill the lack of information and of human, technical and economic resources which prevent them from overcoming the barriers and successfully taking the above mentioned steps.

4. Networking: a key word

From the company point of view, the indication has been plane and straightforward: the only way to acquire these resources is to seek external support. This was particularly true for SMEs participating in our project: they recognised support coming from external actors (public institutions, business partners, stakeholders, etc.) as the only workable way to sustain and accomplish the Eco-label adoption process. In many EU countries, cooperation with external actors is a recurrent and ordinary form of business relation for SMEs. Networking has traditionally enabled them to maintain high levels of efficiency, flexibility, product quality... in few words: to successfully compete with larger companies.
On the basis of this experience, we therefore focused on the possible contributions that some external actors could give to companies within the adoption process. We aimed at designing and implementing what we ambitiously called a "*network model*".
By identifying and involving actors capable and willing to support companies throughout the process, we aimed at starting up a network. The network is conceived to provide the involved focal-companies with incentives, competitive stimuli, resources, competence and information and, consequently, to enable them to overcome all the steps leading to the Eco-label. Creating networks of interested actors, and promoting

cooperation among them, is the most effective way of helping companies in tackling the difficulties they face in adopting the Eco-label.
Network promotion can favour the development of the EU Eco-label, insofar as it stimulates the interest of many actors for the success of the scheme and it facilitates mutual support between them.
This support is crucial for SMEs, which should be considered as the core of our networks for Eco-label adoption.
Few networks (or part of networks) did spontaneously originate in Italy and Benelux before the project, arising from the "natural" availability of actors to cooperate for developing Eco-label-oriented strategies. This is the reason why Eco-label, at the time we started up the project, was experiencing a difficult "take-off" in these countries: trade associations were not ready to support the scheme, environmental groups were little more than indifferent, Public Administration hesitated in enacting environmental procurement policies, and so on.
We believed that activating and motivating these actors, as well as encouraging cooperation between them and interested companies, could give a powerful momentum to the EU scheme. So we attempted to create, start up and develop some networks centred on our focal-companies, within the scope of the pilot project. This seemed the best way to spur Eco-label diffusion in Italy and benelux, since in these countries:

- the "front runners" in approaching the scheme are mostly innovative SMEs
- these companies are rarely able to complete the adoption process on their own, due to a lack of information and competitive stimuli, on one side, and resources, on the other
- they need support from external actors
- external actors are not spontaneously offering their support
- a policy objective should then be to stimulate the interest of these actors and promote their participation in a network: this would "push" the actors to "pull" the Eco-label adoption by front-runner SMEs

In order to pursue this objective, we should answer to two preliminary questions:

- which actors can usefully be part of a network?
- how can they be effectively involved?

Voluntary environmental policies rely on the possibility to set out a "virtuous circle" among the actors involved in their implementation. This represent the strength of voluntary instruments. The application of environmental certification schemes like eco-labelling or environmental management standards, for example, implies that each actor involved pursues its interest by (consciously or unconsciously) supporting other actors' aims. By participating in an eco-labelling scheme, in fact:
- industrial and other business actors are allowed to use a marketing tool to enhance their competitiveness, *meanwhile*
- social actors (consumer, citizens, communities...) obtain correct and credible information on product environmental impact, *meanwhile*
- institutional actors achieve public policy objectives in terms of environmental performance improvement

We tried to reproduce this "virtuous circle" within our networks, by involving actors that might gain benefits and advantages from the development of the EU Eco-label, and hence could be incentivated to support companies interested in the scheme. We needed to start up networking actions at a very operational level and, consequently, we selected a limited number of actors whose cooperation could be viable in specific conditions (market situation, sector composition, institutional context, service

availability, and so on). Nevertheless, we are able to identify some typologies of external actors and stakeholders that could be usefully gathered in a cooperative network for the Eco-label.

a) Customers
The principal beneficiary of eco-labelling schemes is, no doubt, the final consumer. The label guarantees the environmental excellence of eligible products to consumers, whose information and awareness are primary objectives for the EU Eco-label. In order to promote sustainable consumption, the scheme aims at both sensitising consumers and enabling them to express their purchasing preferences. But, in many cases, this is not enough for the success of the Eco-label. As we have seen in section 2, sometimes consumers are not eager to endorse the labelled products (due to their feeble environmental awareness and/or to the scarce visibility of green products on the shelves). Sometimes companies are not able to detect eco-consumption trends (because these are too weak/still immature or because companies do not investigate in sufficient depth).

By creating a network, we attempted to stimulate interaction between a focal-company and its market. Our aim was to let the company fully perceive the true value of the Eco-label by communicating with actors who may *purchase* eco-labelled products.

Of course, it is impossible to directly involve final consumers in the network, since they hardly behave as an homogeneous and identifiable actor at the practical level. This motivated our choice to concentrate on customer enterprises and/or institutions and, as we will see, on consumer associations.
SMEs' large and important customers can play a concrete role within the networks to drive (and support) the adoption of the Eco-label. Our experience reveals that many large customers still need to be sensitised on the potential guarantees and benefits that the scheme offers. However, many others have matured a significant awareness, and are today searching for ways to transmit to thier suppliers requests regarding the environmental quality of intermediate goods and tradable products.
Involving in the network customers that are keen to attribute the proper value to the Eco-label, produces powerful incentives for the focal-companies to participate in the EU scheme.

b) Retailers
Retailers and traders can play a key-role within a network. They act as "mediators" between consumers and focal-companies. The retailer is a sort of "gatekeeper" of product environmental quality:

- on one side, he is a sensor of environment-oriented consumption trends, as he can transfer consumer demand for green products upwards to producer companies
- on the other side, he is an amplifier of "environment-friendly supply", as he can guarantee for the credibility of producers' statements and information and support their green marketing campaign by offering a direct contact with the final consumer (dedicated shelves, ecological oasis, specialised points of sales, etc.)

It clearly emerged from the project experience that in many markets, and for several product groups, retailers are more important than consumers, because they orient consumer purchasing preferences and they decide which goods should be proposed to a client who asks for an environment-friendly product. Even if they had not adopted the Eco-label at that time, for example, most companies interviewed during our preliminary assessment declared that they were ready to respond to any request made by the retailers on the environmental performance of the supplied products.

Today, large retailers in Italy and Benelux are sharpening their environmental strategies and, among other actions, they are increasingly willing to utilise eco-labelled products for their green marketing campaign and "social image" improvement initiatives. This means that their suppliers could soon face tighter requirements for acceding to the vendor-lists. In the near future, they might be asked either to directly

provide eco-labelled products, or to assure that supplied products are eligible for the Eco-label. In both cases cooperation with supplier companies becomes a central issue and represent an opportunity for mutual support. This is why retailers should be considered as a nodal point of any network aimed at supporting Eco-label adoption by companies.

c) Environmental/consumerist associations and other NGOs
The credibility gained by these actors in the eyes of consumers and citizens is crucial for the success of the Eco-label. In addition to their "natural" role in the diffusion of a wider awareness and information regarding environmental labelling, environmental and consumerist associations can promote the EU scheme also by directly cooperating with proactive companies. Their involvement in our networks aimed both at stimulating focal-companies' interest in the Eco-label and at supporting the marketing of labelled products. These objective were pursued by conducting joint information and promotion initiatives. Tighter cooperation between companies and these associations gives higher value to the Eco-label, also from the "green marketing potentialities" point of view.

d) Institutional actors involved in the implementation of the scheme
National competent bodies and correlated institutions (providing support for the EU Eco-label implementation) were fully involved in the networks created during the project. They represented an important reference point for the focal-companies, that could constantly rely on these bodies for technical and informative support in carrying out all the necessary activities for the Eco-label adoption.

e) Public Administration
Among the actors that could contribute to promote and diffuse the Eco-label, Public Administration plays a decisive role. We attempted to effectively involve this actor at different levels and in its different layers, with the objective of starting up initiatives of public procurement or public purchasing, that could represent a considerable spring for the Eco-label. Direct involvement in our networks was only partially accomplished, but its positive results suggest that interactions and business relations between Public Administration and supplier companies adopting the Eco-label should not be undermined as a potential incentive.

f) Media
Media campaign, public initiatives for circulating and diffusing information (as well as training actions) addressed to actors involved in Eco-label implementation are important instruments to be used within a network. These instruments were utilised in our pilot project, on one hand, to support the focal-companies in their marketing strategies (in this way promoting also the Eco-label as such) and, on the other hand, to reach a wide number of actors that could be interested in the application of the EU Eco-label.

g) "Intermediate" institutions
The diffusion of voluntary schemes (Eco-label, EMAS, ISO standards) strongly relies on the supporting activities of many institutions, such as chambers of commerce, local agencies, voluntary consortia, centres of excellence, etc. We may define these institutions as "intermediate", since they are collective (but not public) actors. Their activity is particularly important for removing the barriers to the diffusion of voluntary schemes among SMEs. In the long run, they will probably be the primary means to lead SMEs to implement sound environmental management tools and help them to adopt environmental certifications. A pivotal "intermediate" institution is represented by trade associations. As we have seen in section 1, national sectorial trade associations are often hostile to the development of the Eco-label (with some relevant exceptions, like the Italian Textile Federation); but from our preliminary survey it also emerged that, when these associations operate at a local territorial level or represent SMEs, they are much less concerned with the need of preserving the competitive equilibrium in the reference industrial sector.

Therefore, these associations are willing to accept and even support the Eco-label-connected advantages that their associates could gain in the competition with larger companies (in the case of SMEs) or with respect to companies operating in other areas (in the case of territorial and local trade associations).
Confapi, one of the national federations representing Italian SMEs, was successfully involved in some networks within the scope of our pilot project.

h) Other "first mover" companies
We call "first movers" those companies that have already entered the process of adopting the Eco-label. Virtually all the focal-companies taking part in the project activities are to be considered first movers. They overcame uncertainties and doubts about the adoption of the label and the implementation of marketing strategies based on the exploitation of the label's potentialities. In some sectors (detergents, paper and, to a lesser extent, paint industry) they face the "political" opposition of their trade associations and of many competitors. They hope to take advantage of the breaking of settled competitive balances that, sometime, are vouched by the wait-and-see policy of their associations. Because of these similarities, the first mover companies are eager to cooperate with each other, by exchanging information and experience about their "pioneeristic" approach to the Eco-label. We experience this kind of cooperation during the project.

Cooperation happens to be particularly effective between companies operating in the same industrial sector and companies operating in the same region. In the first case, enterprises collaborate by identifying and discussing similar problems in satisfying the Eco-label criteria and by finding technological solutions to be applied to similar production processes and products. This was the case of a network that we started up within the paper industrial sector in Italy (see section 5). In the second case there are synergies in interacting and communicating with the same stakeholders (local retailers, local population, authorities, ...), without worrying about sharing information with a direct competitor (as occurs in the first case). We experienced a similar case by inducing and organising cooperation between two focal-companies operating in the same area and conducting their information campaigns through the same press-agency (see section 5).

i) The catalyst
Since all the interested actors mentioned above are seldom prone to collaborate with each other, there needs to be what we call a "*catalyst*". The catalyst is the actor that promotes the network: favouring contacts among the other actors, facilitating information exchanges, promoting cooperation initiatives, proposing collective actions, mediating between conflicting interests. The catalyst action is absolutely fundamental to start up the network and "keep it alive". Any interested actor could become a catalyst (the focal-company itself, trade associations, institutional bodies, consultants, etc.), if he/she finds enough motivation to prompt the network. This never happened in Italy or Benelux before our pilot project, though.

NGOs and *non-profit institutions* (such as universities and research institutes) are "natural" candidates to play this role for their neutrality, capability to establish contacts and relations with all the other actors and availability to promote actions for public interests.

Networking as applied to focal-companies within the pilot project is schematised in figure 2. Full arrows represent a relation with the focal company, arrows with dots a possible cooperation between two external actors.

5. Experimenting networks: the first results

The second phase of the project was devoted to experiment the "network model", thanks to the cooperation of some companies participating in our pilot action. IEFE-Bocconi and CEEEM played the key-role of catalysts.

We attempted to design and develop a network of external actors around those focal-companies that were more determined in taking some of the steps we described above. For each step we identified some key-actors that could usefully be involved in the network at a very early stage, in order to start it up and make it work effectively. In our experience, these key-actors are very important partners for the company to carry out the necessary activities for the Eco-label (information collection, feasibility study, market opportunities assessment, application procedures and marketing activities). At later stages, other actors can usefully take part in the network. Each network, in fact, should not be interpreted as a static solution to the problem of "pushing up" the Eco-label system but, as we have seen, as a sort of "small scale" virtuous circle in which all the actors who can help the system (by supporting the focal company) will usefully participate when they will find it convenient. A catalyst should have the task to convince and involve them with the appropriate timing.

In this paragraph we describe some of the activities that we carried out within the second phase of our project, in order to create and stimulate networks which could support the focal-companies in completing the above mentioned five-step adoption process.

In some cases, the focal-company expressed just a **generic interest** with respect to the potential adoption of the Eco-label. This was not enough to persuade the management to further investigate the feasibility of participation in the scheme. As we anticipated in section 3, this "give up" behaviour is often due to a lack of correct and exhaustive information about the EU scheme and/or to a insufficient business interest in obtaining the label.

In this phase, the network could help in obtaining information and can stimulate the interest of the company. Key-actors in diffusing information to companies are the Competent Body, different institutions (including P.A., universities, local agencies) and trade associations. Owing to the lag in diffusing information about the EU Eco-label in all the analysed countries by institutional actors (sometimes even due to the lack of the competent body), this role was played directly by the catalysts. A correct and comprehensive information about EU Eco-label requirements as well as on its opportunities and benefits was essential to give momentum to the networking activities. Some focal-companies were convinced to commit themselves to preparing Eco-label adoption by a more detailed knowledge of the scheme.
Other key-actors can be involved in the network to raise the company's interest towards the Eco-label. In pursuing their own environment-oriented strategies and interests, these actors could ask the company for eco-labelled products: retailers (green competitiveness), P.A. (public procurement), banks (image improvement), NGOs (pro-environment political choice), etc.
The role of retailers is absolutely central. In Belgium, for example, where no white appliance producer is located, eco-labelling of refrigerators and washing machines is taking off thanks to the interest showed by some retailers in selling labelled products. The catalyst, CEEEM in this case, promoted the contacts between these retailers and foreign producers.

Pressures exerted by retailers and large customers could convince the company of the opportunity to take another step towards the Eco-label: a **feasibility study** (see section 3). To support the company in performing this kind of study, the catalyst could usefully involve in the network some key-actors with technical expertise. The Competent Body, trade associations and research centres can provide the

company with specific information on Eco-label criteria (technical details, necessary tests on products, future evolution of criteria and product groups, time-length of the adoption process, etc.). The company needs also a more operational support in evaluating the compliance of its products to the criteria at the practical level. This technical and technological support can be offered by accredited laboratories, suppliers (that, at least, need to be consulted), consultants and experts. Relations and contacts with these actors can be favoured by the catalyst within the network.
One of the experimental networks is particularly interesting as concerns this specific step. In the Italian textile sector two focal-companies were involved in the project. These companies (Madival and Bailo) are not direct competitors, since they produce respectively bed-linen and t-shirts. Nonetheless, they had to interpret, apply and fulfil the same Eco-label criteria. The catalyst (in this case IEFE-Bocconi) facilitated a cooperative relation between the two focal-companies in coping with the analysis of the criteria for a feasibility study. Furthermore, the catalyst had to look for expertise on the test and verification procedures. Since in Italy, at that time, there was no accredited laboratory, the catalyst promoted contacts between the focal-companies and existing laboratories. One of these laboratories was interested in the EU Eco-label, but did not see any development prospect in terms of real company interest. When this laboratory found out that two companies were interested in applying for the Eco-label, it immediately undertook the accreditation process and began its cooperation within the network. The whole operation was possible thanks to the crucial support of the national environment protection agency (ANPA), technical support for the Italian Competent Body, which was fully involved in the network. ANPA elaborated, on behalf of the European Commission, the operational guidelines for the application of textile criteria in the EU: this made its contribution fruitful for all the actors involved. This network is described in figure 3 (not reproduced for technical reasons).

Even if the adoption of the Eco-label is technically feasible, this does not mean that the company automatically decides to participate in the scheme. The Eco-label should also be economically sustainable and guarantee advantages and benefits from the competitive point of view. In addition to the **estimation of costs** linked to Eco-label adoption, the company needs to **assess existing and hidden market opportunities** for labelled products. Retailers and traders can help in evaluating the possible distribution channels and the competitive potentials of the Eco-label. Market research institutes and consumer associations are able to identify consumer preferences and purchasing trends. These are the key-actors that a catalyst should involve in the network.

A very interesting example of network activity favouring this step can be taken from the Italian experience, although it was conducted before the pilot project experience. A small tissue paper producer (Lucart) is traditionally a front-runner as to environmental innovation and management. Its final products are made of 100% recycled fibres. This makes the products easily eligible for the EU Eco-label. Since 1993 Lucart had completed a positive feasibility study with respect to the relevant criteria, but it was not persuaded of the real market opportunities connected with eco-labelling. So this company initiated a cooperation with a market research institute (see also the lower part of figure 5) for carrying out surveys on consumer attitudes and buyer availability to purchase green products. With the support of this professional poll provider, Lucart obtained significant results: 17% of the consumers declared their intention to buy an ecological product, 90% of them said that their purchase was conditioned to a credible third-party certification. This is why Lucart has been the first Italian company to participate in the EU scheme.

Once the Eco-label has proved to be potentially sustainable, the company has all the elements to take the decision regarding application. If the company decides to "**wait**", the network can be used to keep it

informed about the developments of the scheme and to keep its interest high on the Eco-label. This is what the two catalysts (IEFE-Bocconi and CEEEM) are still doing with companies that gave up at this stage.

If the company decides to "**go**", the network can support it in **preparing and presenting the application**. Once again, the key-actors are the Competent Body, the accredited laboratories and, eventually, specialised consultants. A continuous and cooperative relation between the company and Competent Body, on one hand, and accredited laboratories, on the other, is essential to be guided through the correct application procedures.
As we emphasised in section 3, this is not a trivial step for the company. Not many focal-company reached this step during the project. A copy paper manufacturer (Favini) represent a curious example of coordination activities within the networks. Although this company at the beginning of the project had just obtained ISO 14001 certification, it was barely interested in the Eco-label. Favini decided to catch the opportunity of participating in our network, and evaluated the feasibility and potential benefits of participation in the EU scheme. As these evaluations proved that the company should not produce relevant efforts to enter the scheme (because of its high environmental performance) and could gain competitive advantages with respect to competitors relying on national labels, Favini decided to apply for the Eco-label. At this point, the "network approach" turned out to be very useful for the company, that needed to find an accredited laboratory (who was signalled by a project partner: Lucart), to coordinate the action of its consultants with the requests of the Competent Body (who asked for further environmental investigation beyond the Eco-label criteria), to involve ISO 14001 verifiers (in order to get pre-certified analysis) and to contact suppliers (in order to obtain pertinent self-declarations regardng raw materials)

The final step, once the Eco-label has been obtained, is to define and implement an effective and successful **marketing strategy**. Many actors can be involved in the network to promote cooperation and synergies. The company can be supported in the conception and realisation of co-marketing initiatives (with other companies, retailers, suppliers), partnerships (with environmental groups and other NGOs) or actions to link the Eco-label with other main environmental or social events (with the help of institutions and media). These could be win-win strategies for all the actors involved in the network.
A significant effort was made by the two catalysts in defining and implementing networking actions to support focal-companies in taking this step.
In Italy, this effort concentrated on a joint marketing campaign between the comapnies involved in the project. Only one of this companies (Lucart) obtained the Eco-label during the project, therefore it was utilised as a "bridge-head" to support the promotion activities.
Many actions were undertaken to value the Eco-label in a cross-sectorial and cross-market perspective (see figure 5). Two of them are particularly interesting.
The first concerns actions towards retailers. Three focal-companies are suppliers of the two largest Italian retail chains (COOP and ESSELUNGA). The catalyst coordinated a concerted pressure action to sensitise these retailers on the opportunities linked with the Eco-label. The fact that three of their most important suppliers of, respectively, paper products, paints and detergents were actively participating in a project for Eco-label adoption convinced the two retailer to pay relevant attention on the EU scheme. This produced positive results in terms of Eco-label visibility.
The second action aimed at emphasising the Eco-label importance for consumers and producers by means of a press campaign. In addition to many articles on newspapers (dealing with the Eco-label, the IEFE-CEEEM project and the focal-companies as a group of front runners), a specific condition allowed for a very effective information campaign: two of the most successful focal-companies (Baldini and Lucart, both SMEs) operate in the same geographical area and are located hundreds of meters from each other. This area, the Lucchesia region in Tuscany, is one of the (few and) wealthiest industrialised zones in central Italy, where a large number of innovative SMEs are concentrated. This image is really strong and

effective in Italian society, thus these companies decided to implement a joint information campaign on the Eco-label emphasising the role of the whole "industrial district", with the support of IEFE-Bocconi.

6. Policy suggestions

The above described networking actions were experimented in Italy and Benelux by conducting in-field activities in close cooperation with focal-companies. A full and in-depth description of these activities is provided in a final report that will be submitted to the European Commission.
Although these activities have been completed, the pilot projet has not come to a conclusion yet. At press time, IEFE-Bocconi and CEEEM are evaluating the experimental activities in order to identify indications and suggestions for improving the Eco-label promotion strategy. This strategy will be proposed to the European Commission in order to support the definition of policy actions in the field of eco-labelling.
The reader should wait for the final report to acknowledge the content and the details of the strategy. In this paragraph, we draw some preliminary conclusions regarding the described networks and briefly anticipate some of the most relevant indications emerging from the pilot project experience in a policy perspective.

The experience of the project shows that, within the target countries, a networking approach produces positive results in terms of Eco-label promotion and diffusion.
Networking proves to be fruitful and effective especially when aimed at supporting SMEs. These companies are among the most interested in the Eco-label opportunities and eager to undertake environment-oriented innovation strategies based on the use of eco-labels. Cooperation with external actors is the only way for SMEs to overcome barriers and difficulties due to their lack of human, technical and financial resources.

No universal or "easily transferable" indication emerged from the project on how to structure and start up effective networks. On the opposite, the only clear indication is that networks should be tailored to the specificities of the industrial, market, instiutional and social context in which they are implemented. As we have suggested in section 4, there are some typologies of external actors and stakeholderds which can be usefully involved in the network.
The experience of our project emphasises the role of retailer and large customers as powerful drives towards the Eco-label, as well as the role of "intermediate institutions" (such as local trade associations, chambers of commerce, local development agencies, universities and other NGOs) as supporting actors and, in many cases, as catalysts and facilitators of the networking actions.

At the operational level, indications as to creating and managing networks are even fewer. Much depends on the phase (or the "step") of the Eco-label adoption process which a company is going through. An effective network should not have a rigid composition, insofar as companies need different kinds of support at different stages (see section 3). Moreover, as we have seen, external actors may find interest in the Eco-label and motivations to participate in the network at late stages of the adoption process, or even when the netwrok has already produced positive results for a number of companies.

Geographic and sectorial proximity seem to play a key-role in favouring the creation of Eco-label networks. Cooperation between SMEs operating in the same area and with similar production processes proved to be particularly effective in our pilot experience. With reference to the Italian context, for example, the rooted collaboration attitude of SMEs located in the so-called "industrial districts" is a key facilitating condition to promote and diffuse environmental voluntary instruments, such as the Eco-label, among smaller companies. Policy makers should take into consideration the opportunity to define environmental labelling schemes connected with the production of a homogeneous industrial area, rather than just with the product of a single company. This would allow for relevant competitive advantages for

the whole area and would favour cooperation between SMEs, in order to share resources and exploit all the possible synergies in environmental product management.

These sinthetic suggestions refer to a limited experience and, therefore, should be integrated and enriched by considering the specificities of target companies and application contexts.
Further analysis and “in-field” experimentation are needed to prove that the proposed network model is usefully applicable in other countries. The role of the “catalyst” actors will be crucial in this perspective.

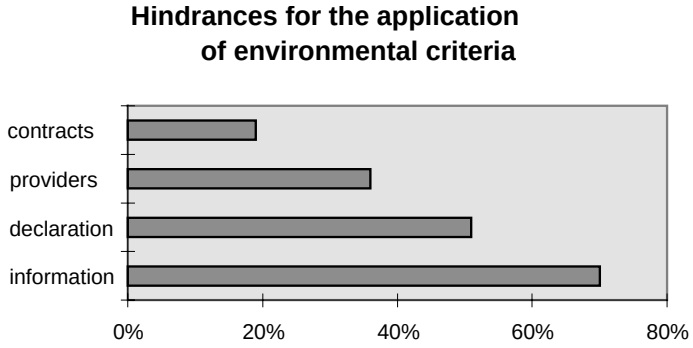
The role of product information for municipal green purchasers, *Laura Buguñá, International Council for Local Environmental Initiatives (ICLEI)*

Eco-products or *green goods* are a general term for products and goods which supposedly are considered more environmentally-friendly. But what is to be considered a *green good*? This question poses the main challenge to the eco-labelling schemes, since there is no generally acknowledged definition of the term *green goods*.

Eco-labelling schemes are a first step towards defining for each product group criteria and procedures at production level, leading to awarding to the product the eco-label for a limited time.

However, there is a confusing variety of labels on the market, and the different existing eco-labelling schemes in Europe have often approved different criteria for the same product groups (e.g. for washing powders, the Blue Angel Board accepts only as maximum up to 90 gr chemicals per wash whilst the European flower has a maximum of 200 gr chemicals/wash). Additionally, the life-cycle asessment methodology is not yet standardized. This is why a purchaser from a local authority might feel rather confused about the environmental criteria of goods awarded by an eco-label.

ICLEI, the International Council for Local Environmental Initiatives, is working since 1996 on fostering green procurement at the municipal level, in line with its strategic plan approved in Saitama, Japan, on October 1995. In October 1996, ICLEI carried out a European wide survey on green procurement at the municipal level. One of the main conclusions of this survey has been the expressed need from the purchasers to get a better access to product information in the field of green goods. In ICLEI's study, 76% of the respondents said they did not have sufficient information on green products:



Source: pre-study on green procurement, ICLEI, October 1996

The pre-study also revealed that only 20% of the purchasers felt they were well-informed about methods of ecological product assessment. 71% claimed they were unaware of any green purchasing guidelines or policies.

- According to van der Grijp[18], this barrier includes a lack of information on: environmental policy concepts;

- product contents - various studies[19] have found that public purchasers were well inclined to phase out products containing certain harmful substances, but had difficulties in

[18] Van der Grijp (1995)

investigating the exact composition of products, particularly the existence of the relevant 'negative' substances within these products;

- how to define a 'green' product*;*
- reliable methods for / a lack of consent on the overall environmental impact of a product;
- concrete product selection guidance through eco-labelling, green lists or other condensed product information.

Substantial reservations have been raised against official eco-labelling schemes. The main criticisms are that eco-labelling institutions will never be able to rationally set product category boundaries, to take into account all the physical effects which a product has during its life-cycle, to estimate the actual impacts of these effects, and to continuously up-date the eco-label product selection criteria [20]. ICLEI's pre-study proved that there is a high acceptance for eco-labels; however, there is confusion because in addition to several national and one EU eco-label a purchaser encounters several small-scale labels and awards. Finally, the generally higher price of eco-labels has been criticized.

We shall come back to the municipal practitioners and look upon their real needs and expectations when purchasing *green goods*. Local authorities are playing a key role when subscribing to sustainable development plans, by providing an example for their citizens and staff, and by building up private-public partnerships. ICLEI is co-ordinating a group of Municipal Green Purchasers in Europe, in the framework of the European Green Purchasing Network, a joint initiative by EPE (European Partners fro the Environment) and ICLEI. This network, which was launched last December in Brussels, gathers a multi-stakeholder group to encourage green purchasing in Europe. One of the main conclusions of the participants at the launch has been to foster the product information in the field of *green goods*, by exchanging experiences as well as information on products. ICLEI is going to provide on the Internet a platform for the information exchange and debate on product specifications for green goods, including the origin of products, its transport, its consumption, its marketing and supply chains, etc.

When promoting eco-labelling schemes, it is of key importance to integrate the buyers and consumers of these products and not only concentrate on the producers as such. Only then we shall be able to increase the acceptance and awareness for eco-labelled products. Apart from eco-labels we shall accept many other tools to promote eco-procurement, such as environmental management schemes for enterprises, cleaner production acts, etc.

[19] Gebers, Führ and Pedersen (1992); Zimmermann and Welte (1992); van der Grijp (1995).

[20] Morris (1997)

Perspectives of a Consumer Goods Company Concerning Eco-labeling, *by Dr. Robert J. Shimp, Associate Direct, Environmental Quality, The Procter & Gamble Company*

Introduction

Over the past two decades, consumers have become increasingly interested in learning more about the environmental aspects of the products they purchase. The purpose of eco-labeling is to provide consumers with information that enables them to consider the environmental aspects of products in their purchase decisions, thereby encouraging environmental improvement. Today, there are two primary forms of eco-labels: environmental "seal-of-approval programs, termed "Type I" eco-labels by ISO; and self-declared environmental claims or information, termed "Type II."

As a global consumer products producer, Procter & Gamble (P&G) has been associated with eco-labeling for 20 years, since the inception of the Blue Angel. We have participated in the development of various Type I program criteria-setting efforts, as well as provided a variety of environmental information directly to consumers. We have also been an active participant in the development of ISO 14000 eco-labeling standards.

Type I Eco-labeling as a Policy Instrument

There has been considerable debate over the best approach for eco-labeling in the OECD, the WTO, EU, and numerous meetings between the governments and industry. Many in industry, including P&G, have expressed concern that government-sponsored Type I eco-labeling programs have not fulfilled their goal of either informing consumers or encouraging environmental progress. The specific concerns are:
The criteria used to select eligible products are often not based on sound science, but rather on political compromises. This is primarily because of the lack of accepted methodology to clearly distinguish individual products across an entire product category.

Type I eco-label criteria can create barriers to innovation, because they are based on an evaluation of products as they exist in the marketplace today, and on publicly known technologies. Thus, they cannot anticipate what will develop tomorrow.

Type I eco-labels provide relatively little information to consumers, beyond expressing a preference for one product over another.

Government-sponsored programs, even when voluntary, have the potential to create trade barriers.
P&G acknowledges the current efforts of countries in the OECD to try and improve existing Type I eco-labeling programs. However, we and many others in industry, believe that several of the above issues are inherent flaws in the Type I "seal of approval" concept that will be very difficult to overcome. As a result, we are concerned about the negative impacts such programs may have on innovation, markets, and environmental progress.

Important Role of Type II Manufacturers Claims

Concurrent with the development of Type I eco-labels, many manufacturers have begun providing factual environmental information to consumers about products, via Type II claims. Such information has focused primarily on those issues that are of greatest interest and relevance to the consumer. P&G and many in industry believe that the sharing of factual environmental information with consumers encourages

environmental progress by empowering consumers to make knowledgeable choices. Understanding the needs of consumers, and the information that they seek when making purchase decisions, then delivering innovative and safe products that meet those needs, is at the foundation of P&G's business.

It is recognized, however, that there are concerns about Type II environmental claims - including whether or not consumers will be given accurate information, and whether they have the background to make knowledgeable decisions. We believe experience is showing that these issues can be addressed effectively. In particular, P&G supports the use and enforcement of "truth in advertising" laws to help ensure that manufacturers are held accountable for the accuracy of their environmental claims, and that consumers are not misled. For example, we have strongly endorsed the U. S. Federal Trade Commission's Environmental Marketing Guides. Similar guidelines also exist in other countries, including Canada, the UK, and Sweden. Experience has shown that such "truth-in-advertising" laws increase confidence in the accuracy and credibility of environmental claims.

In addition to using Type II eco-labels, P&G believes that other forms of industry commitment to sound environmental practices are also relevant to discussions on how to provide information to people. We have supported, for example, the American Forest & Paper Association's "Sustainable Forestry Initiative," and the "Responsible Care" programs initiated by the U. S., Canadian and European chemicals industry; as well as the recently announced AISE Code of Good Environmental Practice for the European laundry products industry. This code has three major elements: (1) a commitment by the industry to environmental innovation; (2) a commitment to provide factual and accurate environmental and product use information to consumers; and (3) a commitment to specific environmental goals for the industry.
Principles for Providing Information to Consumers

As noted above, P&G believes that all forms of consumer information (including both Type I and Type II eco-labels) must be subject to "truth in advertising" laws. These laws have largely been constructed from a few fundamental principles. Information must be:

1. Transparent. Criteria or the basis of claims for eco-labels should be clear, and publicly available.
2. Non-discriminatory. Eco-labeling systems must not favor local products, nor deny equivalent competitive opportunities to imports.
3. Truthful. The seal-of-approval or claim must not be presented in a manner that overstates the environmental attribute or benefit, expressly or by implication.
4. Based on sound science. All forms of eco-labels must be supported by scientific evidence, using methods that are accepted across the scientific and technical community.
5. Substantiated. There must be a reasonable basis for verifying the seal-of-approval or the environmental claim.
6. Not misleading to consumers. The information conveyed by an eco-label must be non-trivial and relevant to both the consumer and to environmental protection.

The Role of ISO Standards

As noted above, P&G has been closely involved in the development of ISO standards for eco-labeling. ISO has provided a a very important forum for discussion eco-labeling issues, and assessing existing and emerging approaches. We believe general guidelines ISO 14020 standard has established principles and expectations that are consistent with those described above. In addition, we believe that the current drafts of ISO 14024 and ISO 14021 for Type I and Type II eco-labels, respectively, provide important guidance on the design and execution of eco-labeling programs that should be followed on a worldwide basis.

Summary

Providing factual information to consumers is an important element of enabling them to make knowledgeable purchase decisions. What is most important from P&G's perspective is that all forms of consumer information, including eco-labels, must operate on a basis of transparency, non-discrimination, truthfulness, sound science, substantiation, and not be misleading to consumers. These principles must hold whether the information is from a government-sponsored Type I eco-labeling program, or provided independently by companies. We believe that the OECD represents an excellent forum for the discussion of eco-labeling programs and principles, and welcome the opportunity to participate in the upcoming "Green Goods V" conference.

ECO-LABELLING: SINGLE ISSUE APPROACHES

The labeling of hydropower as "green electricity", *by Dr. Bernhard Truffer, Limnological Research Center, EAWAG, Switzerland*

Green power products and hydropower

About 50 electric utilities in the US and Europe have introduced green pricing schemes in the last few years in order to let their customers choose the proportion of renewable energy in their personal power consumption. A wide variety of concepts have been developed, so far. A major lesson of these initiatives is that transparency and credibility are key for success. Still, no widely accepted and scientifically grounded standards for the definition of "green power" have been developed, neither in the US nor in Europe. An eco-label for electricity could therefore strongly enhance the market potential for green power products.

The green pricing products realized to date, offer some mix of renewable energies. The majority concentrates on so called new renewables like solar, wind and biomass. These energies are currently available in small quantities and their production costs exceed by far competitive levels. However, due to economies of scale associated with a growing market and future improvements in research and development, consumers improve the medium term competitiveness of these technologies by their additional payments.

Hydropower potentially is part of green power, as well. However, up to date, it has been treated rather ambiguously. Either it has been sold as green power in an undifferentiated way or production sites have been categorized along very simple criteria (e.g. less than 30 MW is "green power", bigger is not). Both approaches are far too simple and do not actually reflect the environmental impact of hydropower use. As a consequence, hydropower has been excluded from most of the green pricing schemes, so far.

Why should hydropower be part of green power products?

Currently hydropower is the only renewable energy source which produces electricity at important quantities in many countries and which is already competitive in current electricity markets. A green power package containing new renewables and hydropower could thus be offered at very competitive prices and for a considerable market niche. Furthermore, hydropower, especially from storage reservoirs, is able to produce electricity at the time of demand. Other renewables produce at non-predictable times and independently of any market demand. Incorporating hydropower into green power products could be positioned in the market as a truly competitive alternative to conventional mixes.

Hydropower producers may be interested in an eco-label as their business has come increasingly under pressure in many countries. Deregulation of electricity markets in Europe and the US will have a major

impact on the competitiveness of certain power plants. Green power represents a means to differentiate their product in the market place.

The environmental impact of hydropower

What are the labeling criteria for hydropower as a green power source? Hydropower has virtually no emissions at its use. Therefore — in a global perspective — its continued use and further expansion would be welcome. It will be one of them most important carriers of a sustainable energy future in the medium term. However, locally, impacts on ecosystems and human societies may be non-negligible. Major criteria for hydropower plants are (following the large dams commission of IUCN and the World bank):

- the number of involuntary resettlements should be zero or low;
- storage capacity has to be seen as a non-renewable resource due to sedimentation;
- fish and benthic organisms should be able to move and reproduce freely along the used rivers;
- biodiversity of the aquatic (and their related terrestrial) ecosystems should not be reduced;
- the net power benefit should exceed the loss of agricultural production if agricultural land has to be submerged;
- the reservoir should not impair water quality;
- downstream hydrology should not impair other uses and ecosystems integrity;
- regional integration and aesthetics should not be impaired;
- greenhouse gas emissions from rotten biomass should not exceed the gas fired equivalent.

Unlike "new renewables", hydropower is an already mature technology which has reached a considerable degree of diffusion and where the learning curve is rather flat. Furthermore, new installations of hydropower very often face considerable local political resistance. As a consequence, green pricing mechanisms for hydropower must be different from the ones of new renewables. A certification procedure for hydropower should concentrate on the environmental improvement of existing installations.

Current project for developing a certification procedure

The above analysis led EAWAG (the Swiss Federal Institute for Environmental Science and Technology) to start a project which aims at developing a certification procedure for hydropower plants and to analyze the potentials of setting up products in which hydropower will be sold alongside with other renewable energies.

In the project, a prototype of a certification procedure for hydropower plants will be developed. This prototype will be tested in the Blenio valley, located in the southern Alps of Switzerland. The prototype will then be generalized to other storage dams in the Alpine region, as well as to run-off river plants in the

rest of Switzerland. We endeavor to generalize this certification procedure to hydropower all over Europe. Certification of first hydropower firms should be feasible by the end of 1999.

Marine Stewardship Council: The Role of Eco-labelling in Helping to Achieve Sustainable Fisheries, *by Carl-Christian Schmidt, Project Manager, Marine Stewardship Council*

Many fish stocks around the world are in serious trouble. In its 1996 issue *of The State of the World Fisheries and Aquaculture*, the Food and Agriculture Organisation (FAO) reported that of the top 200 most important commercial fish species, 35 per cent are in the senescent phase with declining landings, 25 per cent are in the mature phase at a high level of exploitation and 40 per cent of the world's fisheries resources are still being developed. Perhaps the most important conclusion to be drawn by the FAO is that 60 per cent of fish stocks are in need of urgent management.

In addition to over-fishing, by-catch of unwanted seabirds and other marine life, is taking its toll on the marine eco-system. Nearly a quarter of all that is caught at sea (fish, marine mammals, turtles etc.) are thrown back into the sea dead or dying. Clearly, practices must change if we want to secure food fish for future generations and the livelihoods of coastal communities; fishermen and processors, indeed all those involved in the distribution chain including suppliers.

Problems in the fishing industry have been brought about by a combination of factors. A recent OECD publication[21] points to a number of reasons for this situation, the most important being:

- poor resource management;
- ill thought out use of subsidies;
- a lack of well described rights to resource use;
- poor regimes for trans-boundary and highly-migratory species;
- disputes over fishing rights and quotas between different user groups (countries, gear types etc.).

In February 1996, WWF and Unilever formed a conservation partnership to create market incentives to encourage sustainable fisheries. This led to the establishment of the Marine Stewardship Council. The Marine Stewardship Council has introduced a third-party certification scheme based on a robust standard (developed through broad international stakeholder consultation and approval) for sustainable fishing practices against which fisheries can be assessed and certified by MSC accredited independent certifiers. Products from fisheries meeting this standard will be eligible to use the MSC logo on their packs, in order to reassure consumers that they are not contributing to a major environmental problem through their purchasing decisions. Rather, by selecting products carrying an MSC logo, consumers will in future be demonstrably assisting in the solution of the global fisheries crisis.

However, the MSC recognises that in today's marketplace, consumers are bombarded by widely differing 'green' claims. Some of these claims are deceptive and serve only to confuse consumers rather than to provide them with the assurance they seek and the confidence they need in order to make informed buying decisions. The MSC recognises the importance of producing a credible claim (verified by independent, third-party assessment) as the way forward to restoring consumer confidence in "green" labels.

[21] Towards Sustainable Fisheries, Economic Aspects of the Management of Living Marine Resources, OECD 1997

Moves towards achieving more sustainable societies must be market driven. Sustainability as a concept is clearly a long term objective. While the interests of non-governmental organisations and business extend beyond those of public sector political institutions, sustainable solutions will only come about through market forces. In the meantime, public authorities have a vital role to play by facilitating legal and economic frameworks within which such initiatives are encouraged and can therefore thrive.

We believe that the premise on which the MSC is based i.e. a market-based economic instrument (developed through a multi-stakeholder consultation process to ensure the widest possible acceptance to achieve a common objective - in this case sustainable fisheries) could well provide the model for other sectors to follow in the future.

PRACTICAL TOOLS FOR THE USE OF ECO-LABELLING

Co-operation among national eco-label schemes in the EU - Options and Barriers, *by Ms Henriette Øllgaard, Danish Technological Institute, and Ms Susanne Toft, Head of Section, Danish Environmental Protection Agency*

Purpose and objectives

The main purpose of the study has been to present an overview of the differences and similarities among the national eco-label schemes in EU with regards to the general issues e.g. general procedures, principles, etc.

The results of the present study may together with other initiatives carried out after the workshop in Hague, November 1996, facilitate establishment of a more profound platform, aiming at clarifying the possibilities for co-operation, and thereby enhance co-operation among the eco-label organisations.

Furthermore, the objective has been to formulate precise descriptions of the basic principles and requirements in each eco-label scheme, set up important topics to be discussed in relation to the new-established co-operation, set up proposals for adjustment of procedures etc. to achieve a higher degree of co-operation.

Subject of the study

The study has been prepared using a questionnaire designed to clarify the possibilities and the hindrances of co-operation among the national European eco-labelling schemes in Austria, France, Germany, Spain, the Netherlands and the Nordic countries.

The questionnaire included five subjects:

- criteria settings;
- application procedure and test methods;
- control of compliance;
- information strategies;
- topics for co-operation.

The responses of the representatives of the eco-label organisations are lined out in the project as well as the main similarities and differences among the schemes.

Results and recommendations

The study indicates that in the areas of criteria setting, application procedure as well as information strategies, the schemes are rather similar at least at a superficial level whereas test methods and procedures for control of compliance differ more. Furthermore, the study has revealed important topics to be discussed in relation to the new-established co-operation. The representatives of the national eco-labelling schemes have pointed out possible areas for co-operation and opinions about the preconditions for co-operation.

It remains, however, questionable if studies conducted by means of a questionnaire gain sufficient insight to the basis of certain procedures and basic principles and the details for each eco-labelling scheme. Subsequently, it is difficult to set up actual proposals for adjustments of procedures on behalf of the obtained answers. However, the study clearly indicates where the major dissimilarities are and thereby it contributes to an overall clarification, and may therefore together with other initiatives result in a good platform for the future co-operation.

It may be beneficial for the process of further co-ordination and co-operation to employ a stepwise approach, where discussions of preconditions for expanding the recognition of criteria are at first carried out at an informal level aimed at gaining more insight and understanding of the different opinions. The objective of the next step(s) may be establishment of formal co-operation.

Subsequently, it is recommended to establish a routine of regular meetings both at a formal and informal level. The meetings/workshops could be thematic, e.g. workshops on preconditions for LCA data exchange, control procedures, definition of product groups, information strategies etc. Regular meetings serve at least two purposes: Establishment of personal contacts and sharing of knowledge and experience, which may be key prerequisites for enabling harmonisation.

Criteria setting

The study shows that data for the raw material and production phases are collected and criteria are set if the LCA proves that the phase has a major environmental impact. Transportation and packaging are included in the criteria by way of recommendations. There are some exceptions though. Generally, Germany does not include the production phase and the Nordic scheme does not include transportation. For both schemes it is argued that inclusion of these phases may result in creation of trade barriers.

Verification of the criteria is carried out through either site audits, tests or self-declarations. The Austrian and the Dutch schemes always demand a third party certification. Conformity with national environmental legislation is required in all the schemes.

The environmental strategies for the different schemes are rather diffuse, and only the Nordic scheme has a written strategy.

In general, no fixed lists or guidelines for hazardous substances or materials are used. Instead general guiding principles and requirements are implied in the criteria setting. Both international/domestic regulation and agreements are respected in all the eco-labelling schemes. In some schemes, certain substances are sought to be phased out or excluded (e.g. CFC’s).

The precautionary principle is either directly or indirectly incorporated in all the schemes.

The level of criteria (selectivity) is not precisely formulated, except in the Nordic scheme, but in practise all the schemes consider market and market shares.

Except in Austria, change of criteria is possible before the planned revision. The reason for revision is new knowledge of environmental issues related to the products.

In principle, all schemes have "borrowed" criteria from the other eco-labelling schemes. And it is also stated that this "borrowing" will continue in the future. Transparency as to the origin of data, boundaries etc. is mentioned as the most important precondition for borrowing and that national adaptation is required. This does, however, not imply that products that have already obtained licenses in one eco-labelling scheme may be accepted or recognised in another.

There is already more or less an established routine with regards to looking into the criteria of other eco-labelling schemes when new criteria are developed. Subsequently, co-operation within the field of criteria development may be possible at either a bilateral or multinational level.

Therefore, it is recommended to conduct a full criteria development or criteria comparison in selected product groups or products at a bilateral or multilateral level. The precondition for selection of product groups must be that the products are on the market in all of Europe. Thereby, it will be possible to discuss thoroughly e.g. definition of products groups, and address the difficulties related to the handling of transportation and the production phase.

In general, there are no specific guidelines on how to define products or product groups. It is decided on a case to case basis. But as a minimum all the eco-labelling schemes include function and functional unit. Other factors such as technology, consumer/market, quality and area of use are included to a varying degree.

All schemes believe it is possible to carry out cross-national co-ordination of product choice and products groups for future criteria development. Even though, there is no congruence in the plans for future choice of product groups, this does not need to be a major obstacle regarding co-operation. The choice reflects the trade structure of the countries but also the number of product groups for which there have already been developed criteria. The latter is often correlated with the life time of the specific schemes.

Subsequently, it is recommended to discuss which product groups that are suitable for joint criteria development. In order to clarify the possibilities the first step may be a discussion of the national plans for criteria development and criteria revision and the second step may be a discussion of which product groups that are of general interest.

Application procedure and test methods

The application procedure and level of documentation differ among the schemes in accordance with the different requirements.

If the criteria are equal and the general requirements are met, the procedure may be simplified for applicants that have already obtained license in another scheme except in the Nordic and Austrian schemes, which treat each application as a unique case.

In principle, all schemes agree on the advantages of simplified application procedures for products that already hold a license. The preconditions are knowledge of differences in the criteria and commonly accepted test methods. It is found to be worthwhile to develop "bridge documents".

It is recommended to have a further discussion of development of "bridge documents as a potential instrument for simplification of the application procedures.

All schemes, except the French, demand that tests are performed in accordance with international standards (ISO/CEN) and secondly in accordance with national standards. In all the schemes, the tests shall be performed by independent accredited laboratories, but some times the applicant's own laboratory is accepted.

Development of tests and test methods are generally not regarded as an area suitable for co-operation among the eco-labelling organisations. However, it may be worthwhile to identify areas where development of tests and tests methods are necessary and thereby be a potential mutual interest e.g. performance and function.

The extent of use of declarations varies among the schemes and as a result some schemes have general guidelines and others do not. In general, the declarations are found to be in accordance with the reality.

It is recommended to elucidate the experience regarding the use of declarations further.

There are no general requirements regarding quality or environmental management systems at the production site, but quality procedures concerning control, traceability etc. are required.

It is recommended to discuss the possibility of using the standards for environmental management systems (ISO 14001 and EMAS) with regards to documentation of the criteria for the production phase and the other life cycle phases of the products.

Control of compliance

The German scheme differs from the other systems by having no regular control and that compliance with the criteria is monitored through mechanisms of free market competition.

Tests and control of declarations take place in all the schemes. However, the independence of control is guaranteed in different ways (levels) in the schemes - from a third party certification to internal (within the eco-label organisation) quality standards in the eco-label organisations.

Control procedures are linked to the guarantee towards consumers and are organised differently in the schemes. Therefore, it is recommended that the control systems and points of control are regarded as an area of national interest and therefore should be kept out as an area of co-operation. In that way, different control procedures may not be a hindrance for co-operation.

Information

The information strategies of the schemes are very similar and differentiated towards different target groups: ordinary consumers, public "green" purchasers, licensees etc.

The opinions about including general information about other schemes and labels are divided. Some already provide information. Others believe that there is a risk of confusing the different interest groups. Therefore, the information strategies must depend on objectives and target groups. Some countries believe that specific information should be published by GEN.

The overall precondition for co-operation is the flow of information between the different eco-labelling schemes concerning both labelled pro- ducts and licensees but also concerning criteria setting.

Therefore, establishment of both formal and informal exchange of information and data regarding criteria setting, labelled products and licensees in order to achieve transparency is preferable and recommendable.

It is recommended to appoint a contact person in each eco-labelling organisation as responsible for the information exchange between the schemes. The information exchange may include: general policies, plans for development of new criteria and plans for revision of existing criteria, etc.

Introducing eco-labelling in the Mercosur, *by Stefan Larenas, Environment Officer Regional Office for Latin America and the Caribbean*

Since the month of July, 1997, the Consumers International Regional Office for Latin America and the Caribbean has been coordinating a project with the objective of introducing ways of environmental labelling into the countries that make up the Common Southern Market, (Mercosur, made up of Argentina, Uruguay, Brazil, Paraguay and Chile).

The project contemplates the following steps:

1. Definition of Specific Objectives.
2. Selection of the participant organisations.
3. Description of the different stages.
4. Elaboration of the Final Report.
5. Project Evaluation.

1. The Definition of specific objectives was carried out by the project coordination together with participant organisations. The question to be resolved was how to implement the general objective of eco-labelling in countries where independent and reliable environmental labelling, excluding some exceptions, is practically unknown.

   This requires a constant effort to define the general objective and annotation of specific objectives, in order to guide the different stages of the project.

2. The selection of participant organisations was carried out among Consumer member organisations, taking into account the following criteria: the organisations summoning capacity, its environmental experience, and its influence over decision makers. As a result, the following came to form part of the project: CEADU-Consumption of Uruguay, Consumer Action (Adelco) of Argentina, the Organisation of Consumers and Users (Odecu) in Chile, the Institute of Consumer Defense (IDEC), Brazil, and the Consumer Defence Council of the Municipality of Asunción, Paraguay.

3. Description of the different stages of the project, defining the contents of each stage and its correspondent continuance.

   a) Research

   b) Seminar

   c) Elaboration of Publication

   d) Meetings in each country

a. The research is centred on the legislative norms in each country that recount the information that each product should carry. Diverse regulations of a phytohealth, environmental and general labelling character exist, which should be studied in order to deliver a solid base for

the formulation of prepositions. The research period concluded with the deliverance of reports from each country in a seminar carried out in Santiago on April 23rd, 24th, and 25th.

b. Each of the representatives responsible for the organisations involved in the project participated in this seminar. Also, two British experts, Mrs. Teresa Smallbone of National Consumer Council and John Lawrance fom British Standard Organisation, participated as consultants on the topic of environmental sealing. During these workings days, we had the opportunity to learn of the England and the economic communitys experiences as far as environmental claims and independent certification. Besides analysing all the reforms handed in by each member of the project, we also analysed the situation in the different countries of the Mercosur in relation to the market situation as well as the in-force legislation. In the same meeting, in accordance with the presentations, we decided how to continue defining the next and last stage of the project.

c. Publication

The best way to influence a proposal is by carrying out local meetings, where we summon together all of the interested and decision-capable sectors. The results of our research and the range of our proposal will be presented in these meetings by a publication.

The publication will include the following contents:

Background

This part will be dedicated towards delivering a small outline of the experiences of independent environmental labels, thus far known of in the world, as well as its history, its difficulties and the necessity of promoting independent ways of certification.

Diagnosis

This part is dedicated towards presenting the results of a diagnosis that will take place in each of the countries. The diagnosis will deliver a vision of the situation in the markets of each country, as far as the existing claims in the respective markets, which are used by the producers in the form of marketing.

The diagnosis also will include indications as to how the system of certification works in general, referring to the information that the products should carry, based on the research carried out in the first part of the project on:

- Penal and legislative administration
- General and environmental labelling, in the case that it does exist.
- Use of information and publicity
- Institutionalism and administrative organisms in each country.
- Proposals

This part will include two central proposals posed by the project:

a) Legislative Proposal

This proposal aims to deliver a legislative framework which would regulate the diverse types of auto-declarations that exist in the market and which are used as a sale strategy by the producers.

b) Definition of criteria

With the aforementioned in mind, the criteria that exist for the introduction of independent labelling will be defined.

Comments

Lack of independent labelling in the countries that make up the Mercosur, created the necessity for this project. Keeping in mind the growing environmental awareness of consumers in the region, the project intends to incorporate a new type of labelling for the products so that the consumers of this market can redirect their purchaising power towards products that are more environmentally friendly.

The project participants confirm that practically no legislation on the environmental labelling of products exists, nevertheless there is a large quantity of products of all types that appear in the market as environmentally friendly without having been subjected to a reliable verification.

The participation of British experts contributes to the clearing up of the steps to be followed, and at the same time helps to approach the difficulties that labelling has had in diverse European countries, most of all England.

With the accumulated background, we, the members of the program, think that contribution can be made with the publication and its results, inciting the interest of diverse social sectors in different countries and opening up a debate on the topic.

The existing interest in the topic can be confirmed by the different conferences organised by Consumers International, when British experts visited Chile. On this occasion, to debate the necessity of introducing environmental labelling, we brought together ecologists, academics, consumer and environmental defence authorities and the general public. The members of the project think that similar interest exists in the other countries. Due to this, it has been decided to carry out of a workshop in each of these countries, using the publication of the project results as an instrument for discussion.

Ecoseal progress in Brazil, *by Roberto Fendt, Instituto Liberal, Rio de Janeiro, Brazil*

Brazil is in the process of introducing its first ISO Type I eco-seal, for the leather and shoe category. This paper proposes to analyze the demand for product environmental information and the role eco-seals or other forms of eco-labels could play in the process.

SECTION I reviews Brazil's actual experience with product environmental information, with particular attention paid to the existing Brazilian environmental network and public attitudes about the importance of environmental attributes in their product puchasing decisions.

SECTION II describes and analyses the Brazilian eco-seal process, and the efforts to include full life cycle analyses for products. This section also evaluates the selection of product categories in the context of the European market, which is the most important destination for Brazil-made shoes and leather products.

SECTION III addresses criteria used in the Brazilian eco-labeling scheme, vis-a-vis those used in other selected countries, and examines the goal of harmonizing Brazil's young eco-label program with other eco-sealing or eco-labeling schemes.

Finally, SECTION IV compares eco-seals to alternative ways of providing environmental information about products, from the perspective of Brazilian consumers: their needs, interests, purchasing habits, and desire to balance environmental and economic concerns in their final purchasing decisions.

The paper's main conclusions are as follows. (1) Brazilian consumers are increasingly interested in the environmental impact of their consumption decisions. This is attested by the growing demand for such kinds of information, which is provided by consumer associations, their periodicals, and the various forms of package labels and inserts that are analyzed in the paper.

(2) In addition to eco-seals, several alternative forms of environmental information are also available to consumers. These alternative may follow industry guidelines or be based on criteria developed by government agencies, consumer groups or other organizations.

(3) Certain alternatives to Type I ecoseals—such as Type II labels that provide detailed product and consumer information, similar to nutrition labels on foof products—were found to be advantageous to consumers in several respects.

(4) Harmonization of labelinh schemes, product life cycle analysis criteria, environmental goals and standards, and other considerations is desirable. Otherwise, if each importing country is free to devise its own system (based on local labor, industrial or environmental needs, for example) exporting countries like Brazil would need different manufacturing processes, eco-labeling schemes and the like for each market to which it wants to export its products.

The paper's principal recommendations are as follows. (1) It is important that all nations adhere to the principle of non-mandatory product environmental labels. (2) Type II labels are generally superior to Type I eco-seals in their ability to inform consumers about the environmental impacts a product is likely to have in a particular locality and for a particular use. (3) If Type II eco-seals are to be a useful information device, and not result in non-tariff barriers to trade, international harmonization criteria on product environmental labeling will need to be developed.

Environmental Labelling in Chile, *by Ana Isabel Zuniga, Environmental Economics Unit, National Commission for the Environment, Santiago, Chile*

In Chile, there is no tradition on informing consumers about the characteristics or components of the products commercialised at national level. Even more, it does not exist a legislation that obliges producers to incorporate consumers' right to get information about the environmental quality of the products they consume.

However, in the last time an increasing concern in Chilean people about the environmental quality of products has emerged, although very intuitively yet. Considering that in more developed countries, citizens are more environmentally conscious, it is possible to think that this tendency will continue to grow in Chile.

In this context, in Chile, some producers have begun to use labels as "ecological" or "friendly with the environment" on their products. The unconscious use of these labels only leads to confuse consumers and, by any way, it constitutes a guarantee that the products really respond to what they offer.

So, this is a situation that deserves an analysis of the way to implement a system of environmental quality certification through, for example, a formal eco-label, so bad practices that do not point to establish a sustainable development in the country, can be avoided.

By other way, at international level there are conditions for globalisation and for trade between countries. This means a challenge for developing countries as Chile, that have been part of this globalisation process and that pretend to increment its participation in international markets with more strict environmental regulations.

In January 1998, the Chilean Government published the document "An Environmental Policy for a Sustainable Development". The fourth objective of the policy is to introduce environmental considerations into productive sectors. The design and implementation of a certification system that assures a proper production from an environmental perspective, is considered as one way that can help to reach the objective, by helping product's acceptability in national and international markets.

In order to comply with the forth objective, the Environmental National Commission is working on a national policy for environmental certification which pretends to formulate a country position in respect to this topic.

By other hand, the Environmental National Commission has just begun with a study whose main objective is to design a National Environmental Labelling System for Chile that considers the potential demands that will appear in the national market, as it assures a better insertion of national products in international markets.

The specific objectives of this study are: i) a diagnostic of national situation in relation to environmental claims made by national consumers, ii) analyse Chilean products on international markets discussing the possibilities of submitting to international eco-labels, iii) propose a series of technical, institutional, and legal basis for a National Environmental Labelling System for Chile, iv) propose environmental seals for three product categories commercialised in national markets, defining criteria, design and environmental label characteristics.

As Chilean efforts on implementing eco-labelling systems are at an initial state, exchanging experiences with more developed countries in this topic is crucial. The International Conference Eco-Labelling for a Sustainable Future, held on Berlin, between October 26-28, 1998, is a valuable opportunity for the Environmental National Commission from the Government of Chile to attend and get to know about other's countries experiences. By this means, the design of the system for Chile has a better chance to be successful.

ANNEX 1: LIST OF PARTICIPANTS

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