



Ecodesign directive

How to create a more efficient legislation



Teknikföretagen

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Foreword

Teknikföretagen, the Association of Swedish Engineering Industries, represents more than 3,500 engineering companies – Sweden's most important companies. Our members operate in a range of sectors such as telecommunications, fabricated metal products, electronics, machinery and equipment, office machinery and apparatus, power industry, instrument technology, optics, motor cars and transport equipments.

The ecodesign directive is a framework which allows the EU Commission to take decisions, implementing measures on specific product requirements for energy-using products, the decisions are harmonised EU regulations or directives. The directive was extended in 2009 to include energy-related products, which means that e.g. windows were also covered. When the draft ecodesign directive was published, it was the first general environmental directive aiming at products.

There are elements in the Eco-design directive that is positive for industry. The directive stimulate an open process of consultation with stakeholders, self regulation could be used as an alternative to legislation. Another possibility is to supplement the current system with an alternative making the work on the ecodesign directive more similar to the work process used for new approach directives by using standards.

In order to give input to the review of the eco-design directive in 2012, Teknikföretagen has conducted a study to obtain a picture of the workability of the directive and its impact from a company point of view. It is the framework directive that has been studied by looking at implementing measures. The study has been focused on the areas legislation and working process, implementation, market surveillance and self-regulation.

The study has been conducted through interviews with representatives of those considered to be interested parties in regard to the ecodesign directive, such as companies, the Commission trade organisations and market surveillance authorities.

During the study a reference group consisting of representatives from member companies has met regularly to discuss and reconcile the progress.

The specific requirements as such are not a problem. What is mainly lacking is clarity in the process, i.e., what the requirements mean and when they take effect. Therefore a main conclusion of the study is that the application of the framework directive needs to be revised.

Areas not directly covered by the framework directive have also proven to be very important, e.g. the methodology used to develop requirements, the so-called MEEUP method to make the simplified life cycle analysis.

The study has been conducted by the consultant company Arkitraven.

Stockholm, Juli 2011

Maria Sandqvist

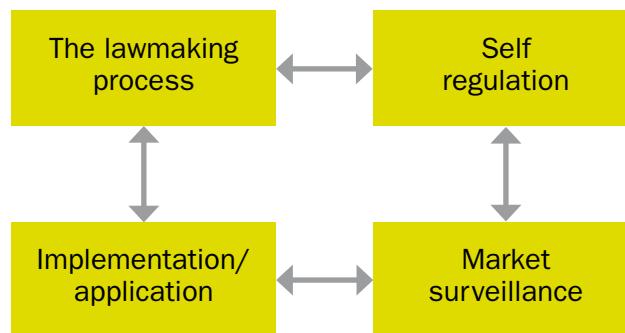
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Executive Summary

During 2012 the ErP directive will be reviewed. Therefore, Teknikföretagen is interested in getting an idea as to how the directive has been functioning so far and how it has affected its member companies.

The ecodesign legislation differs from other EU legislation on products in that the framework directive is supplemented with implementing measures or voluntary agreements. Also the ecodesign legislation does not use standards in the same way as in the new approach directives.

To get an overall view, the framework directive is analysed on the basis of four parts:



The study carried out interviews with companies that are affected by the implementing measures, representatives of the Commission, nationally responsible authorities, trade organisations, NGOs, market surveillance authorities and preparatory study consultants.

Proposal for changes in the current model

The study has shown that what is needed first of all is not changes of “what”, but of “how”. This means that companies and other interested parties have understanding of the requirements, but what needs to be changed is how the process leads to the requirement and how this is communicated.

The legislative process

- The most important step is to review the process of developing new implementing measures. Clarifying and communicating the process will go a long way toward rectifying the negative consequences experienced by companies today. The following can be pointed out:

- **Clarify the work plan:** For better clarity in regard to what products it is intended to be targeted, the PRODCOM codes or CN codes (commodity codes for statistical purposes) could be used in the work plan. Furthermore there is a need for a more precise timetable as to when the work with the particular product group will get under way and when provisions are expected to be in place. Resources should also be redistributed to develop a more clear work plan.
- **Flexible application of the method:** Create flexibility in the application of the MEEUP method as to the parts of the life cycle being studied in order to speed up the preparatory study process and also make sure all relevant parts are included.
- **Structure preparatory studies with fixed-time goals:** The preparatory studies should contain more clear time tables and fixed-time goals. A time table should be in place and communicated even before a preparatory study begins.
- **Establish “expiration dates” for preparatory studies:** If a preparatory study is not ready within the time set or a finished preparatory study is not adopted as an implementing measure within a certain time, there should be a recognised procedure on how the Commission will act to ensure that the requirement does not become out of date.
- **Start preparatory studies in sequence:** Limited resources to carry out preparatory studies, both for the Commission and for the trade organisations, can be remedied by starting studies in sequence, rather than in parallel.
- **Horizontal and vertical implementing measures:** To avoid suboptimal results, it should be possible for requirements in vertical implementing measures to take priority over those in horizontal ones. This is in line with the procedures in other product legislation.
- **The method:** Make it possible to use the method in optimal fashion:
 - Facilitate access to data from different data sources, e.g., make it easier for the industry to hand over data in a way they are familiar with or are satisfied with from a competition standpoint.
 - Make sure the consultants are able to contact companies, e.g., by a visit, and ensure the budget has funds to do so
 - Make sure that user patterns set forth in the preparatory study better reflect the actual use of the product.
- **Possibility of commenting:** Require the consultants to have a dialogue with industry representatives also before and between meetings with interested parties. Also make sure the number of meetings is determined together with the interested parties and that material is sent out far enough in advance.
- **Impact assessments:** This should be made more clear in the process, i.e., be tied more closely to the preparatory study process itself. There should also be more focus on how SMEs are affected by the proposals put forth.

Implementation

Better clarity throughout the legislative process, from work plan to adopted implementing measure and enforcement, should allow the market to impose requirements at an earlier stage and companies to begin to adapt sooner.

Market surveillance

Today there is limited market surveillance, even though issues such as ecodesign have the same legal status as safety issues. One way of increasing market surveillance of properties is to facilitate co-operation between market surveillance authorities in charge of product safety and product properties, i.e., make it possible to use common denominators, e.g., by testing the same product for both safety and ecodesign.

Make sure the information systems available for exchanging experience and test results are adapted to product properties and the requirements imposed by the ecodesign directive.

Voluntary agreements

Try to simplify the process and consider whether it needs to be just like the process of producing implementing measures at present. Try to find less administratively onerous ways of driving the process forward. A simpler process could also increase the number of voluntary initiatives adopted.

Encourage market surveillance type efforts from companies to focus on the issues. To create trust, actors from both private and public organisations should be asked to take part in such initiatives.

Standardisation as an alternative

One should consider supplementing the current system with an alternative making the work on the ecodesign directive more similar to the work process used for new approach directives.

Such a procedure could be based on the standardisation bodies (which is open to all stakeholders, including lawmakers) producing standards for both measurement and the technical requirements. The lawmakers could then decide on when the various technical requirements should take effect, in order to create a pressure for change. The benefits of this procedure include:

- The companies can be more involved in the work
- The work is done in a way familiar to the companies
- A global harmonisation of requirements is achieved more quickly

Results of the study

The legislative process – defining and developing implementing measures

The specific requirements or the method as such is not a problem. What is mainly lacking is clarity in the process, i.e., what the requirements mean and when they take effect.

Besides lack of clarity in putting forward implementing measures, the process seems to take a long time from the work plan to the actual implementing measure. In some cases, this long time can affect the relevance of the requirements when the measures actually take effect.

Implementation

The process of bringing forth implementing measures is currently perceived by companies to be unclear and poorly communicated. Better clarity throughout the process will create increased understanding and possibly more prompt observance of the requirements in practice. Especially for small companies, which generally feel themselves more affected than the big ones and thus feel less prepared to cope with the requirements.

Market surveillance

All those interviewed agree on the importance of an active market surveillance for the ecodesign directive and the importance of co-operation, both between industry and authorities and between the different member states. Due to the limited market surveillance for the ecodesign directive, co-operation projects have been limited thus far.

Due to lack of market surveillance on the part of the national authorities, trade associations and similar sometimes carry out market surveillance activities on their own. Those interviewed are positive as regards this type of co-operation, as long as it does not mean that the market surveillance carried out by the authorities ceases, or it undermines confidence in the ordinary market surveillance.

Voluntary agreements

Those interviewed indicate that voluntary initiatives can be a good alternative in certain circumstances, especially when they involve a sector that has few actors and complex products.

The main benefit of voluntary initiatives is seen as being that industry drives the processes. The work also involves challenges, since the process of working out voluntary initiatives is felt to be administratively onerous. Other challenges are the lack of guidance on what needs to be done. The issue of how, and how the lack of market surveillance should be handled, also creates difficulty.

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Introduction

Background

Given the great importance of the ecodesign directive for energy efficiency and climate issues and for companies operating on the internal market, it is extremely important for the legislation to be as effective as possible. This is to achieve the political goal in a simple way for the companies.

The ecodesign directive 2005/32/EG (the EuP directive) is an EU directive which aims at improving the environmental performance and places requirements on energy-using products other than vehicles.

By revision in 2009, the directive was extended to also cover energy-related products, such as windows and water faucets, which mean that far more products are affected than before. With the extension, it becomes the ErP directive 2009/125/EG.

During 2012 there is going to be a review of the ErP directive, which might mean that further products will be covered. Before this revision, the Association of Swedish Engineering Industries is interested in getting an idea as to how the directive has been functioning thus far and how it has affected its member companies.

Purpose of the study

The purpose of the study is:

- To determine how the work with the ecodesign directive is functioning at present
- To identify which parts of the work are functioning well or less well from a variety of viewpoints
- To make proposals for changes in how to carry out the work with the ecodesign directive

The perspectives studied

To get an overall view, the way that the directive functions is analysed on the basis of four parts:

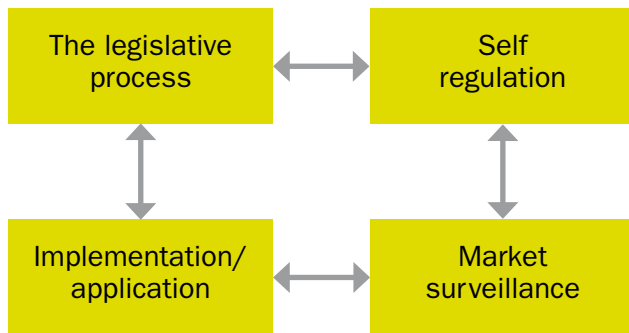


Figure 1. The four parts of the ecodesign legislation that have been studied.

1. *The legislation and the work process*

The process of developing implementing measures is central to the ecodesign directive. It is the framework directive, along with implementing measures, that affects the company. In the process of producing implementing measures, one decides how a product is defined and which requirements should be imposed on it. Since the outcome of this work affects the company, it is important to gain an idea of how the process functions and which parts causes extra costs, lack of clarity, or other negative impacts on the companies that have to implement the legislation.

2. *Implementation*

To clarify the impact that the framework directive and implementing measures have or are expected to have on the companies subject to the legislation, it is necessary to study how companies work to apply with the requirements of the legislation and what impact this has on the companies and their products. This gives a picture of the parts of the legislation that function well or less well from a number of perspectives on the micro level, such as resource utilisation, effectiveness, market influence, and information.

3. *Market surveillance*

Market surveillance is important in ensuring that the legislation will be observed. An active market surveillance is important to all interested parties. It is therefore worthwhile studying if there are certain aspects of the framework directive or implementing measures that make it especially hard to carry out market surveillance in the field.

For market surveillance to work, there needs to be resources made available, as well as exchange of experience and data between the member states. It is therefore important to clarify how the market surveillance functions according to the ecodesign directive at present, and the extent of co-operation between member states and between market surveillance authorities and companies.

4. *Voluntary agreements*

With the introduction of the ecodesign directive, the possibility was opened up for self regulation, that is, voluntary sector agreements as an alternative to implementing measures. In this context, it is important to analyse the prerequisites for self regulation and what they are based on. We also analyse how self regulation works as compared to legal regulations.

Present situation

Composition of the legislation

The ecodesign directive is a framework directive within which implementing measures are set forth for various products or product groups. It is the framework directive in combination with an implementing measure that affects a company. As an alternative to implementing measures, voluntary agreements can be made by a sector that works with a certain category of products or product groups.

The focus of the ecodesign directive is energy, but other environmental aspects are also considered. The focus on energy is a natural consequence, since the directive applies to energy-related products.

The process of working with requirements according to the ecodesign directive can be described by the following steps:

1. **Work plan** – The Commission will establish a work plan, giving an orientation to the work and a guidance listing of product groups that are prioritised for adoption of implementing measures. The most recent work plan was produced in October 2008 and applies to 2009-2011.
2. **Preparatory study** – In the preparatory study phase, the Commission uses consultants to carry out a preparatory study for a product group. This study is carried out by the so-called MEEUP method¹ which means that the product is analysed from a life cycle perspective (production, distribution, usage and “end-of-life”). During the preparatory study, so-called stakeholder meetings are held with interested parties.
3. **Consultation forum** – The requirement for the Commission to hold a consultation forum is contained in the framework directive. The forum should have representatives from the member states and all interested parties for the product or the product group. This is held after the preparatory study is finished and it involves a proposal for implementing measures.
4. **Impact assessment** – This is done after the preparatory study is completed and a draft has been produced for implementing measures. It is done by an *Impact Assessment Board*.
5. **Committee procedure** – The requirement for a committee procedure is found in the framework directive and means there is a voting with government representatives from the different member countries.
6. **Review prior to decision** – This is the last step before adopting the implementing measures. The examination is done by Parliament and the Council.

¹ MEEUP stands for Methodology for the Ecodesign of Energy-using Products

7. **Legislation in place** – Legislation in place means that requirements have been decided upon and companies must abide by them after a certain time.
8. **Revision** – Both directives and implementing measures are to be reviewed at certain intervals. For example, the implementing measures for electric motors will be reviewed not later than 7 years from taking effect and the implementing measures for external power packs not later than 4 years after taking effect.

In this study, we primarily examined steps 1-4 and 7. Committee procedure and parliamentary review are not further touched upon. Revision of implementing measures has not yet taken place, so it is hard to have ideas about it.

Differences from other product legislation

The ecodesign legislation differs in one major point from other EU directives about products. Other product legislation uses most often the new approach, which means that a directive imposes requirements on which goals are to be achieved in nontechnical terms, while how this is to be done for a particular product group (the technical formulation of the requirements) and which measurement method is to be used are up to standardisation (which is open to all interested parties). For the ecodesign directive, the lawmakers impose requirements on how to achieve the goal in technical terms, through implementing measures or voluntary agreements.

Focus of the legislation and overlap with other legislation

Ecodesign is defined in the framework directive as the integrating of environmental aspects in the product design in order to improve the product's environmental performance during its entire life cycle. With such a definition, this means that there may be overlap with the RoHS directive and the WEEE directive, since these also deal with environmental aspects in products, namely, certain chemicals and recycling, respectively.

The ecodesign legislation thus far has focused on energy, both due to the original framework directive and the updated framework directive. Depending on whether the focus is only energy or if there is another focus, this will affect in practice how much overlap there is with other directives. A focus on energy involves the member countries of the EU working together on climate issues. By placing requirements on energy efficiency for different product groups, the use of energy is reduced, with less emissions as a consequence.

Observations from the interviews

The legislative process

The process of producing implementing measures is central, given the status of the directive as a framework directive and since each implementing measure can be seen as new legislation, in that they impose new and often detailed requirements not previously specified in the framework directive.

This means that the lawmaking process and how it works in practice can have major impact on the companies covered by the requirements produced. A large number of the observations made within the context of this study were directed to the lawmaking process and the parameters related to it.

The work plan

The work plan is the basis for the work done in the context of the ecodesign directive.

A recurring comment during the interviews is that the work plan is difficult to interpret. It is unclear which specific products will be included during the period when the work plan applies. The areas covered are relatively aggregated and the examples of products given in the appendix of the work plan are not all-encompassing, which makes it hard for individual companies to figure out if their products will be covered by the implementing measures or not.

One example is the area in the work plan entitled “Food preparation equipment”. Products actually covered by a preparatory study during the period are kitchen ranges and grills for household use and commercial use, coffee makers, and ovens for household use and commercial use. This means that preparatory studies were done on some of the food preparation equipment, but there are other kinds of food preparation equipment for which no preparatory study was done.

Some of those interviewed feel there are things in the preparatory study that are not mentioned in the work plan. Others feel there are things mentioned in the work plan that were not in a preparatory study. The uncertainty among those interviewed illustrates the lack of clarity in the present work plans.

Many of the interviewed companies begin the practical working with the ecodesign directive and monitor the process going forward by using the descriptions in the work plan so it is important for the descriptions to be clear.

The interviewees point out that the gap between the descriptions in the work plan and the product groups actually studied is too large. This makes it hard for the company to figure out in advance if their products will be covered by a preparatory study or not.

Examples from the work plan for 2009-2011

The work plan includes the following guide listing of product groups:

- Air conditioning and ventilation systems
- Electrical and fossil fuel-fired heating devices
- Food preparation equipment
- Water-consuming equipment

Appendix 1 of the work plan contains examples of what the different product groups can involve

The preparatory study

All those interviewed were involved in one way or another with the work on a preparatory study. The Commission employees and preparatory study consultants are directly involved. Companies, trade organisations, NGOs and national authorities are indirectly involved by tracking the study and taking part in *stakeholder meetings*. The commentaries put forth by the interviewees primarily concerned:

- The time spent, i.e., the total calendar time that the preparatory studies take and the reasons why
- The extent and definitions of the area covered by the preparatory study
- The method and input values of the method used to determine the environmental impact of the products, especially their energy consumption
- Size and significance of the task for the consultants used to carry out the preparatory study
- The input from the consultants who carry out the preparatory studies
- Possibility of interested parties to give their views and comments on the preparatory study

A review of these aspects is given below.

Time spent

Many of those interviewed indicated that the preparatory studies often take much too long to carry out. This, in turn, can have impact on the relevancy of the study, since this carries a risk of the market so to speak jumping ahead of the study when it is finally ready. The long time between preparatory study and final measures can also mean that areas with very great energy savings potential go unregulated longer than is desirable. This holds, for example, for boilers and hot water heaters.

The explanations given for the long process time are first and foremost:

- All parts of a product life cycle are analysed, i.e., both the manufacturing phase, the distribution phase, the application phase and the reprocessing phase (“end-of-life”). This is done even for products where it is already clear from the start where the major energy consumption occurs.

- The method is hard to use in certain areas or for certain types of products, e.g., products which are part of a system.
- Sometimes it has been hard to get hold of relevant market data in support of the preparatory study and the method.
- Due to the public nature of the process, a lot of actors come forward with commentary during the *stakeholder meetings*. This is of course the aim of the process, but it often means that the preparatory study takes longer than would otherwise have been the case.
- For many interested parties there is great values/much at stake, such as competitive ability or survival. Therefore, everyone fights for the orientation that suits them best.
- The consultants hired often need to familiarise themselves with the field. This means learning time, but also misunderstandings that have to be resolved during the course of the process, which also affects the time frame.
- The Commission is usually short on resources. The shortage becomes worse in that several preparatory studies are started in parallel and thus have greater demand for staff.

Scope and definitions

A preparatory study involves a certain product or product group. What is actually studied is the product or the product group as defined in the preparatory study. Therefore, the question of definitions in the preparatory study is central. How a product is defined is also important to the possibilities of producing data.

In the preparatory studies that were carried out, the consultant had to define what was meant by the product or the product group. Some of those interviewed pointed out that this can mean giving too much power to one person or a close group of people. Especially if the consultant is not an expert in the field and may have time reasons, for example, to include only certain categories of the product.

The companies interviewed would like to see both “broader” definitions as regards aspects and “narrower” definitions as regards products:

- In many of the preparatory studies conducted the interviewed companies feel that the definitions tended to be broad, i.e., that they sometimes involve a function rather than a product type. This kind of broad definitions can force exceptions as the study proceeds, which potentially will delay the process. The interviewed companies would like to have “narrower” definitions in the sense that what is today part of one preparatory study or implementing measure should be divided into two or more implementing measures or preparatory studies.
- The interviewed companies would like the preparatory study or implementing measure that deals with their product to cover the entire spectrum of relevant ecodesign aspects, including those that can be covered with horizontal implementing measures, such as standby. In this way, it can be said that the companies would like to see “broader” preparatory studies or implementing measures, i.e., by having all relevant ecodesign aspects brought together in a preparatory study or implementing measure.

The consequence of the above is that horizontal implementing measures cause challenges, both from practical perspectives and how they fit in with vertical implementing measures:

- The interviewed companies pointed out that they often assume that all relevant aspects are covered in the preparatory study on their product. Resource issues may also be of importance here, i.e., they only have the capability to follow one particular study. As a result, the companies do not follow other studies and become aware of their existence after the fact, i.e., when they are adopted or in the worst case take effect.
- In other product-related legislation, requirements in the vertical legislation take precedence over those in the horizontal. In the ecodesign directive, the most stringent requirement always prevails. This can mean that requirements in the implementation measures that are horizontal will apply instead of the one for individual product group. This carries a risk of suboptimal performance. One example is more stringent standby requirements which can affect the energy efficiency negatively for a product, as a whole, depending on what kind of product it is and how it is used.

The method used for the study

The MEEUP method is used to carry out preparatory studies. Most of those interviewed pointed out the merits of the method and feel that it works well for its purpose. It was also pointed out as being a positive that a standardised method is used, which facilitates the scholarship among different preparatory studies.

The viewpoints put forward in most instances have nothing to do with the method itself, but how it is applied and practical difficulties in connection with its application.

The method covers the entire life cycle of the product. This is not seen as a problem in itself, but is considered to possibly “steal time” if, for instance, there is already knowledge at the start of the study that the overwhelming majority of the energy consumption occurs in the application phase.

The method is supposed to describe how the products are used, which is a significant challenge. Much of the energy use of the products is influenced to a very high degree by how they are used, which makes it important to chart usage patterns in order to determinate requirements that influence the environmental impact in a desired way. Here, both the study consultants and the companies and trade organisations interviewed feel that the usage proposed in the preparatory study often does not reflect the reality adequately. There are many reasons for this, one of them being the resources needed to determine a good usage pattern. Another reason is that existing studies on usage often give many different pictures of what the usage looks like. Neither is the analysis of usage done in any consistent way. In many cases, it is done by interviews with users, in other cases it is based on assumptions of different kinds.

The preparatory study is supposed to establish the Least Life Cycle Cost (LLCC). This is described as follows: “*the level of energy efficiency or consumption will be set aiming at the life-cycle cost minimum to end-users*”. Some of those interviewed pointed out that there are products where it can be difficult to establish this, e.g.,

due to the fact that the effect of proposed efforts only marginally impacts the LLCC. This can be the case when a proposed step to reduce energy consumption is “balanced out” by a higher manufacturing cost. In the worst case, the LLCC can remain virtually unchanged, regardless of the proposed changes.

The difficulty in determining the LLCC also applies to products with long lifetime, where it can sometimes be hard to determine what the lifetime is.

Example of the difficulty of establishing lifetime

One of the interviewed companies estimated they had placed around 750 000 units on the market over an 80-year period. Half of the units are deemed to be still in use. How is the lifetime defined for this type of product?

Lack of data to use in calculations in the preparatory study can in many cases be a challenge. Lack of relevant data is also considered to be something that makes it hard to establish a realistic baseline for the products, i.e., something to compare energy efficiency improvements against.

According to those interviewed, the lack of data can be due to:

1. No data is available in that area
2. No one is willing to provide relevant data
3. Those who hold the data cannot provide it for legal reasons.

Some of the interviewees feel that in certain cases there can be a grey area between the areas affected by the ecodesign directive and other legislation. Among others, they mention requirements in the RoHS, which involves questions of the environmental impact of certain materials of electronic products. The interviews also point to a grey area with regard to emissions rights. In these cases, the issue of emissions which occur primarily in the manufacturing phase of a product need to be regulated by ecodesign legislation, since emissions rights may approach the issues with a different means of control.

The consultants

The interviewed companies have a somewhat more critical view of the preparatory study consultants. Many of the interviewed companies think that the preparatory study consultants are often poorly acquainted with the product or the product area being studied. The companies also think that the consultants in some cases are opposed to considering the reality of the manufacturers or visit the company.

Article 15.5 of the framework directive stresses that there should be no significant negative consequences on the product’s way of functioning. Some of the interviewed think that the lack of knowledge of the consultants about the product and the strong focus on energy means that impact on usage is sometimes not handled to a sufficient extent. This means that the limit values for energy consumption proposed by the consultant in fact significantly affect other properties of the product in a negative way.

That some consultants do not visit companies whose products they are analysing may be due to budget factors. It may also be that the consultants are afraid of losing their independence from the companies affected by the study. Moreover, there is no formal requirement at present for the consultants to visit the companies involved. The overall consequence is that the consultants are to some degree felt to be proposing requirements without understanding what it means for the usage or the performance of a product, as seen by many companies.

Those interviewed other than companies generally have a more positive view of the consultants. The persons interviewed within trade associations, government authorities, and the Commission feel that the consultants used, don't need to have detailed knowledge of a certain product area. Instead, they need to have an overarching understanding of the technology. But it is felt to be just as important that they understand the political process, i.e., the purpose of the preparatory studies and what they will be used for, and an ability to look broadly at the product and its environmental impact.

Possibilities of giving one's views

During the work with the preparatory studies there are several opportunities to offer input to what is produced during the work. That which is debated during the interviews is *stakeholder meetings*.

Stakeholder meetings

As for *stakeholder meetings* it can be said that the interviewed companies are more critical than other interviewees. Many of the interviewed companies think that the number of *stakeholder meetings* in the studies involving them were too few and the meetings that were held often come at inconvenient times during the year.

A similar criticism from the companies is the point in time when material is sent out prior to *stakeholder meetings*, as it is felt that the material arrives far too late before the meetings. This criticism is shared in many cases by trade organisations which have to gather their members' viewpoints on the material sent out. With much too short a time to administer such a process, the upshot is that trade associations and by extension their member companies do not have any real chance of presenting their viewpoints.

Many of those interviewed point out that the broad circle of participants at stakeholder meetings is a challenge. Since the meetings are open to those who potentially have various information about the product or product group being discussed, the meetings can sometimes be felt as being ineffective.

Some of the interviewed companies expressed a desire for more limited groups to discuss more technical aspects of a product, while at the same time there is an understanding that there needs to be broad participation to create legitimacy in the process. The "closer" the interviewees are to the lawmaking processes in Brussels, the greater their understanding of a broad participation.

Consultation forum

As compared to *stakeholder meetings* relatively few viewpoints were expressed regarding the consultation forum.

One view expressed concerns the number of seats in the forum and that they are permanent. Some organisations that were not aware that their products would be covered by the ecodesign legislation when the seats were assigned have been left out. However, this has been solved in that there are also other opportunities to take part, besides the permanent seats, depending on which area is covered by a preparatory study.

Another viewpoint concerns the cases when it is appropriate to hold several consultation forums for one product or product group. Those interviewed believe they do not know how much time there is between two consultation forums. This creates uncertainty as to the anticipated time for adoption of an implementation measure.

Impact assessment

Few of those interviewed feel that they have a clear idea of the work on impact assessments after a preparatory study is concluded and before an implementing measure will be adopted.

One view expressed involves when the impact assessment is done in relation to the preparatory study. Those interviewed feel that the impact assessments are done long after the preparatory study is ready. There are several examples of cases where the impact assessment was done 1.5 to 2 years after the preparatory study was ready. Some of those interviewed point out that impact assessments done so long afterwards seldom are likely to question the work of the preparatory study. That the preparatory studies are conducted for several years is also felt to influence the will to question them.

The time between a completed preparatory study and the finished impact assessment is given below for a number of areas:

Area	Preparatory study ready	IA ready	Time between study and IA
Circulators	April 2008	July 2009	Around 16 months
External power supplies	Jan 2007	April 2009	Around 28 months
Motors	Feb 2008	July 2009	Around 18 months
TV sets	Aug 2007	July 2009	Around 23 months

Another criticism is the content of the impact assessment. Some of those interviewed feel that the impact assessment functions more as a summary of the preparatory study and its work, than an actual analysis of the impact that investigates what kind of impact a proposal will have, e.g., for a company.

Implementation at companies

Implementation at companies means all work that the companies do in connection with a certain product or product group being covered by a requirement

under the ecodesign directive, i.e., from the time that a product group is first mentioned in a work plan until the final requirement is in place and being enforced. Thus, implementation is considered to be somewhat more than the work done after the legislation enters into force.

Many of those interviewed point out that it often takes a long time from a preparatory study being ready until an adopted implementing measure is in place. In some cases, this time is more than 4 years.

The long time between a finished preparatory study and a finished implementing measure means that the result of the preparatory study becomes outdated. Depending on how fast the product development is in a certain field, it can be felt as being almost obsolete.

Companies active in sectors not having so fast a turnover rate also feel it to be a problem when it takes a long time between finished preparatory studies and adopted implementing measures. This has to do with the uncertainty which the company experiences. Companies do not want to start adapting to something they are not sure about or when it will take effect. This holds both for companies that have to make large investments in development to adapt their products and those which need to make smaller investments in development. Under uncertain conditions, nothing gets done.

Interviewed companies, especially the smaller ones not able to have a service devoted to tracking developments in the field, feel that they have to go by rumours as to what the requirements will be and when they will take effect. There can also be uncertainty as to how much their products will in fact be covered by a definition and, thus, a preparatory study or implementing measure.

Those interviewed indicated that how long it takes between adopted implementing measures and enforcement varies among companies and among products. For certain products it can be 6 months, for other product groups it can be 4 years. But none of the interviewed companies said that a change-over time as proposed was too long.

All those interviewed agree that an important factor in how much time a company needs between an adopted implementing measure and its enforcement is how long it takes before the adoption becomes known as a requirement. One can of course say in response to this that it cannot be known exactly what the requirement will be before the implementing measure is adopted, but the more the companies know about the requirements, the easier it will be to begin to prepare themselves. This holds for the entire process from the work plan and through the entire lawmaking process to the adopted implementing measure.

Both interviewed companies and trade associations stressed that it is very resource-consuming to monitor preparatory studies. One consequence of this is that certain trade associations cannot follow every individual preparatory study. For the companies, the consequence is that they often commit themselves to the work in the beginning, or as soon as they become aware it is under way, but after far too many years and proposals they consider that there is no reason and they do not have the resources to follow or try to influence the proposals.

Some of the larger companies interviewed see it as not just negative that it takes a long time to produce implementing measures, since there is time to make sure that the requirements imposed are as relevant as possible.

The companies' view of requirements

None of the interviewed companies are in principle against ecodesign requirements. Companies understand the importance of such legislation being put in place. On the contrary, there are differences between how large and how small and medium-size companies (SME) active in various product areas view the requirements presented in the context of various preparatory studies.

Small and medium-sized companies generally feel more affected by requirements than large companies, which can be viewed as a natural consequence of the fact that smaller companies often do not have the same resources to track developments within a product group or an ability to affect the outlook by taking part in *stakeholder meetings*. Because small and medium-sized companies have fewer resources to devote to working on the issues, they are often to a large extent “outside the loop” and have less information as to which people they should contact to gain knowledge of the issues.

Some of those interviewed feel there should be an awareness that even minor changes to products can have large impact on the company. This means that even if the company's products can easily be adapted to fulfil the requirement which an implementing measure entails and the product development is not so comprehensive, the requirement can mean that the production lines have to be changed to satisfy the requirement. It may also mean that the product in question has to be marketed in a new way, so that with the ecodesign requirement it becomes more expensive to buy, but cheaper to operate. This type of impact is seldom emphasised and seldom taken into account.

Companies previously subject to such legal requirements felt less threats and challenge from the type of requirements that the implementing measures involve. Some of the interviewed companies affected by similar requirements previously point out, however, that the first time they were subjected to requirements on energy efficiency, for example, they saw them as tough and hard to achieve, but at present, knowing that they were able to meet the previous requirements, they do not see ecodesign requirements as so great a challenge. The opposite is true of companies active in sectors where this type of issue was not previously on the agenda.

One variant of the above holds for companies where, e.g., energy requirements have long been a selling argument or where there have been demands from the market, e.g., during negotiations. Based on the interviews conducted, there seems to be a certain difference between manufacturers of what is typically seen as a class of consumer product and what is typically seen as B2B products, where the consumer products have often already focused on energy as a sales argument and in some cases through other legislation.

Manufacturers of “plug-in appliances” feel it easier to fulfil the requirements than companies making products that are part of systems or need to be installed. This may in part be due to that companies manufacturing products in systems feel that there are many factors outside their control that influence the energy efficiency or other burden on the environment. The demand for “plug-in appliances” is more isolated, to such an extent that the connection between cause and effect is felt to be more distinct. It may also have something to do with “plug-in appliances” being more visible as compared to, say, pumps, so that the focus on energy and burden on the environment was placed earlier on “plug-in appliances”.

Market surveillance

An important factor to keep in mind regarding market surveillance for ecodesign legislation concerns the limited number of implementing measures put into effect. A further factor is that even after an implementing measure takes effect, products placed on the market (i.e., made available on the EU internal market) before the requirements took effect can continue to be sold. This affects the intensity of the market surveillance done in this situation. None of the interviewed companies had been subject to any market surveillance according to the ecodesign directive.

All those interviewed, both companies and others, entirely agree on the importance of a functioning market surveillance for ecodesign legislation. All of them also point out the importance of collaboration in this area, both between industry and government, but also among different member states.

None of those interviewed was able to point to anything that makes market surveillance for ecodesign legislation generally speaking more difficult than other areas. But there are some exceptions. For example, there are areas where the tests needing to be done in connection with the market surveillance are highly resource-demanding. This holds, e.g., for incandescent bulbs, where the tests are to run over the entire product lifetime, which is set at 6,000 hours. Such conditions make it much harder to carry out an effective market surveillance. And so, as with many other areas, the absence of good test standards is something which makes market surveillance difficult.

Due to the limited market surveillance thus far, the collaboration on market surveillance for ecodesign is also limited. This holds both between member nations and between companies and government. But there are some examples of the contrary.

Due to the lack of market surveillance on the part of the national authorities, trade associations and the like sometimes take it upon themselves to carry out activities similar to market surveillance. This phenomenon also exists for ecodesign, where the so-called Atlete project² was recently completed, made up of five different actors, three of them being private actors. Those interviewed are positive about this type of collaboration, as long as it is done in a transparent way and the tests done are based on the same foundations as tests done in connection with market surveillance. Yet many of those interviewed point out it is very important that this type of initiative not mean that market surveillance on a national level is halted by the authorities or that it undermines the confidence in the latter.

² Atlete stands for Appliance Testing for Energy Label Evaluation. It says on the web site: “The purpose of the ATLETE Project is to increase European-wide implementation and control of energy labelling and eco-design implementing measures for appliances.”

One reads on the Atlete project web site:

“The ATLETE Project is solely intended to demonstrate that market surveillance testing is possible and cost-effective. It should be noted that the testing results published by the ATLETE Project are indicative only.”

“Only the market surveillance authorities of the Member States have the legal right to officially declare whether an appliance placed on the market is compliant or non-compliant.”

Passages on market surveillance are found in article 3 of the framework directive. Besides the passages in the framework directive, there are also market surveillance issues regarding both safety and material properties issues (among which ecode-sign can be ranked) through ordinance 765/2008 on requirements for accreditation and market surveillance in connection with sale of products. None of those interviewed pointed out any major reason to keep the passages on market surveillance in the framework directive, but rather the passages in 765/2008 will suffice.

Voluntary agreements

Those interviewed point out that the voluntary agreement can work especially under certain assumptions. One such assumption is that the sector has relatively few actors who have long been conducting collaboration on this type of issue. In sectors with a lot of actors, there is a risk that proposals and wishes will be ignored, especially from the smaller private actors. As compared to implementing measures, voluntary agreements are also felt to work relatively better when they involve complex products and/or fields that are quickly changing.

The foremost benefit of voluntary agreements is judged to be that industry itself drives the process. This means that the sector has control over how the products being considered will be defined, what requirements will be imposed and how. It is pointed out as being a major difference from the work with implementing measures, where the industry in practice functions as a recipient for what is produced by someone outside the industry.

By themselves driving the process, there are greater opportunities to exclude certain products where there is reason to exempt them from the requirements. It also ensures that focus remains on relevant aspects and consideration is given to the special factors applying to a certain product. Being able to drive questions about weighing the energy efficiency against desired material properties is felt to be a great benefit.

Yet many of those interviewed pointed to the challenges of working with voluntary agreements. One such challenge is the actual working with the voluntary agreements. The work is felt to be administratively burdensome. Producing a voluntary agreement is just as administratively burdensome as working out implementing measures, and phases that exist for implementing measures, such as *stakeholder meetings*, also apply to voluntary agreements.

Another challenge mentioned is the lack of guidance as to what needs to be done and how. Many of those interviewed think believe that, apart from what is stated in appendix 8 of the framework directive, they do not know whether anything else written about what is required or expected from the voluntary agreements.

Of course, this creates great opportunities for organising the work to suit the one who is driving the process, but it also creates an uncertainty.

Perhaps the foremost criticism made has to do with the voluntary nature itself. Being a voluntary agreement, there is no market surveillance in the same way as for implementing measures. Given how important market surveillance is to all of those interviewed, this must be seen as a shortcoming.

Yet another challenge that has to do with the voluntary aspect is what happens if the reason for the voluntary agreement erodes over time. This can happen, for example, when market shares change, e.g., new actors come into the market and they choose not to take part in the voluntary agreement. Another variant might be when an actor who was initially on board chooses not to be so for some reason. The boundary is approximately when the participants no longer represent a broad majority of the relevant sector of the economy.

Yet another challenge connected to the voluntary aspect has to do with the “threat” of legislation always being present, e.g., if the basic assumptions change in a decisive fashion. Even if there is a well functioning voluntary agreement, from the perspective of the industry, the Commission can always introduce implementing measures in that sector. If such legislation involves other requirements, a different scope or new definitions, it might potentially mean another reorganisation of an industry where the first reorganisation had to do with producing the voluntary agreement.

Standardisation as an alternative

Prior to the interviews it had been noted that ErP was not being applied as a new approach directive, i.e., as compared to existing product directives the implementation measures contain highly detailed requirements, which in product directives instead are found in standards.

Among those interviewed are many companies who expressed a desire that the work with ecodesign could resemble the work with other product directives, i.e., where the industry in large measure determines the technical requirements through standardisation work based on the level of ambition set forth in the directive. Companies point to several reasons why standardisation can be an alternative: one reason is that the industry would drive the issues in a more distinct way as compared to the present situation with preparatory study consultants. Another reason put forward is that standardisation work is well established and many companies would be familiar with it. Yet another reason mentioned is more connected with the outcome: standardisation is global, while the ecodesign requirements through implementing measures only concern the EU.

Among government, NGOs and certain companies, there is not the same desire to let standardisation play a greater role. Instead, it is stressed that, unlike what applies in safety matters, for example, there is not the same unanimity of issues in connection with ecodesign. Ecodesign is more politically charged than product safety. As a consequence, companies are not considered ready to solve this by themselves, but rather the pressure must come from external parties. Another objection is that it might carry a risk of visionary requirements disappearing, since companies to a greater extent would agree on a least common denominator.

Overall picture based on the interviews

The interviews show that the various product areas differ greatly in regard to the challenges presented by the ecodesign directive. The assumptions for regulation are also different among the different areas, which makes it harder to come to a clear verdict as to the effectiveness of the ecodesign work.

The interviews also show that the impact on individual companies within a given product area can be different. This may have to do with the fact that a certain company has traditionally chosen to work with a certain technical solution that better deals with the requirements of an implementing measure, but it can also have to do with certain companies being better at adapting to new requirements.

There are no requirements as such, nor any method for establishing the requirements that need to be adjusted first and foremost. What is mainly lacking is clarity in the process: what the requirements signify, how they are formulated, and when they come into being. Increased clarity through the entire process could create a greater understanding and, in practice, a faster compliance with the requirements. At the present day, companies in practice figure out the challenges of how to fulfil requirements once they become aware that their products may come under the legislation. Because the preparatory study process is so unclear today, in the sense that companies do not know what the requirements will be or when they will arrive, it is hard to start working on them at an early stage. This also affects how long of a transitional period is needed.

Increased clarity for all parties involved, including what different proposals are expected to have for impact, could mean in practice a quicker adaptation among companies. It will always be the case that requirements can change until they are adopted, but if a range or a minimum level can be provided in which the requirement will lie, at an earlier time than at present, and when it is expected to be put in place, the companies will have something to work toward. If the companies are confident as to what is going to be done, this may mean in practice a compliance even before the requirement is in place, legally speaking.

The situation is different for small and medium-sized as opposed to big companies in many ways and also in regard to ecodesign. The small and medium-sized companies generally feel more affected than the big ones and feel less prepared to meet the requirements. The following figure illustrates the level of preparedness for different types of companies and products:

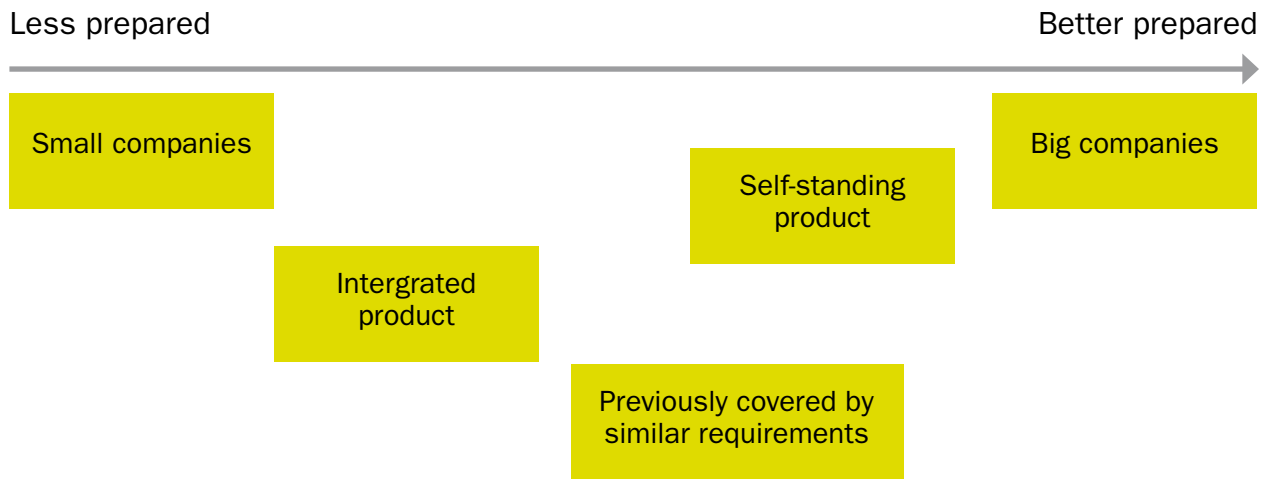


Figure 2. Circumstances affecting the perceived level of preparedness of companies.

The interviews also show there can be alternatives or additions to the current procedures where standardisation could have a larger role to play.

Both interviews and studied material show that there are a large number of factors having nothing to do with the ecodesign directive per se, but which can have the same effects as ecodesign. Application plays a large role in the environmental burden that a product causes. Since application has corresponding effects to the ecodesign requirements, it is reasonable to ask how one could go about working with it, and what requirements can be placed on companies or member states in this regard.

All the above factors influence the proposed changes that can be adopted.

Proposed changes

Based on the interviews, a number of areas have been identified in the course of the study where improvements can be made to bring about a more effective ecodesign legislation and a more effective process in this work.

Many of the viewpoints put forward on the process have to do with resources being always scarce; this holds both for commission and for companies, for preparatory study consultants, NGOs, and trade organisations. The starting point is to make proposals that somehow take this into consideration, i.e., the improvements proposed are in a context of limited resources.

The work plan

As for the work plan, more time needs to be given to structuring the significance and content of the areas in the work plan so that the users can better predict what is coming. More work needs to be done in clarifying which products will in fact be covered by the work plan. Alternatively, one can indicate in the work plan which PRODCOM codes or CN codes will apply, since companies and trade organisations are used to be working with them. For areas where product standards are applicable, these can be mentioned.

Further, a more precise picture should be given as to when the work with the particular product group is expected to begin and when provisions are supposed to be in place. It is not clear enough that work is going to be done sometime during a two to three year period.

Such changes give individual companies a reasonable chance to prepare for the adaptations to be made. It also gives the market as a whole the chance to begin adapting products in terms of future requirements.

Before a work plan is presented, there should be a high degree of discussion with interested parties, not least to give them a better picture of what is coming and how the Commission arrived at this. In this way, those who will be affected will have a firmer foundation when it comes about.

The preparatory study

Create flexibility in the use of the method

To shorten the time involved in the preparatory study but at the same time make sure that all relevant parts are studied, a flexibility should be created in the application of the MEEUP method. This type of flexibility might mean that the method can be used in three alternative ways.

Before an alternative is chosen, there needs to be an overarching estimation as to

where the greatest energy consumption occurs. Such an overarching estimation might be viewed as a kind of “pre-preparatory study”.

Such an overarching estimation could be based on accepted knowledge as to how long a lifetime the particular product has, an extremely long lifetime being an indication that the application phase is the dominant one. The estimation can also include what kinds of material and the quantity of material the products are normally made of.

The estimation is made with the help of the knowledge existing among those with great knowledge of the sector, such as companies, trade associations, government authorities or NGOs, supplemented with any previously conducted life cycle analysis for the product.

The result of an overarching estimation should be an active and communicated decision as to which way that is chosen for a particular product, to avoid uncertainty as to what the continuing work of the study will be based upon.

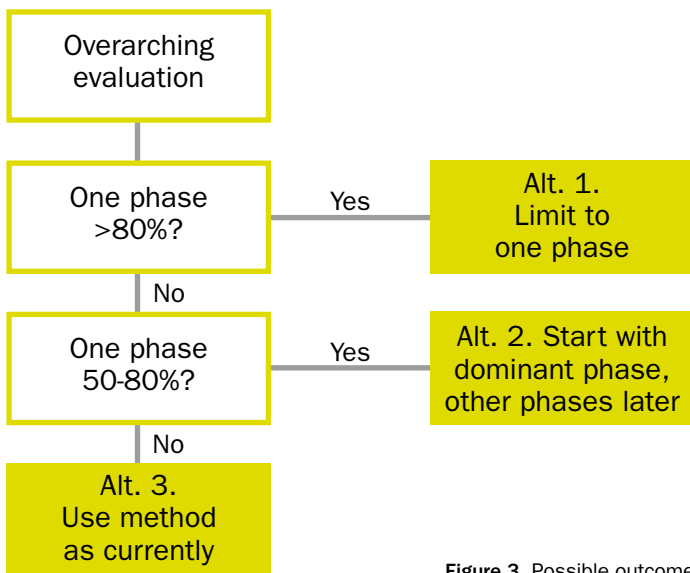


Figure 3. Possible outcomes of overarching estimation.

The three alternative ways of using the method can be described as follows:

1. Limit to one phase

The resources are invested in making a deeper study by the current method of the dominant item according to the overarching estimation. Other parts are left out. This approach could work for products such as machine tools, pumps and other products with very long lifetime. As an indicative, these can be products where one phase is estimated to exceed 80% of the total burden on the environment.

2. Prioritise the phases by impact

When an overarching estimation indicates that one phase is dominant in energy or environmental impact, while there may also be aspects in the other life cycle phases that are worth studying, the dominant phase can be studied first and with greatest depth by the MEEUP method. Other phases are studied at a later time,

also according to the accepted method. Here the study consultants could make use of handling times in the overall process or study the other phases during review of an implementing measure.

An example from the implementing measures for electric motors appears in article 7:

”The Commission shall review this Regulation in the light of technological progress on both motors and drives no later than seven years after its entry into force and present the result of this review to the Ecodesign Consultation Forum. The review will include resource efficiency, re-use and recycling and the level of measurement uncertainty.”

With texts of the above kind, one could let the manufacturing, distribution and disposal/recycling phases wait until a review is done. This is possible when a review is mandated and scheduled in the implementing measure.

This type of procedure could be used for products where the dominant phase is estimated to be between 50 and 80% of the total environmental burden.

3. Total life cycle analysis

In the third variant of the method, it is used as at present, i.e., all life cycle phases are studied. This is done when the overarching estimation was not able to point to any of the phases being dominant in a clear manner. This application can be used when it is simply not possible to decide which phases are dominant, or when one knows that several phases have large environmental impact.

The application chosen may depend on which type of product is involved, but also whether the focus is placed on energy or not. If there is more focus on all types of environmental aspects, it is also more relevant to look at all parts of the life cycle in greater detail. This can be illustrated by the following figure:

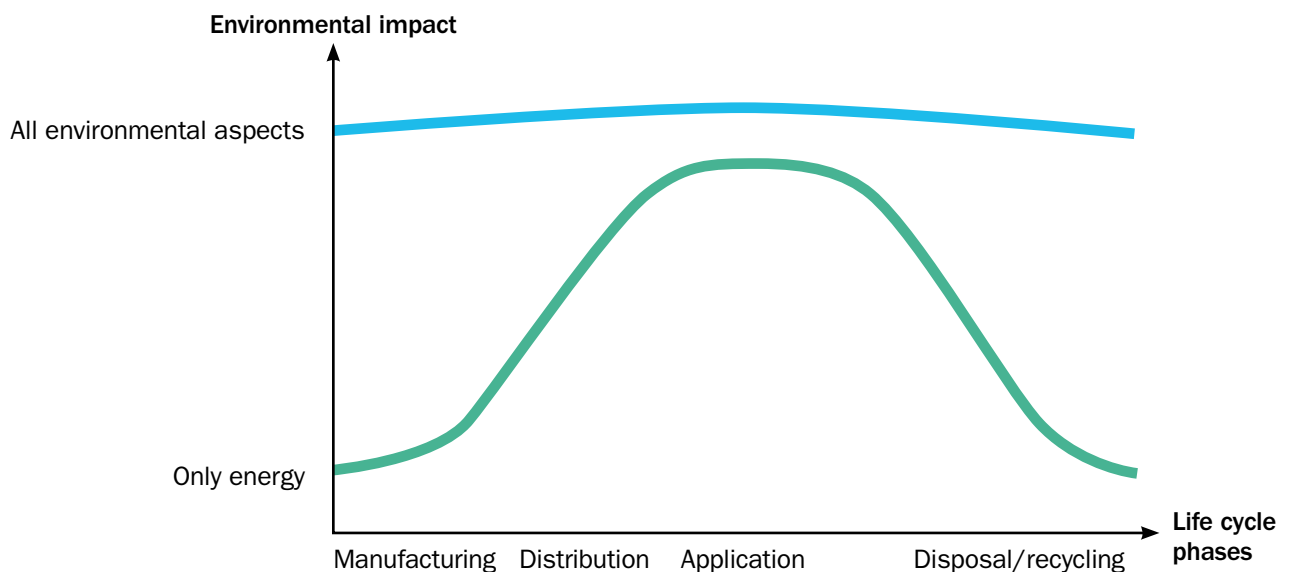


Figure 4. Environmental impact in different life cycle phases

The figure shows schematically how great the environmental impact might be in different life cycle phases, depending on whether the focus is on only energy or on all environmental aspects, it being more relevant to look at all phases when more environmental aspects are taken into consideration.

Structure preparatory studies with set-time tables

The preparatory studies should be better structured and contain clearer time plans and set-time goals. A time plan should be in place and communicated already before a preparatory study starts. It should cover the entire preparatory study process for a particular product and all relevant time points. The time plan should contain:

- When various items will be ready, including what has to be ready by a certain time in order to proceed with the next step
- When *stakeholder meetings* will be held
- When the preparatory study is planned to be finished
- When the consultation forum is planned to be held
- How long after a first consultation forum will the next consultation forums be held, if more of them are required
- When an impact assessment will begin and when it is expected to be ready
- When a completed implementing measure will be implemented, if relevant
- Also include, already at the start of a study or as soon as possible, when various levels of requirements will take effect (since it is not unusual for there to be successively tougher requirements)

For maximum control effect of the set-time parameters, the goals should also be connected to responsibilities, i.e., whose responsibility it is to achieve them: the study consultant, the Commission, etc.

A clearer structure and set-time goals should have the following benefits:

- It creates incentives to be ready with the entire legal process in a definite time, including adoption of implementing measures.
- It makes the process more clear to all interested parties, not least the companies and trade organisations that need to set aside resources to monitor a particular preparatory study. This is especially important to small and medium-sized companies.
- It makes it easier for the Commission to plan and communicate its work
- It makes it easier to place demands on the preparatory study consultants and exact responsibility from them

Expiration date for preparatory studies

If a preparatory study does not become an adopted implementing measure in a relatively short time, the requirement risks becoming out of date and no longer a spur to industry. It should also be kept in mind that, besides the study itself

becoming dated, it is based on data that might be 1 or 2 years old when the study is being done. For example, the preparatory study on computers and monitor screens, which still has not become an adopted implementing measure, are the figures from 2005, which means that at present it is 6 years old for a field under very quick turnover.

If a preparatory study is not ready within the time set (in accordance with the time plan in the preceding section) or a completed preparatory study has not been adopted as an implementing measure within a certain time, there should be an accepted procedure as to how the Commission should proceed. Such a procedure could be set up as follows:

- If more than 2 years, e.g., elapse and no implementing measure has been adopted, the preparatory study can no longer constitute the basis for an implementing measure unless it is reviewed, e.g., by updating certain of the requirements in the study. This does not mean the preparatory study should be done again from the bottom up, but rather the requirements should be revised and possibly updated.
- If a preparatory study goes beyond one or more of the time points determined in connection with the starting of the study, a review will be made as to the reasons for this, in order to speed up the process. Factors which may need to be adjusted are the scope of the study, definitions, etc. It is not worthwhile letting an entire study drag on because certain factors are problematical.

Start preparatory studies in sequence

There will always be limited resources to carry out preparatory studies. This holds both for the Commission and for trade organisations. To facilitate the processes for all involved, not least the Commission, one should not start a multitude of studies in parallel.

One proposal is to start and conduct the studies in sequence, i.e., there should be a distribution of the use of resources over time. Instead of starting, say, five preparatory studies at the same time, one can be started a month over five different months. In this way, they can be taking place in different phases. It should be possible to accomplish this given the more clear project and time plans proposed above. By starting studies on related areas in sequence, one can potentially also utilise the knowledge and results from the study started first in the later studies.

Such a procedure takes on extra importance in future, if current implementing measures have to be reviewed. There is a requirement for review both every fourth and every seventh year. If 40 implementing measures are reviewed over an average of every fifth year, this means that eight implementing measures a year have to be reviewed. And then there are new areas. The upshot is there will be many processes under way, all of which will be attended to by the same limited resources.

Clarify the relations between different requirements

There should always be a procedure known in advance for when requirements in horizontal and vertical implementing measures conflict with each other.

The proposal made here is that the ecodesign directive should be handled the same way as other product-related legislation, i.e., the requirements in the vertical legislation outweigh the horizontal ones. The starting point can be the requirements in the horizontal legislation, but if there is a reason, such as the impact on other processes, significantly worse performance or worse energy efficiency overall, then the requirements in the vertical legislation should apply, even if they are not as stringent as those in the horizontal implementing measure.

In this way, companies can be assured that all relevant ecodesign aspects are present in an implementing measure and that they are adapted to the assumptions which apply to the product or the product group.

Find ways of using the method more effectively

Many of the proposals and viewpoints put forward on the MEEUP method during the interviews actually concern not the method itself, but rather the input parameters. Of course, there can be criticism of the method; depending on the starting points, it can either be felt to be too simple or too complicated, but in terms of its purpose most agree it is a reasonable method to use. Therefore, proposals on the method concern factors involving the possibility of using the method in a good way:

- One of the most difficult things in the preparatory studies is the possibility of getting hold of relevant data.
 - The Commission should support companies and industries with ways of relinquishing data which the companies are satisfied with from a competition standpoint.
 - When data is required from companies and industries, it should be requested in a way they are familiar with. This may entail that data is requested in a way that makes it easily accessible in systems, or where it has already been produced for other purposes.
 - Don't use data from databases based on voluntary updating, except in special cases.
- Don't prohibit the consultants from visiting companies and make sure there are funds in the project budget for this. Reasonably, and to avoid problems with objections, one should make sure to visit two or more companies. Contacts of the consultants with companies should be established through the relevant trade associations to ensure competitive neutrality of the consultant in the choice.
- Establishing user patterns for different products is often a great challenge. Therefore, make sure that time and resources are set aside to carry out user studies and take this into account in the project planning.

In a situation where other environmental parameters than energy should be given greater consideration and products should be included that are not directly energy-related, different demands are placed on a method than those at present, in order to quantify other environment parameters. The proposals made here are based on the products studied thus far.

Clarify the requirements for the consultants

The consultants who perform the preparatory studies have in many cases received good reviews by those interviewed and even when criticism was expressed there is awareness that there are a limited number of consultants able to perform this type of study with the needed expertise. Therefore, the proposals involving the consultants do not apply first and foremost to the consultants as such, but aim at ensuring that the consultants do what can be made for a better preparatory study process:

- Require that the consultants co-ordinate with representatives of industry even before and between *stakeholder meetings*, since the deep knowledge about the products lies with the companies. Part of this can be done through visits to the companies. One consequence of this should be faster results, less friction, more effective *stakeholder meetings*.
- Place certain requirements on the consultants and the makeup of the consultant team; one of them with technical knowledge of the product, one with legal knowledge of the industry, one who can see the impact on the market and the companies, and one with distinct project manager experience. The impression we received from those interviewed is that it has worked like this in practice in most instances, but it always needs to be assured.
- Require that the consultant hold a sufficient number of *stakeholder meetings* to provide for the needs of all relevant parties. To establish what is a sufficient number of meetings for a particular industry, the number of meetings should be determined along with the interested parties.
- Make sure the consultant works so far in advance that the material can be sent out in good time before the meetings so that all interested parties have a reasonable opportunity to examine it and, if necessary, gather opinions from their members.

These changes can advantageously be set forth in the formal consultant agreements and the time plans proposed in the preceding section.

Increase possibilities of providing input

In order to create credibility and openness in the process of producing implementing measures, a broad group of interested parties must be involved, as what is currently being done. But the companies involved in a particular preparatory study have a special position, since they are the only one of all interested parties that have to adapt themselves to the proposed requirements. The following proposals are made on the necessary breadth of the particular company's special position:

- Require that the consultants co-ordinate with representatives of the industry even before and between *stakeholder meetings*, i.e., in accordance with the previous section above.
- Make sure enough *stakeholder meetings* are held, and that material is sent out sufficiently in advance thereof, i.e., in accordance with the previous section above.

Consultation forums

For consultation forums, it is proposed that the date for these should be set as far in advance as possible and in keeping with the proposed time plan, i.e., before a preparatory study begins.

It should also be clear even before a preparatory study begins how much time there will be between two consultation forums, in the event that matters occur during the first one that require the proposals to be reviewed and several consultation forums be held.

Impact assessment

The impact assessment needs to be reviewed, both as regards how it fits in with the preparatory study process and as regards its content.

The impact assessments should come earlier in the preparatory study process and become an integral part of the preparatory study. The impact assessment should be an ongoing element and an evaluation opportunity for the proposals produced during the course of the preparatory study. In this way, one can use impact assessments as a simulation tool in the work.

In particular, the focus of impact assessments should be the effect of the proposal on SME companies, since they are potentially more affected by the requirements of the ecodesign directive. The impact on big companies should also be taken into account, but these often get by because big companies have greater possibilities of setting aside resources for the preparatory study process.

The impact assessments should also look more at how companies are affected in individual countries and in individual cases. Even if the proposed requirements only affect a small part of the market, this may affect a large number of manufacturers.

Implementation at the company level

As noted above, it is not so much the requirements that need to be changed, but instead there is a need for increased clarity to create a better implementation. Increased clarity throughout the lawmaking process, from work plan to adopted implementing measure and enforcement, should allow the market to impose requirements at an earlier phase and companies to begin adapting earlier on. Thus might create a softer and more flexible implementation for many companies.

Not least of all, this pertains to requirements that become successively more stringent. Here, the companies need to know well in advance what will apply and when. Longer transitional periods can also be helpful, i.e., from adopted implementation measure to taking of effect.

As pointed out above, it is mainly the small and medium-sized companies that feel affected by the requirements and see challenges in their observance. Through more time-compressed preparatory studies with increased clarity and greater focus on small and medium-sized companies in impact assessments, they will have a greater ability to handle the challenges which the ecodesign legislation brings.

Through the proposed changes for the legislative process, it is considered that many of the demands of the companies are met.

Market surveillance

The Association of Swedish Engineering Industries together with the Swedish Trade Federation (Svensk Handel) conducted a study on market surveillance in 2009. The change proposals put forward in the study also apply to ecodesign.

The Association of Swedish Engineering Industries together with the Swedish Trade Federation conducted a study on market surveillance in 2009 pursuant to the so-called goods package. The goods package means that the issue of cooperation in the context of market surveillance has become especially relevant. The study was conducted to clarify what an effective cooperation would look like among different actors involved in the market surveillance and what are the prospects of success for such a cooperation.

Apart from what was produced in the previous study, there are a number of changes which could further improve the possibility of an effective market surveillance for ecodesign.

From a legal perspective, safety and material property matters are on an equal footing due to ordinance 765/2008 on requirements for accreditation and market surveillance in regard to the sale of products. Ordinance 765/2008 applies to all harmonised legislation, including the ecodesign directive. For this reason, passages on market surveillance can be removed from the ecodesign directive.

Ensure and facilitate further collaboration between safety and material property issues by the market surveillance authorities, i.e., make it possible to use common denominators, e.g., by testing the same product for both safety and ecodesign. This is a way to distribute resources more effectively.

Collaboration is a key factor for well functioning market surveillance. Especially important to the collaboration is information systems for exchange of experiences and test results, which have clearly proven themselves in the market surveillance for safety issues. There is nothing of the kind today for the ecodesign directive. The ICSMS system³ can be the basis for such an information transfer, but it needs to be adapted, since the entire system today has a focus on safety.

Ensure co-operation between member countries. This is important for safety issues, not least because products may need to be recalled quickly from the market. It is at least equally important for material property issues, since resources tend to be even more scarce for market surveillance of properties. It is also important to ensure compliance with the directive for competitive neutrality.

The industry has a role to play in co-operation first and foremost when it involves exchanging experience and when the company's knowledge of products and how the industry works may be worthwhile to the market surveillance actors.

³ www.icsms.org

Initiatives from private actors can work like catalysts to set the market surveillance going. The type of collaboration which the Atlete project involved can play an important role in material property issues such as energy. This type of initiative should never be something that replaces market surveillance, but can act as a way of finding out areas where market surveillance should or should not be pursued. One prerequisite for encouraging such initiatives is that they be transparent and comply with current test standards.

Voluntary agreements

To create credibility for the voluntary agreements, one needs to solve the market surveillance problem. At present, there is no market surveillance for the type of factors involved in the voluntary agreements. This means the risk that there possibly being a number of companies standing outside of the voluntary agreement, and there can also be companies working within the voluntary agreement that do not fulfil its requirements. This also means that companies carry out market surveillance type activities for requirements they themselves have had a hand in establishing. One way of dealing with the lack of market surveillance might be to encourage the industry or dissuade it from carrying out market surveillance type activities that lack the possibility of sanctions, yet whose results are still emphasised. To create credibility in the matter, actors from both private and public organisations need to be brought in, similar to the Atlete project.

One needs to clarify what this means to the industry. What presently appears in appendix 8 creates a lot of latitude, but it also creates a great deal of questions. As a supplement to appendix 8, the experiences produced by initiatives thus far should be utilised to describe in more detail the requirements to be fulfilled per appendix 8. This does not mean that the directive should set forth exactly how a voluntary agreement should be produced, but serve as an example of how it can be done. Such examples can also show how large a product area is suitable for self-regulation initiatives. This in view of the fact that many of the challenges with broad product groups also exist for the voluntary agreements.

Given the time spent or the administration, it is not considered today that there are any benefits of working with self-regulation as compared to implementing measures. For this reason, one should consider changes to make it less burdensome, as opposed to copying the process led by the Commission and consultants. This might lower the thresholds and speed up things in the product area working with self-regulation.

Work with standardisation

During the course of the study, many of those interviewed drew parallels with how standardisation operates for applications of the new approach directive and the ecodesign directive. They pointed out that there should be a way of adapting the ecodesign directive to use a corresponding work process as for the new approach directive, where the directive describes the policy goal to be achieved in nontechnical terms (what should be addressed and the level of ambition), while identified standardisation bodies “translate” these goals into technical requirements for the product in question.

Besides the improvements in the current processes reported above, the Commission should therefore consider, in the context of the review, creating an alternative to the current ways of working with implementing measures and voluntary agreements. This should involve making the work with the ecodesign directive more similar to the work process used for new approach directives.

Such work can be based on the standardisation bodies (which are open to all interested parties, including the authorities) producing standards for both measurement and for the technical requirements, i.e., how much energy or environmental impact a certain product can have in accordance with the level of ambition set by the lawmakers. The lawmakers determine when the various technical requirements will take effect. But interested parties should have an opportunity to influence the minimum time between different levels of requirement. The advantages of such a procedure include:

- The companies affected can be more involved in the work
- The work is done in a way familiar to the companies
- Global harmonisation of requirements can be achieved more quickly.
- The industry along with others in the standardisation work is a participant in determining the technical requirements in a way different from the work with implementing measures. This ensures that energy or environment requirements are formulated with regard to the properties of the product.
- The level of ambition of the requirements is ensured by letting the lawmakers influence the pace of their introduction.
- By letting the industry take greater responsibility, resources can be freed up from the Commission and the process need not halt because of lack of resources.

Other factors of significance

As a supplement to the framework directive, implementing measures and voluntary agreements, there should be a clearer focus on questions of enforcement, consumer behaviour, as well as installation. Thus, there are things that mainly lie outside of the ecodesign directive, yet can have the same effects as the product requirements imposed by the ecodesign directive. The reason for this is that this type of issue can potentially have just as much of an effect on energy consumption and environmental burden as a pure product requirement. In such work, it is reasonable to have a division of labour between member countries and companies.

The following picture shows how a division could be done in principle:

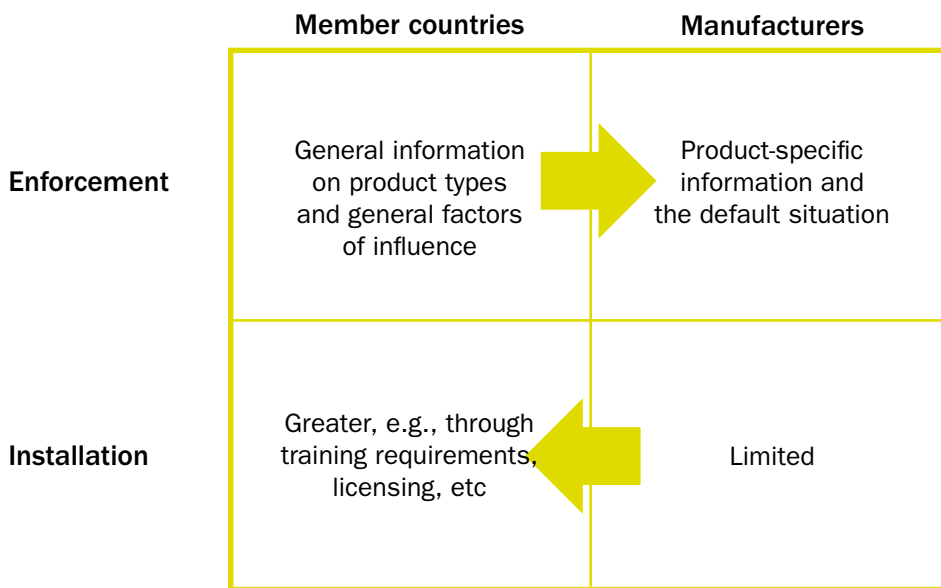


Figure 5. Requirements from various parties for installation and enforcement.

Enforcement

Enforcement involves how the product is used. It may involve how two runs of half-full washing machines relate to one full run, how different sleep or power economising conditions affect a computer. Note that this involves not just information but also settings such as a particular default condition at the time of sale. There can also be other means of guidance, such as a smart grid displays for information from the supplier to the user on how to save energy.

As regards enforcement, it is unreasonable to impose requirements on manufacturers other than those connected with the default condition and certain product-specific information on the optimal conditions from an energy standpoint for one particular product. General requirements can be imposed in the member countries, through information on how different handling of a certain product type affects energy consumption in general.

Installation

Both the choice of equipment and the actual installation play a large role in energy efficiency. In practice, this may involve not installing a pump that is bigger than needed. This type of issue is hard to make companies to deal with through legal requirements, not least because, on account of their situation, they cannot be expected to give “legal advice” to customers. On the other hand, they can obviously be encouraged to inform customers on a voluntary basis.

It is probably member countries or even the EU level where the greatest efforts can be made. For example, requirements can be placed on installer training to make certain types of installations in order to ensure they are as effective as possible from the standpoint of energy and environmental burden. In future, it might mean that an entire installation is approved from an ecodesign perspective by an installer trained or certified for this purpose.

Conclusions

The study showed that what is needed first of all is not changes of “what”, but “how” in regard to the ecodesign directive. This means that most companies and other interested parties have an understanding of requirements and sympathise with them. What they have opinions about and want to change is *how* the process of producing requirements is conducted and *how* the process and the requirements are communicated.

The most important step is to review the process of producing new implementing measures. Making the process more clear and communicating it will go a long way to putting right the negative consequences which companies are experiencing today.

By making the process more clear, companies can begin to plan for measures earlier on and thereby the transition to the new requirements will go faster.

The impact assessment at present comes long after a preparatory study has been conducted and it should therefore be moved up earlier in the process and be made an integral part of the preparatory study.

Utilise the fact that market surveillance activities have not yet got going fully to ensure the prerequisites such as collaboration between different member countries and between industry and government.

Voluntary agreements have a place in ecodesign, especially in product areas and sectors with certain characteristics, such as relatively few actors. Still, the process needs to be made more simple and clear to make it easier for the sectors to choose this procedure.

As an alternative to the existing processes, standardisation should be given a broader role in the ecodesign work in future and be organised in such a way that the requirements are both ambitious and realistic.

Appendix 1

– The study procedure

How the study was carried out is described below.

In the first phase of the study a review was made of relevant material in the field, in the form of legal texts, reports, analysis, presentations, etc., produced in connection with the field. Examples of actors whose material was reviewed are trade organisations at the EU level, Swedish and foreign government authorities, material from the EU commission, etc.

In the second phase of the study, interviews were conducted with representatives of those deemed to be interested parties in regard to ecodesign and are working with ecodesign on the basis of one or more of the four aspects. The interviews were semistructured, using two variants of questionnaires to conduct interviews, one oriented to companies subject to requirements and one variant for others.

Interviews were held with:

- **Companies:** Those companies placing products on the market and subject to current implementing measures or areas where preparatory studies are under way or have been concluded, but implementing measures have not yet been adopted or taken effect. Interviews were also held with companies subject to self-regulation initiatives. Interviews were held with both big companies and SME companies.
- **The Commission:** The parts of the Commission working with the framework directive, implementing measures and market surveillance
- **Nationally responsible authorities:** Those authorities present at the consultation forums to produce implementing measures and otherwise engaged in the work with framework directives and implementing measures.
- **Trade organisations:** Those that offer opinions on behalf of their member companies as to the material produced in the preparatory study process and the framework directive and its requirements. Trade organisations can also be those that are instrumental in the process of producing voluntary agreements.
- **NGOs:** Those organisations that offer opinions for their members as to the material produced in the preparatory study process and the framework directive and its requirements.
- **Market surveillance authorities:** Those national bodies charged with conducting market surveillance of implementing measures that enter into effect.
- **Consultants:** Those who carry out preparatory studies that result in implementing measures.

In all, around 35 interviews were held in the course of the study with actors who cover the entire EU.

The third phase of the study consisted in an analysis of the material gathered to function as a basis for proposals.

Time of performance of the study

This study was begun in December 2010. Most of the interviews were conducted in the period of February to April 2011. Hence, the answers and commentaries should be interpreted based on the assumptions prevailing at that time.

At the time when this study began, there were 9 implementing measures adopted. Of these, 3 had entered into force. Just under thirty preparatory studies were in some phase prior to being adopted.

As for voluntary agreements, at the time of the study there were a number of self-regulation initiatives, but far fewer than the number of implementing measures or preparatory studies.



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