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## Guide for the building industry - Integrating the European Ecolabel in building projects

### CONCERTO INITIATIVE Class 1

### Cost-effective Low-energy Advanced Sustainable So1utions

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Thematic Priority: Energy 2005

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# ***Guide - Integrating the European Ecolabel in building projects***



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## **1. THE CLASS 1 PROJECT AND THIS GUIDE**

The idea of the project CLASS 1 is to use strengthening of the energy requirements to boost and drive the technological developments and to prove the economical and environmental benefits of ultra-low energy buildings (50% below the new requirements in the Danish building regulations) integrated with biomass- and solar heating based renewable energy supply.

In this context the Scientific & Technical objectives of the project are to:

1. Optimise the integration of low-energy building technologies with supply (renewable and conventional) and distribution (heating and electricity) technologies.
2. Advance selected technologies within the 3 areas: low-energy building, renewable energy supply and distribution
3. Improve the design, checking and verification procedures (this relates directly to the implementation of the building energy performance directive -EPBD).
4. Integrate the European Ecolabel in the building projects (houses and components)
5. Demonstrate large scale implementation at close to market technical and economical conditions.

The Class 1 project is focused on the optimisation of sustainable energy systems in local communities, through an innovative integration of RE technologies with ultra low-energy buildings. The bio-mass CHP system produces electricity and heat that are distributed directly to the use for heating in an innovative local district heating system for the dense, low-rise houses, and through the electricity network to heat the single family houses by heat pumps. Solar heating systems integrated in the network – and individual systems on the single family houses will be supplementing the CHP and taking over the in summer months when it is shut down. An advanced Building Energy Management System will control the energy supply, the thermal storages (for solar and for heating energy pulses from the CHP plant).

The project also has special focus on the Indoor Environmental Quality (IEQ) to make sure that the energy savings are met without reducing the IEQ standards set out in the design specification phase. The IEQ focus is one of the areas in which the Class 1 project involves partners from other EU countries who are experts in respectively lighting and thermal comfort issues. Also trans-national cooperation is introduced for the socio-economic research part of the project, which deals with the user point of view (priorities, etc.) in the participating countries.

The Ecolabel is integrated in Class1 through product use and information dissemination and the development of the guide below has been based on the experiences gained in Class 1.

The class1 guide below is a simple and practical tool that can be used by developers engaged in building and renovation projects to take care of the environmental and quality issues regarding building product use.

## 2. THE EUROPEAN FLOWER



The EU Ecolabel is recognised throughout the EU. To qualify for the Ecolabel, products have to comply with a tough set of criteria.

### The Official environmental symbol for non food products

An extensive number of products can be certified by the Flower and by the end of 2011 there were over 1300 licences issued covering more than 17000 products. The Ecolabel offers benefits to producers, retailers and consumers

The Flower makes it **easy and quick** to identify products which guarantee:

- Lessened environmental damage
- Good quality
- Health aspects are taken into account

The Flower **cooperates** with a number of National Ecolabels such as the **Nordic Swan** which was established in 1989 in the Nordic countries:



**The purpose** of the Flower is to promote sustainable products and reduce environmental damage

**Ecolabel criteria** are based on studies which analyse the impact of the product or service on the environment throughout its **life-cycle**, starting from raw material extraction in the pre-production stage, through to production, distribution and disposal.

For more information on the Ecolabels and products visit:

EU:  
[http://ec.europa.eu/environment/ecolabel/index\\_en.htm](http://ec.europa.eu/environment/ecolabel/index_en.htm)

DK:  
[www.ecolabel.dk](http://www.ecolabel.dk)

### 3. TWO GOOD REASONS TO USE ECOLABEL PRODUCTS

#### I. Meet your customer demand

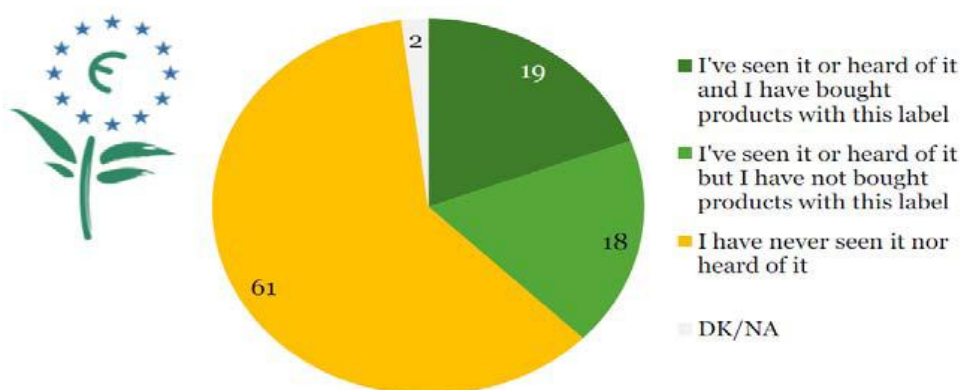
Consumers are today more sensitive to the protection of the environment.

Four out of five European consumers would like to buy more environmentally friendly products, provided they are properly certified by an independent organisation.

The use of Ecolabel products in buildings offers a reliable way to easily show that environmental impact has been lessened.

A Eurobarometer survey conducted in April 2009 has shown that more and more Europeans are aware of the EU Ecolabel. The average awareness level of the EU Ecolabel was 40% of the respondents. A further 19% stated that they have bought products bearing the Flower. In a similar survey conducted in 2006, on average only 11% of respondents replied that they had heard about the Flower or knew what it stood for. It is also encouraging to hear that, according to the survey, 47% of Europeans are inclined to pay attention to ecological labelling. Almost half of EU citizens stated that Ecolabels play an important role in their purchasing behaviour.

#### **Awareness of the *Flower*, the symbol of the EU Eco-label**



**Q9. Are you aware of the Flower, the symbol of the EU Eco-label?**  
Base: all respondents, % EU27

The trend for most National Ecolabels is similar with recognition levels as high as 87%.

## II. Benefits for the company

- **Improve company image.** The Ecolabel provides a platform for improving the company's image for both the end user and the public authorities
- **Product definition.** The Ecolabel on products implies product quality guarantee, assurance of diminished use of harmful substances throughout the life cycle of the product and good indoor climate depending on the product.
- **Keep existing customers happy.** Customers whether private or public can see the extra value in the Ecolabel and will tend to remain more loyal to suppliers working with environmental issues
- **Increase of competitiveness.** The Ecolabel can be used as an edge in the marketing of the buildings to gain new customers

Ecolabel product suppliers can provide specific product information regarding the criteria that the product fulfils. For example it may be waste water treatment, decreased energy use, no use or restricted use of certain harmful substances and so on.

This information about the product's environmental and quality benefits can be used to market the buildings and promote the company.

### For Example:

*The European Ecolabel for Outdoor paints and varnishes means:*

<b>Manufacturing</b>	<ul style="list-style-type: none"><li>○ Limitation of substances harmful for the environment and for health.</li><li>○ Reduction of air Pollution.</li><li>○ Reduction of by-products' hazardous wastes</li></ul>
<b>Use</b>	<ul style="list-style-type: none"><li>○ Limitation of air pollution by solvents.</li><li>○ User information for environmental use.</li><li>○ Performance Criteria.</li></ul>
<b>End of life</b>	<ul style="list-style-type: none"><li>○ Limitation of the use of substances dangerous for the environment and health.</li></ul>

**Exploit the marketing potential the Ecolabel offers both in the private and public sectors:**

See: [www.euecolabel.eu](http://www.euecolabel.eu) for a guide on how to market Ecolabel products



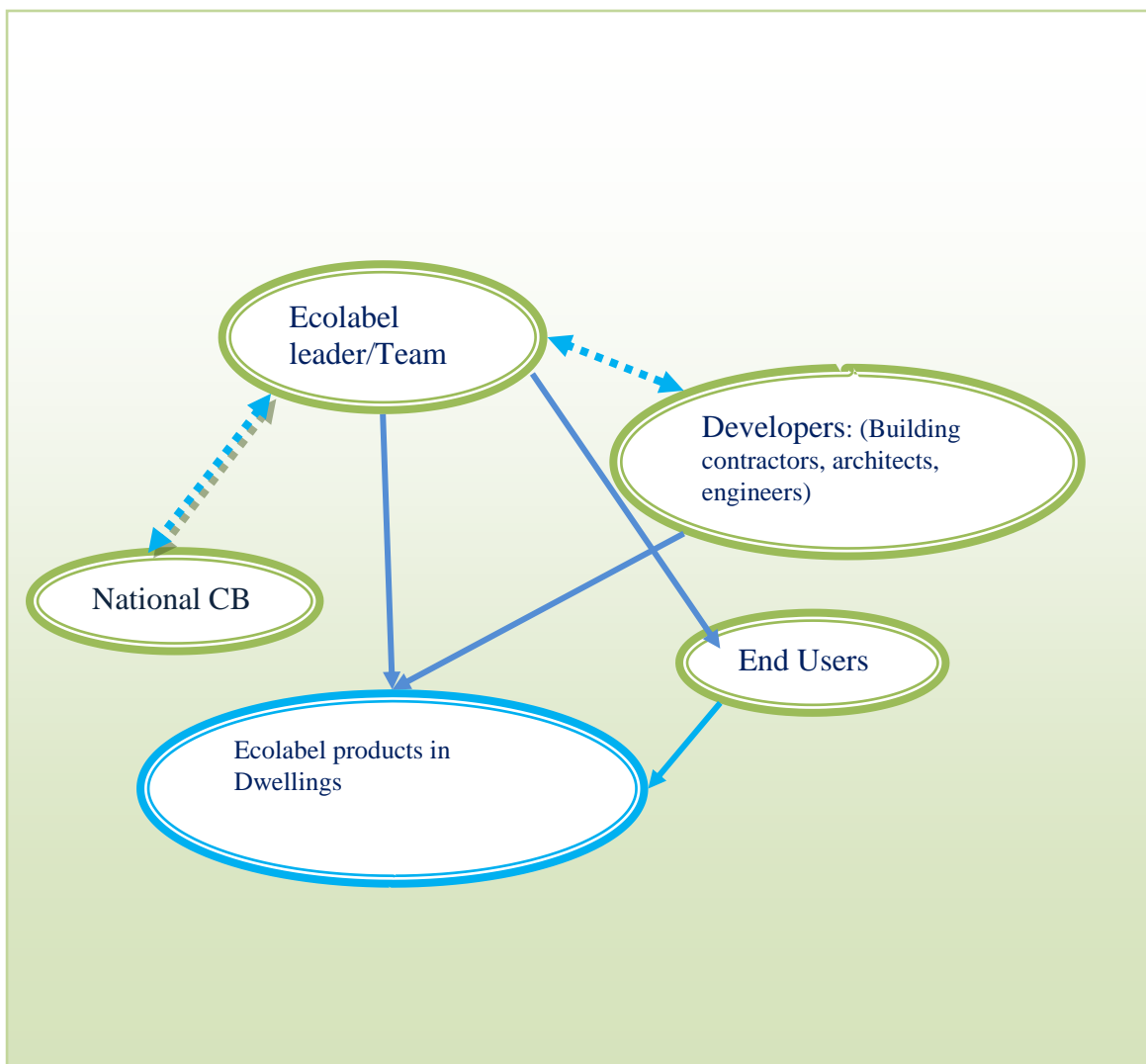
#### 4 . GUIDE FOR THE BUILDING INDUSTRY

### How to integrate the Ecolabel in buildings

The following guide has been developed for architects and building developers wishing to integrate the Ecolabel in the dwellings they build.

The guide is based on the experiences derived from integrating the Ecolabel in CLASS 1 and offers recommendations of procedure to the **Ecolabel team/leader** which can either be internally appointed staff by the company or hired external consultants.

The elements of the guide graphically:



The following table shows the 4 steps of the guide

Steps	Comments
<p>1. Appoint a responsible person to integrate the Ecolabel: "Ecolabel Team"</p>	<p>The tasks of the Ecolabel leader/team are:</p> <ul style="list-style-type: none"> <li>• To research and identify the Ecolabel products and the suppliers available</li> <li>• To increase the Ecolabel competence level of the company key staff involved in the building project</li> <li>• To incorporate the use of Ecolabel products in the building project</li> <li>• To provide information to the end users of the dwellings</li> </ul>
<p><b>2: Identification of situation and stakeholders</b></p>	
<p>Identify the present situation regarding:</p> <p>a. Availability of EU Ecolabel products.</p> <p>b. Suppliers of Ecolabel products.</p>	<p>Identify Ecolabel products available Both Nationally and in the EU. Use the National and EU Ecolabel web sites (The "green Store" <a href="http://www.eco-label.com/">http://www.eco-label.com/</a> ). Not all products can be Eco-labelled.</p> <p>This information is vital to have as soon as possible. The Ecolabel team should have a list of products available in the building area product groups as well as home products.</p> <p>Identify the "focus products" in the building stages and for the end users: These are the most readily available locally and the most likely to be considered for use.</p> <p>If EU flower products are very limited, look at the National Ecolabel availability of products (The EU flower cooperates with most National Ecolabels).</p> <p>Who are they and what can they offer.</p> <p>A clear picture of the existing situation regarding suppliers will make it easier to plan and carry out the activities. Suppliers can and are willing to contribute with product information that could be used in the marketing of the dwellings.</p>

**c. Stakeholders that can help.**

The National Competent body.

The local CB is the best partner in terms of support with both, information, materials and marketing. Most CB's will cooperate within their rules and competence capacity.

Other stakeholders.

Stakeholders/references that may help in Ecolabel activities can be local associations, partners in the project and the Ecolabel web site. Identify them and determine their willingness or extent of participation as well as how they can contribute. It could be through their members network, articles for company exposure and so on

**d. Ecolabel competence.**

Are the key staff and relevant stakeholders aware of the Ecolabel and how much do they know

This will help in the planning of Ecolabel activities and also determine the extent of Ecolabel training for the key staff in planning, purchasing and marketing

**3: Preparation of the following**

**a. Product availability information.**

Prepare a list of both Ecolabel building products and home products available.

**b. General Ecolabel information**

Ecolabel information for the key staff. This information will be used to increase the awareness of the Ecolabel so that each department in the company can use it constructively. The CB can in most cases provide information, leaflets and so on.

The Ecolabel web site is also a good source of information

[http://ec.europa.eu/environment/ecolabel/index\\_en.htm](http://ec.europa.eu/environment/ecolabel/index_en.htm)

**c. Ecolabel product selection and specific product information**

Select the Ecolabel products to be used (Focus products) and prepare specific information of these

products. This information should be in more detail and should contain a list of all suppliers, their contact details and their leaflets/material on the products.

**d. Activities plan**

A plan of activities based on the information gathered should be worked out.

The aim of the activities is to increase the Ecolabel awareness and competence level of the key staff and information dissemination of company’s environmental policies and Ecolabel activities.

The main activities will be internal (personnel Ecolabel competence building). External activities could be meetings, exhibitions and so on (Information dissemination)

**4: Implementation**

**a. Carrying out the planned activities**

It is the job of the Ecolabel team to ensure that the planned activities are carried out and that information, materials and brochures relevant to each department of the company are in order.

The Ecolabel team should also make sure that the decisions taken regarding Ecolabel product use are properly coordinated between the various departments.

**b. Dissemination and Evaluating**

Use of company’s own information channels as well as the National/EU Ecolabel news medium to disseminate information on Ecolabel activities

It is important to evaluate the activities especially in terms of concrete results relating to the use of Ecolabel products and effect on the company.

It is also important to keep up with developments of new product groups, new possibilities of information dissemination through Ecolabel channels, exhibitions and so on.