



Project Acronym: Class 1
REF EC: 038572
Work package 5
DOCUMENT:
Deliverable 25B

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Project coordination org.:
Municipality of Egedal
Date: December 10, 2009
Revision: 1

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

CONCERTO INITIATIVE Class 1

Cost-effective Low-energy Advanced Sustainable So1utions

Instrument: Integrated Project
Thematic Priority: Energy 2005

Period covered:
1.10.08- 30.09. 09
Start date of project:
November 1, 2007

Date of preparation:
December 10, 2009

Duration: 5 years



CONCERTO is co-funded by the European Commission

Guide - Integrating the European Ecolabel in building projects



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1. THE EUROPEAN FLOWER



The Flower is the EU's Ecolabel and was established in 1992 by the EU Commission. It is recognised throughout the EU.

The Official environmental symbol for non food products

An extensive number of products can be certified by the Flower and today there are over 750 companies that have products certified.

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

DK:
www.ecolabel.dk

2. TWO GOOD REASONS TO USE ECOLABEL PRODUCTS

I. Meet your customer demand

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

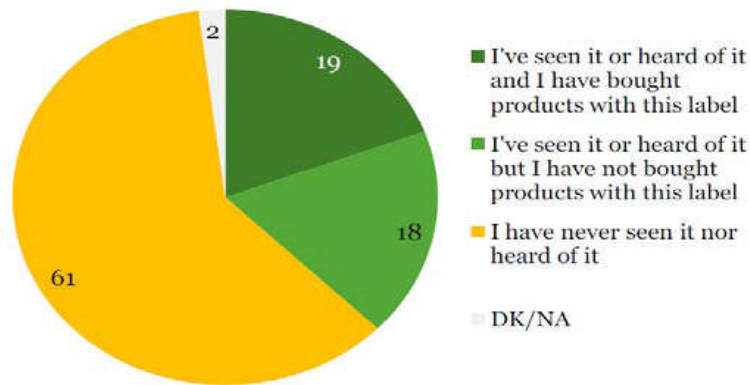
Four out of five European consumers would like to buy more environmentally friendly products, provided they are properly certified by an independent organisation.

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:

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

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

See: www.euecolabel.eu for a guide on how to market Ecolabel products

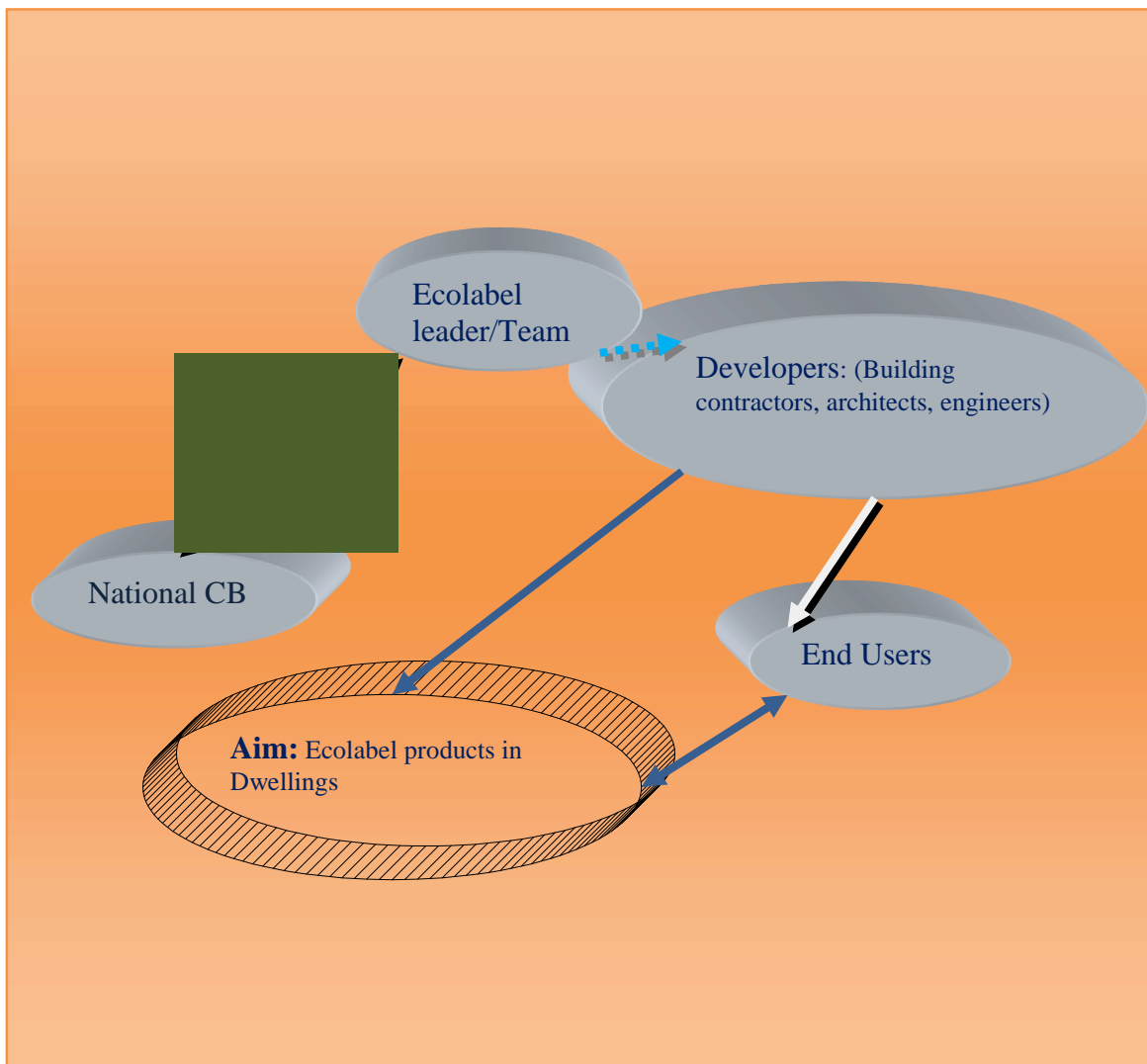
3. GUIDE FOR THE BUILDING INDUSTRY

How to integrate the Ecolabel in buildings

The following guide has been developed for 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</p>	<p>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"> • To research and identify the Ecolabel products and the suppliers available • To increase the Ecolabel competence level of the company key staff involved in the building project • To incorporate the use of Ecolabel products in the building project • To provide information to the end users of the dwellings
<p>2</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” http://www.eco-label.com/). 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>

4. 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 above guide has been based on the experiences gained in Class 1.

The class1 guide above 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 product use.