

Summary of the background document to the draft criteria for the Nordic Ecolabelling of houses, flats and pre-schools

A full English translation of the background document will be available at www.svanen.nu from 15 July 2009.

The background document provides background information to the draft of version 2 of the criteria for houses. The scope of these criteria has been extended to include flats and pre-schools.

Principal changes to the criteria:

- The requirements now also cover flats in blocks of flats and pre-school buildings.
- The requirement on energy consumption has been tightened with new requirements on airtightness.
- The requirements on building materials have been revised.
- The requirements on chemical building products have been tightened.

The revision process

The criteria for houses have been revised during 2007-2009. The criteria for houses were evaluated in 2006, at which point the market demand for the ecolabelling of flats was also investigated [NM 2006b]. This investigation concluded that there was great interest from several parties. In addition, a study [Sintef 2008] was conducted in Norway that found that there is great potential for the ecolabelling of pre-school buildings since both interest and potential environmental benefits exist. The aim of enabling the ecolabelling of pre-school buildings is to help prevent that their rapid expansion happening at the detriment of quality or the environment. For a definition of building types, please refer to national building regulations. In this document, the term “house” is used to denote all three building types unless specified otherwise.

The previous document had 57 requirements (49 obligatory requirements and 8 point score requirements). The new draft criteria have 61 requirements (51 obligatory requirements and 10 point score requirements). Some major changes have been made. Only eight of the original 57 requirements are unchanged. 25 requirements have been changed, six requirements have been omitted and 28 new requirements have been added. In general, the criteria for houses cover four main areas:

1. Energy consumption, pressure testing and ventilation.
2. Building materials including chemical building products.
3. The construction process including quality assurance.
4. Information for residents.

1. Energy

One of the most central environmental parameters is energy consumption during the usage phase of the house. This version of the criteria also prioritises reduced energy consumption. The greatest change here is that a requirement in line with national building regulations has been introduced. The previous version only included Danish national requirements. Limit values for airtightness have also been established. The potential savings in materials are also great with increased airtightness since the walls do not need to be as thick. Regarding flats and pre-schools there are requirements such as the individual measurement of energy consumption. Previous projects show that savings in the range of 15-30% can be made for hot water and 10-20% for heating. The new criteria also award points for the use of solar energy. There are also new requirements specific to pre-school buildings. Regarding energy consumption, a level has been set for what is considered a “low-energy house”.

2. Building materials

Much work has been done on the material side of the criteria, above all regarding chemical building products, for which the requirements have been tightened. Relevant criteria are set regarding both the environment and quality. One of the new requirements concerns nanoparticles in chemical building products. Nanoparticles have become more commonplace in recent years though knowledge about their environmental and health aspects is low. Accordingly the potential problems may be significant.

3. Construction process

The criteria have been revised for clarity regarding liability for the construction process. Requirements regarding building inspection have also been tightened. For example, requirements regarding damp prevention, building design and water installations are now more stringent. Likewise, the requirements on quality systems and subsequent quality inspections are now stricter.

4. Information for residents

Minor revisions have been made to these requirements.