

2 HOW MANY OTHER DIRECTIVES ARE THERE?

There are a number of EU directives concerned with energy and improving energy efficiency. And there will be more in the future. As a matter of interest, one of the earliest agreements in the forerunner to the present Union – the European Coal and Steel Community Treaty in 1952 – regulated the coal industry from the very birth of the Union. As a result of the oil crisis in 1973, more far-reaching legislation concerning energy was introduced.

In this chapter, we will take a closer look at existing directives and how they affect property owners now and how they will affect them in the future. Some of the directives have a direct effect, while others have an indirect effect. However, all the directives have the same original purpose: to achieve a quicker and greater reduction of the use of energy within the Union than if the issue had been left solely to market forces.

As this book is primarily aimed at property owners, it is natural to focus on the directives that affect them. Besides giving a short general overview of the different directives, the aim of this chapter is to show whether, and how, they affect property owners in their day-to-day work.

The current directives concerned with energy, with a clear focus on improving efficiency, are:

- The Directive on the energy performance of buildings (2002/91/EC)
- The Directive on energy labelling of household electric refrigerators, freezers and their combinations (2003/66/EC)
- The Directive on promotion and development of cogeneration of heat and power (2004/8/EC)
- The Directive for establishing a framework for the setting of ecodesign requirements for energy-using products (2005/32/EC)
- The Directive on energy end-use efficiency and energy services (2006/32/EC)
- The Council decision concerning conclusion of the Agreement between the Government of the United States of America and the European Community on the co-ordination of energy-efficiency

labelling programmes for office equipment (2006/1005/EC), including supplementary Regulation (EC) No. 106/2008.

The directives are shown in chronological order of adoption, not in their order of importance for property owners. The first mentioned is the EPBD. This directive directly affects most property owners in the Union and is also the directive that is studied in detail in this book. The contents of all the above-mentioned directives are summarized below, with the EPBD being discussed last.

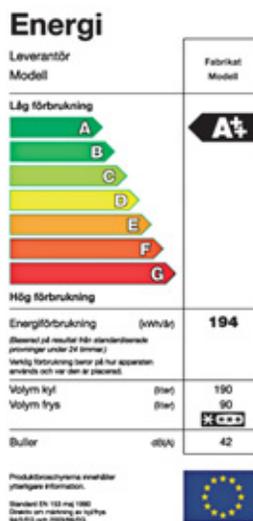
2.1 The Directive on energy labelling of electric refrigerators and freezers

This directive states, as its name implies, that refrigerators and freezers, and combinations of these, when sold must include information about their use of energy. Since 1994, it has been possible to label products like these using a letter to indicate their energy-efficiency class, and this is still done today.

Originally, there were seven classes, A to G. Energy labelling contributed to improving the efficiency of the products, and more and more of them began to fulfil the requirements of Class A, the best class. In order to distinguish the most efficient products, two more classes were added in 2003, A+ and A++.

This directive can be seen as a help for property owners when choosing refrigerators and freezers. It only affects them to the extent that it provides a guide to the energy use of the products. On the other hand, it has resulted in greater demands being made on refrigerator and freezer manufacturers, especially in regions where the consumers are energy-conscious.

Figure 2.1 Energy labels used in Sweden for refrigerators and freezers. See page 103.



2.2 The Directive on cogeneration of heat and power

The purpose of this directive is partly to facilitate investments and partly to facilitate the use of combined heat and power stations. The fundamental goal of the Directive is not to maximize the number of combined heat and power stations but to emphasize that they can be efficient tools for achieving energy savings and reducing carbon dioxide emissions.

According to the Swedish Energy Agency, the combined heat and power stations in Sweden more than well fulfil all criteria stipulated in the Directive. For the individual property owner, the Directive will not require any measures to be taken, as these are all carried out at national level. For this reason, the Directive is not discussed any further.

2.3 The Directive on ecodesign requirements

The term ‘ecodesign’ refers to the integration of environmental aspects into product design, with the aim of improving the environmental performance of an energy-using product during the whole of its life cycle, while also maintaining the usefulness of the product. Specifically, steps should be taken as early as possible in the design phase of a product to ensure energy efficiency, as it is during this phase that the contamination or pollution that the product will later cause is decided. It is also during this phase that the opportunities for influencing the design of the product are greatest.

The Directive is a so-called framework directive, in which the framework for requirements for ecodesign has been determined with the aim of guaranteeing free mobility for the products concerned within the inner market. However, the Directive excludes means of transportation of passengers and/or goods.

Member states are obliged to set up authorities with responsibility for overseeing the market and to ensure that these authorities have and use the necessary powers in order to take the required steps in accordance with the obligations set forth in the Directive.

The Directive also emphasizes that energy-using products fulfilling the requirements for ecodesign should be CE marked and accompanied by relevant information, so that they can be released on the inner market

and enjoy full mobility. At the same time, it is stressed that self-regulatory measures adopted by trade and industry should be given priority, if it is likely that these measures will contribute to the political goals being achieved quicker, or at a lower cost, than they would be by mandatory requirements.

An energy-using product that fulfils the criteria below must be subject to an implementation measure⁷ or self-regulation, for example, by voluntary agreements.

Criteria:

- The energy-using product must constitute a significant sales and trading volume within the Union, suggesting more than 200 000 units per year.
- The energy-using product must have, in relation to the quantities released onto the market and/or put to use, a significant environmental effect within the Union (according to the strategic priorities of the Union as stated in Decision 1600/2002/EC).
- The energy-using product must display significant potential for improvement with regard to environmental impact, without incurring unreasonable costs. Special consideration must be taken to the following conditions:
 - The lack of other relevant Union legislation or inability of market forces to address the problem in a suitable way.
 - The great difference in environmental performance between energy-using products, with similar functions, on the market.

2.4 The Directive on energy end-use efficiency and energy services

The purpose of this directive is to reduce the use of energy within the Union, partly by promoting the availability of energy services and partly by stimulating demand for energy services.

It is especially emphasized that the public sector should be seen as a

⁷ Measures approved in accordance with the Directive and which stipulate requirements for ecodesign for the specified energy-using products or for their environmental effects.

good example when it comes to investments, maintenance costs and other costs for energy-using products, energy services and measures to achieve improved energy efficiency. The public sector should therefore be encouraged to integrate considerations regarding energy efficiency improvement into its investments, depreciations and operational budgets. The public sector should also strive to make use of energy efficiency criteria when calling for tenders.

The Directive came into effect on 25 April 2006. Member states were required to introduce laws and regulations, to ensure that the Directive could be followed, before 17 May 2008.

The first article in the Directive has a clear goal: Member states are to set and to strive to fulfil a national energy saving goal of at least 9 percent by 2016, to be achieved by offering energy services and by introducing other measures aimed at improving energy efficiency. Member states must adopt cost-effective, feasible and reasonable measures to contribute to the fulfilment of this goal.

The Commission demands that every member state submit plans of action stating how the goals are to be fulfilled. The first plan was to be submitted by 30 June 2007, the second is to be submitted by 30 June 2011 and the third by 30 June 2014.

As previously mentioned, the aim is to position the public sector as a leading example in the execution of energy efficiency measures. This should be possible to achieve by stipulating requirements via legislation or via voluntary agreements. The Directive states that at least two of the following types of requirements must be imposed:

- a) Requirements for the use of financial instruments for energy savings, including agreements regarding energy performance, in which measurable and pre-determined energy savings are stipulated.
- b) Requirements to purchase equipment and vehicles based on lists provided by authorities (or similar institutions/bodies) that include energy-efficient product specifications using, where applicable, minimized life cycle cost analysis or corresponding methods to ensure cost-effectiveness.
- c) Requirements to purchase equipment that is energy-efficient in all

modes, even stand-by, using, where applicable, minimized life cycle costs or corresponding methods to ensure cost-efficiency.

- d) Requirements to replace or retrofit existing equipment and vehicles with equipment specified in b) and c).
- e) Requirements to use energy audits and to carry out the resulting cost-effective recommendations.
- f) Requirements to purchase or rent energy-efficient buildings or parts thereof, or requirements to replace or retrofit purchased or rented buildings or parts thereof to make them more energy-efficient.

The Directive also points out that, in the case of public buildings, member states must publish guidelines for energy efficiency and energy savings as possible criteria when calling for tenders.

Other important target groups named in the Directive are energy distributors, distribution system operators and companies selling energy on the retail market. These must, if required, but not more than once a year, submit suitably compiled statistical information about their end-users to the relevant authorities (or similar institutions/bodies). The information must be comprehensive enough to be able to:

- Draw up and carry out programmes to improve energy efficiency in a satisfactory manner.
- Promote and check energy services and other measures to improve energy efficiency.

In addition, they must refrain from activities that can inhibit demand for and the provision of energy services and other measures to achieve energy efficiency or hinder development of the market for energy services and other energy-efficiency improvements.

Member states must also choose one or more of the following requirements that must be fulfilled by the said target groups, i.e. the energy distributors, the distribution system operators and companies selling energy on the retail market. They must either:

- Guarantee the offering and promotion to end-users of competitively priced energy services.

- Ensure availability and promote to end-users competitively priced energy audits that are carried out in an independent manner and/or measures to achieve improved energy efficiency.
- Contribute to funds and financing mechanisms.

As an alternative to the above, voluntary agreements and/or other arrangements aimed at the market can be made, for example, so-called white certificates⁸ can be drawn up, if their effect corresponds to one of the points above. If voluntary agreements are made, then they must be evaluated, checked and followed up by the member states, so that sufficiently high effects can be obtained.

For other players, for example, energy service companies, energy equipment installers, energy advisers and energy consultants, member states must ensure that there are sufficient incentives, fair competition and equal conditions, so that they can independently offer and carry out energy services, energy audits and measures aimed at improving energy efficiency.

When it comes to end-users of electricity, natural gas, district heating and/or district cooling, and hot water for domestic purposes, the Directive clearly stipulates that member states must ensure that these end-users have individual meters to show how much energy has been used and when, as far as it is technically feasible and economically viable with respect to potential energy savings. Invoice specifications must be presented in such a way that they can be easily understood.

Among the reasons given for adopting the Directive, it is also stated that motor fuel and transport sectors have an important role to play, where energy efficiency and energy savings are concerned.

2.5 The Agreement on energy-efficiency labelling programmes for office equipment

USA and the EU have agreed to coordinate energy-efficiency labelling of office equipment. According to the agreement, it will be possible to use

⁸ It should be possible to award so-called white certificates, showing the value of improved efficiency, to companies that have improved their energy efficiency. A next step would be the possibility of trading them on an energy market.

the so-called Energy Star label in the EU to signify energy-efficient office equipment. In USA, products other than office equipment can also be labelled with the Energy Star label; in fact, whole buildings can be labelled in this way.

In the EU, the Energy Star is regarded as an ‘energy quality label’ for office equipment. In order to be able to use the Energy Star symbol, the product must fulfil stipulated performance requirements. The symbol is shown in Figure 2.2.



Figure 2.2 The Energy Star symbol.

When property owners purchase new office equipment they avoid having to investigate the energy performance of each product and in detail compare different makes with each other to find the most energy-saving products. By stipulating that the products must carry the Energy Star label, they can be assured that the products are energy-efficient. Energy Star labelling can be seen as a guide for property owners and is therefore not something that requires their active participation.