Renewable electricity with green certificates
Government Bill 2005/06:154

The vision in Swedish energy policy is that the country will obtain all its energy from renewable energy sources in the long term. The continued transformation of the energy system and high security of supply are two important reasons to promote electricity production from renewable energy sources in Sweden. The most important policy instrument in promoting renewable electricity production is the electricity certificate system that was introduced in 2003.

The Government Bill Renewable electricity with green certificates (Government Bill 2005/06:154) proposes a development of the system. The electricity certificate system will be streamlined and enhanced. This means increased investment in renewable electricity production in Sweden. The electricity certificate system will be extended and the target for production of new renewable electricity increased. It is proposed that the Act enter into force on 1 January 2007.

Background to and fundamental structure of the electricity certificate system
The electricity certificate system aims to promote the development of renewable electricity production and is technology neutral; in other words, it covers various kinds of renewable energy sources. The aim is to promote the most cost-effective production of renewable electricity.

The electricity certificate system has a target that defines how much new renewable electricity production must be developed by a certain date. The target is then broken down to the annual growth rate necessary to attain the target.

To create a demand for electricity certificates, there is what is known as a quota obligation. A quota obligation is an annual obligation on the part of electricity suppliers to hold electricity certificates corresponding to their sale and use of electricity during the previous calendar year.

Producers of electricity from renewable energy sources receive an electricity certificate for every MWh of electricity produced. By selling these certificates, the producer receives an extra income in addition to the sale of electricity. This makes it profitable to invest in new renewable electricity production.

The electricity certificate system has proved to be highly effective in promoting electricity production from renewable sources. The system is estimated to have generated 5 TWh of renewable electricity compared to 2002. Through the proposals in the Bill, the Government wants to give a longer term perspective to the system and increase the ambition level.

Streamlining the electricity certificate system
In the Bill, the Government presents a proposal for a new ambition level of 17 TWh of renewable electricity by 2016, compared to 2002. This is a target that means an increase of 12 TWh in renewable electricity production in Sweden during the period 2007–2016.

Electricity certificate system to be extended
The electricity certificate system is to be extended to 2030. Such an extension is deemed appropriate for several reasons. It provides sufficient scope for stability and introduces a long-term perspective to stakeholders' investments in renewable electricity production. Further, it creates a sufficiently long planning horizon to enable suppliers with quota obligations to predict developments and act in accordance with the conditions of the system.

New allocation period for electricity certificates
The new electricity certificate system is designed so that power plants are entitled to electricity certificates for a maximum period of 15 years. This means that new plants entering the system no later than 2016 will be entitled to electricity certificates up to 2030, when the allocation of certificates will cease. The allocation period has been limited to keep down consumer costs and to increase the ambition of investments in new renewable electricity production.

Restrictions for older production
Electricity production plants commissioned before 1 May 2003 will be phased out of the system on two occasions – at the end of 2012 and the end of 2014. The year for phasing out will depend on the type of plant and when it was built.

Special restriction for small-scale hydroelectricity
The right to be allocated electricity certificates will not apply after the end of 2010 for electricity produced by a
hydroelectric plant with an installed effect no higher than 1 500 kW. If such a plant has started production after 30 April 2003 but before 1 January 2007, the right to be allocated electricity certificates will apply until the end of 2012. Legislation on the special restriction for small-scale hydroelectricity was proposed in the 2006 Spring Fiscal Policy Bill.

**Development and streamlining of quota obligation**
In conjunction with the long-term development of the electricity certificate system now taking place, changes that will simplify, streamline and refine the system are also being implemented.

**Quota obligation transferred**
Quota obligation is being transferred from electricity users to electricity suppliers, except in the case of electricity users who use electricity they themselves have produced, imported or purchased on the Nordic Power Exchange, and users in electricity-intensive companies. Transferring responsibility for quota obligation to electricity suppliers provides powerful incentives for streamlining, and enables a reduction in system costs. This creates a clearer incentive to fulfill the quota obligation and limit transaction costs within the system.

**Exemption from quota obligation for electricity-intensive industry**
A new rule to limit quota obligation costs for electricity-intensive industry is being introduced. The proposal is based on the assumption that the individual company's electricity use is fairer and more accurate than the previous exemption rule based on branch affiliation. By means of the new exemption, greater precision is achieved regarding the companies that are covered under the exemption, and that companies in different branches are treated in the same way.

**Better statistics**
To improve statistics on the electricity certificate system, the Swedish Energy Agency will have new possibilities to gather information from the producers who are entitled to certificates and electricity suppliers. This gives greater opportunity for management and control.

**Reviews**
The long-term development of the electricity certificate system should be followed up and evaluated in periodic reviews, which should take place every five years beginning with a review in 2012. The Government has begun work to simplify and streamline the licensing procedure for renewable energy sources such as wind power and biofuels. A review will be carried out in 2008 to see how the measures to simplify this licensing have worked. If the conditions for initiating development of renewable electricity production of this kind have significantly improved, consideration will be given to further increasing the ambition level by up to 2 TWh.

**Consumer interests in the electricity certificate system**
To achieve greater cost efficiency and enable consumers to compare electricity and electricity certificate prices more easily, two changes in the system are proposed. First, it is proposed that responsibility for quota obligation is transferred from electricity users to electricity suppliers. Second, it is proposed that the existing requirement for electricity suppliers to itemise the electricity certificate price on the electricity bill be abolished. It is anticipated that this will lead to more streamlined processing of electricity certificates for the supplier and simpler invoices for the customer.

**International electricity certificate market**
An international electricity certificate market has considerable advantages. International trade contributes to a more efficient market with higher liquidity and increased turnover. It creates greater effectiveness and increased pressure on production costs for renewable electricity. In the Bill, the Government considers that the Swedish electricity certificate market should in the long term be developed into an international market and, in connection with the coming review in 2012, it would be appropriate to consider expanding the system.