National report from the Slovak Republic on progress towards achieving targets

Report from the Slovak Republic under Article 3(3) of Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market

Introduction

This report has been drawn up pursuant to Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market, Article 3(3) of which requires Member States to publish every two years a report on success in meeting the national indicative targets, taking account of climatic factors likely to affect the achievement of those targets, and which indicates to what extent the measures taken are consistent with the national climate change commitment.

1. Measures to promote greater use of RES to produce electricity

Directive 2001/77/EC was implemented by legislation adopted in 2004 and 2005. The laws adopted and/or amended during that period provided the basic legal framework for increasing the amount of electricity produced from renewable energy sources (RES), the support mechanism comprising an obligation to purchase RES electricity, the fixing of purchase prices for such electricity and its priority transmission and distribution.

Act No 309/2009 on the promotion of renewable energy sources and high-efficiency cogeneration and amending certain acts (hereinafter 'Act No 309/2009') was adopted in 2009.

It improved the functioning of the market in RES electricity and created a stable business environment. It provided a long-term (15-year) guarantee for purchase prices. It also gave preference to the building of small plants that use local renewable energy sources.

Purchase prices for RES electricity are set by the Network Industries Regulatory Office (ÚRSO) by means of generally binding legislation in the form of an implementing order. When setting prices, account is taken of the type of renewable energy source, the technology used, the date on which the power plant becomes operational and its installed capacity. The prices set in this way will apply to electricity producers for a period of 15 years from the year in which they built their plants. Provided that certain conditions are met, these prices may also be increased by applying a coefficient that takes account of core inflation and the technology used. The prices applicable to plants built in this period may not be reduced by more than 10% in the following period.

The Act also promotes the use of an upgraded type of biogas, namely biomethane. Provided that technical conditions are met, biomethane may be given priority in terms of access to the distribution network and distribution itself. Support is granted to electricity producers who use biomethane to produce electricity in CHP mode.

2. Measures to ensure the reliability of guarantees of origin

Under Act No 309/2009, guarantees of origin for RES electricity are issued by an independent body (i.e. ÚRSO) at the request of producers.

Certificates of origin for RES electricity specify:

a) the identification particulars of the RES electricity producers to whom they are issued,
b) the type of plant and its installed capacity,
c) the date on which the plant became operational or on which the plant's machinery was redesigned or modernised,
d) the renewable energy source from which electricity is produced,

e) the production location and the amount of electricity to be produced from RES during the period for which they are issued,
f) the amount of investment aid received from the state budget.

ÚRSO issues certificates of origin for RES electricity for the preceding calendar year if electricity was produced from renewable energy sources. The amount of electricity actually produced is adjusted to take account of the amount of electricity for which a certificate has already been issued in respect of the period in question.

ÚRSO issues certificates of origin for RES electricity for the following calendar year if:
(a) the RES electricity producer has supplied data on actual electricity production during the preceding calendar year, and
(b) the amount of RES electricity corresponds to the amounts expected to be produced by the plant, as stated in the request.

Provided that the aforementioned conditions are met, a certificate of origin is issued to the requesting party within 30 days. Records are kept of the certificates of origin for RES energy that have been issued and of the actual amounts of electricity supplied by such sources. Certificates of origin issued in Member States of the European Union are also valid in the Slovak Republic.

Guarantees of origin for RES electricity issued in Member States of the European Union under a mechanism that guarantees their accuracy and reliability are regarded in the Slovak Republic as certificates of origin for RES electricity as provided for in this Act.

3. Electricity production

Table 1 presents RES electricity production by type of RES in the period 2003-08.

Table 1: Production of electricity from RES

	2003 [GWh]	**2004 [GWh]**	**2005 [GWh]**	**2006 [GWh]**	**2007 [GWh]**	**2008 [GWh]**
Hydropower	3 480	4 100	4 638	4 399	4 451	4 039
Geothermal	0	0	0	0	0	0
Solar	0	0	0	0	0	0
Wind	2	6	6	6	8	7
Biomass	98	18	27	368	463	502
Biogas	2	2	5	8	11	15
Total	**3 582**	**4 126**	**4 676**	**4 781**	**4 933**	**4 563**
Share of total electricity consumption	12.4%	14.4%	16.4%	16.1%	16.6%	15.3%

Source: Ministry of the Economy of the Slovak Republic

RES electricity accounted for 15.3% of total electricity consumption in 2008. There has been significant growth in electricity production from the co-firing of biomass in redesigned plants and an increase in production at existing plants since 2006.

No plant using geothermal energy to produce electricity has yet been established in Slovakia. Although the potential offered by geothermal water in the Slovak Republic lends itself in particular to heat production, plans are afoot to build the country's first geothermal electricity plant near Košice.

Very little use has been made of photovoltaics, and less than 0.05 GWh of electricity is produced in this way. This amount is not even reflected in the statistics, as the systems in question are very small, are not connected to the electricity grid and are used exclusively for lighting. There is currently some 60 kW of installed capacity, and this is used in particular to light public telephone kiosks and provide auxiliary lighting for the electricity transmission system.

Conclusion

The share of total electricity consumption rose between 2003 and 2008 from 12.4% to 15.3%. Electricity production at small hydropower plants increased but, given the installed capacity of large power plants, total electricity production from hydropower has been affected by weather conditions. Electricity production from biomass rose substantially as a result of new plants coming on stream and increased production at existing plants. Biomass is the renewable energy source that has the greatest technical potential in the Slovak Republic and is making a significant contribution to the increase in the RES share of final energy consumption. Slovakia recorded an increase in the RES share of final energy consumption from 3.7% to 7% between 2000 and 2008.

During the structural funds period 2004-06, aid amounting to SKK 555 million (EUR 16 million) was granted to businesses under the Industry and Services OP, for the purposes of developing the use of renewable energy sources. During that period, eight biomass projects and five small hydropower plant construction projects received support.

The prices for RES electricity set by ÚRSO since 2005 have risen each year at least in line with inflation, and this has led to greater interest in building plants. The fact that purchase prices for RES electricity were set in the ÚRSO implementing order without guaranteeing their long-term application meant that the anticipated increase in RES electricity production did not materialise. This shortcoming was remedied by Act No 309/2009 on the promotion of renewable energy sources and combined electricity and heat production [*sic*] and amending certain acts.

A high level of investor interest in building biogas, hydropower and solar power plants to generate electricity was recorded even as the draft of the act was going through the approval stages. This interest is being translated into increased electricity production, especially in 2010.