

Report by the Slovak Republic on achievement of the indicative target

Report by the Slovak Republic pursuant to Article 3, paragraph (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

Renewable energy sources (RES) are domestic sources of energy that help to enhance the safety of energy supplies and the diversification of energy sources. The utilization of such sources complies with the environmental acceptability requirement and leads to a reduction in greenhouse gas emissions. Increased RES utilization in heat and electricity generation is one of the priority tasks of the Slovak Republic to boost the use of domestic energy potential and thus decrease Slovakia's dependence on imported fossil fuels.

On 1 May 2004 the Slovak Republic became an EU Member State and, as of this date, has been subject to obligations arising from Directive 2001/77/EC on the Promotion of Electricity Produced from Renewable Energy Sources. Article 3(3) of this Directive obligates the Member States to publish, every two years, a report which includes an analysis of the success in meeting the national indicative targets taking account, in particular, 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.

In 2004 the National Council of the Slovak Republic adopted new energy legislation which implements Directive 2001/77/EC. This legislation provides a fundamental legal framework for increasing the electricity production from renewable energy sources; the basic support mechanism within this framework is fixed purchase prices of electricity produced from RES and its preferential transmission and distribution.

1. Measures encouraging greater use of RES for electricity production

1.1 Legislative measures

The following energy sector regulations were adopted in the Slovak Republic in 2004 and 2005 to implement Directive 2001/77/EC:

- *Act No. 656/2004 Coll. on Energy Sectors and amendments to certain acts*, effective as of 1 January 2005.
- *Act No. 658/2004 Coll. amending Act No. 276/2001 Coll. on Regulation in Network Industries and amendments and supplements to certain acts*, effective as of 1 January 2005.
- *Government Regulation No. 124/2005 Coll., laying down the electricity market rules*, effective as of 9 April 2005.

The aforementioned legal regulations specify in principle the legal framework pertaining to the renewable energy sources. The most important provisions promoting the production of electricity from RES include, in particular, the following:

- a) unambiguous specification of renewable energy sources** – definition of electricity produced from renewable energy sources in the Energy Act in order to specify electricity promoted within the production from renewable energy sources;
- b) facilitation of access to the system** - under the Energy Act, a producer producing electricity from renewable energy sources enjoys the right of preferential electricity transmission, distribution and supply if a production facility designed for the production of electricity from renewable energy sources meets the technical and business terms and conditions;

- c) **electricity distribution** - under the Energy Act, a producer producing electricity from renewable energy sources enjoys the right of preferential distribution of electricity if a production facility designed for the production of electricity from renewable energy sources meets the technical and business terms and conditions;
- d) **transparent and non-discriminatory conditions for connection and access to the system** – a transmission and distribution system operator is obliged to provide connection and access to the system based on a transparent and non-discriminatory principle and provide information required for the connection and access to the system;
- e) **enhancing the legislative support for renewable energy sources** - in the general economic interest approved by the government of the Slovak Republic, the Ministry of Economy of the Slovak Republic may specify an obligation of preferential access and preferential connection to the system, preferential transmission, distribution and supply of electricity produced from renewable energy sources in the delineated territory;
- f) **ensuring the reliability of guarantees of origin** – a system for the issuance of confirmations on the origin of electricity produced has been established; a producer of electricity from renewable sources has the right to be granted a confirmation on the origin of the electricity produced; the confirmation includes specification of the source of the electricity produced, date and place of production and in the case of hydroelectric power plants also their capacity; the confirmation is issued by the Regulatory Office for Network Industries;
- g) **preferential purchase of electricity produced from RES** – system operators must preferentially purchase electricity produced from renewable energy source in order to cover their losses;
- h) **system development obligation** – under the Energy Act, system operators are obliged to ensure the operability and development of systems arising, *inter alia*, from the requirements of electricity producers producing electricity from RES in order to adapt to the further development in the production of electricity from RES whereby the costs of system development are borne by the system operator;
- i) **information on the share of electricity from RES** – an electricity supplier is obliged to provide information on the share of individual types of primary energy sources on electricity production and supply;
- j) **better connection conditions** – transparent rules applicable to the sharing and payment of costs for the connection to the system stipulated by a Regulatory Office for Network Industries decree;
- k) **simplification of administrative procedures pertaining to construction** – smooth, transparent and non-discriminatory issuance of certificates for the construction of facilities for the production of electricity from renewable energy sources;
- l) **simplification of administrative procedures pertaining to operation** – a producer of electricity from renewable energy sources in a facility with a total installed capacity up to 5 MW does not need a licence to conduct business in energy sector; transparent and non-discriminatory issuance of operation licences for facilities with a total installed capacity greater than 5 MW.

1.2 Determination of purchase prices of electricity from RES

Act No. 275/2001 Coll., as amended, stipulates that the production of electricity from renewable energy sources is also subject to price regulation. Based on the above provision, the Regulatory Office for Network Industries issued on 30 June 2005 Decree No. 2/2005,

which laid down the scope of price regulation for the production of electricity from renewable sources; the Decree became effective on 1 January 2006.

The Decree set fixed prices of electricity produced from renewable energy sources. The pricing method is transparent and takes into consideration the benefits arising from the production of electricity from RES. The scope and manner of price regulation for the production of electricity from renewable energy sources is set as follows:

Prices of electricity produced from renewable energy sources are set for 2006 as fixed prices in the following manner:

- 1) electricity produced from hydro energy in a facility with a total installed capacity up to 5 MW
 - a) put into operation before 1 January 2005 1900 SKK/MWh
 - b) put into operation after 1 January 2005 2300 SKK/MWh
 - c) for a capacity increase of a facility reconstructed after 1 January 2005 2400 SKK/MWh
- 2) electricity produced from solar energy 8000 SKK/MWh
- 3) electricity produced from wind energy
 - a) facilities put into operation before 1 January 2005 2500 SKK/MWh
 - b) new facilities put into operation after 1 January 2005 2800 SKK/MWh
 - c) facilities older then 3 years put into operation after 1 January 2005 1900 SKK/MWh
- 4) electricity produced from geothermal energy 3500 SKK/MWh
- 5) electricity produced from biomass combustion purpose-grown biomass 3000 SKK/MWh
 - waste biomass for facilities put into operation before 1 January 2005 2000 SKK/MWh
 - a) waste biomass for facilities put into operation after 1 January 2005 2700 SKK/MWh
 - b) co-firing of biomass or waste with fossil fuels for facilities put into operation before 1 January 2005 2000 SKK/MWh
 - c) co-firing of biomass or waste with fossil fuels for facilities put into operation after 1 January 2005 2200 SKK/MWh
 - d) combustion of biogas 2500 SKK/MWh

The aforementioned fixed prices for electricity produced from renewable energy sources will be applied based on a confirmation of electricity origin. The prices have been set so that a rate of return on the investment is 12 years when drawing a commercial loan. These fixed prices will be increased for the next year by the core inflation index published by the Statistical Office of the Slovak Republic.

If the acquisition of a facility for electricity production from renewable energy sources and a facility for electricity co-generation has been supported by other form of state aid, or if a payment from an EU fund has been provided for that purpose, the fixed prices for electricity produced from renewable energy sources are reduced by 15%.

The set prices promote the development of purpose-grown biomass as the electricity produced from this type of biomass is purchased for 3,000 SKK/MWh. With regard to the prices of electricity produced in facilities for co-firing of biomass or waste with fossil fuels set in the above manner and in connection with the Air Protection Act addressing the issue of sulphur emissions, a growth in electricity production from biomass is expected after 2006.

1.3 Programmes promoting production of electricity from renewable energy sources

Projects using renewable energy sources for the production of electricity and heat are supported with financial resources provided under Aid Scheme de minimis DM-003/03, EU structural funds and the Environmental Fund.

1.3.1 Scheme to support energy savings and renewable resources utilization

(Aid Scheme de minimis DM-003/03).

The support for energy savings and the use of renewable energy sources has been provided since 2003 in the form of financial assistance funded from the state budget. Beneficiaries include SMEs, associations of natural and legal persons registered in the Slovak Republic, organisations established by the state and public administration bodies which conduct business activities, participate in economic competition and in which public sector holds a share equal to or higher than 51 %.

Eligible projects also focus on the use of renewable energy sources, including:

- construction or reconstruction of small hydropower plants with installed capacity up to 10 MW;
- construction or reconstruction of facilities for energy utilisation of biomass;
- installation of thermal pumps;
- installation of solar collectors and photovoltaic cells;
- construction or reconstruction of facilities for geothermal energy utilisation;
- installation of facilities for wind energy utilisation.

Financial aid is provided for:

- the payment of a portion of interests accrued on loans for acquisition of tangible fixed assets;
- the payment of a portion of loan for acquisition of tangible fixed assets;
- the payment of a portion of loan for acquisition of intangible fixed assets;
- subsidies for electricity/heat production from renewable energy sources.

1.3.2 EU structural funds

Projects focused on the use of renewable energy sources are included under three operational programmes:

- a) Sectoral Operational Programme Industry and Services;
- b) Operational Programme Basic Infrastructure;
- c) Sectoral Operational Programme - Agriculture and Rural Development

Sectoral Operational Programme - Industry and Services (SOP I&S) – Measure 1.4: Support for energy savings and the use of renewable energy sources.

Since this involves assistance to business entities, compliance with the rules for state aid provision is required. The following forms of assistance can be provided in this area:

- regional assistance;
- environmental assistance;
- minimum assistance.

The objective of **regional assistance** is to support regions with a low standard of living and/or a high unemployment rate; in our case it is focused on specific projects in the field of energy saving and use of renewable energy sources. Regional assistance can only be provided for projects which constitute entry investment or its part, i.e. investment into establishment of a new undertaking, expansion of an existing undertaking, launch of an activity requiring a significant modification of a product or the production process in an existing undertaking (streamlining, diversification or modernisation). Eligible costs are the costs of procurement of tangible and intangible fixed assets directly related to the project. The assistance represents 50% of eligible costs, including a 15% bonus for SME.

The primary objective of **environmental assistance** is environmental protection, in particular the reduction of emissions of pollutants and greenhouse gases. Eligible costs are only the increased costs that the business entity must exert in order to reach the project objectives. They are further reduced by the sum representing 5-year savings in costs due to implementation of the project.

Minimum assistance is designed for small investment projects, but also for advisory services. In aggregate, the sum of assistance must not exceed EUR 100,000 over a period of three consecutive years. Maximum assistance intensity is 65% of the eligible costs. Eligible costs are the procurement costs of tangible fixed assets, intangible fixed assets as well as the procurement costs of external advisory services.

The overall sum of SKK 886 mil., including co-financing from the state budget, was approved for the programming period 2004-2006 for *Measure 1.4. Support for energy saving and use of renewable energy sources*. Support was given to 24 projects on the use of renewable energy sources of the total number of 27. A total sum of SKK 780 mil. was earmarked for these projects (88% of resources).

Operational programme: Basic Infrastructure

The specific objective of the Environmental Infrastructure priority, based on strategy approximation in the field of environment, is focused on the completion of environmental infrastructure, designed to guarantee the health of citizens and the preservation, protection and restoration of the natural environment in Slovakia, and performed through application of four measures, of which Measure 2.2 - “Improvement and development of air-protection infrastructure”, is directly aimed at the use of RES.

Activities performed under this measure focus especially on the reduction of emissions from basic polluting substances (SO₂, NO_x, CO, C_xH_y, solid pollutants), fulfilment of obligations arising from the Kyoto protocol in the field of the reduction of greenhouse gas

emissions, utilisation of environmentally-friendly fuels and energy sources, and support for more intense utilisation of RES and rational utilisation of non-RES.

The final recipients of assistance are in this case the self-governing regions, local self-governing bodies, state administration and business entities, although it is the citizens of the affected areas/the citizens of the Slovak Republic and the Community, who are the target group. The provision of assistance to business entities is governed by similar rules as Measure 1.4 SOP I&S.

Sectoral Operational Programme: Agriculture and Rural Development

Projects focused on the use of RES can be submitted as a part of the first priority. The main objective of Measure 1.1 - "Investment in agricultural enterprises", is to increase labour productivity and competitiveness while protecting the environment. Specific targets also include the support for the use of environmentally-friendly technology and equipment. Eligible recipients are natural and legal persons conducting business in the primary agricultural industry.

The main objective of Measure 1.2 - "Improvement of processing and marketing of agricultural products", is the increase of competitiveness and quality of the processed food products, including ecological products, while at the same time mitigating negative environmental impacts. Specific targets also focus on the mitigation of negative environmental impacts.

Eligible recipients are natural and legal persons conducting business in the field of product-processing and primary agricultural production.

1.3.3. The Environmental Fund

The Environmental Fund was established by Act No. 587/2004 Coll., to provide state support for environmental protection. The resources of the Fund may be provided and used also in support of activities aimed at the fulfilment of state environmental policy objectives at the national, regional or local level. The support for RES is provided in the "Protection of air and Earth's ozone layer" section. The Fund is administered by the Ministry of Environment of the Slovak Republic.

1.4 Other measures

These measures include information and motivation activities concerning renewable sources. Under the law, electricity customers are informed on what the share of electricity produced from RES in the overall electricity supplied in the previous year is, by volume of such electricity being stated on the invoice. In 2005, the Centre for Energy Saving and Utilisation of RES was established with the support of the World Bank. The Centre focuses on the support of energy saving and RES utilisation projects. The Slovak Energy Agency, in cooperation with the Austrian Energy Agency, established a specialised centre for the utilisation of biomass, which focuses on the preparation of projects aimed at the utilisation of biomass for generation of heat and electricity. The "Electricity generation from biomass" manual is currently under preparation. The Ministry of Economy of the Slovak Republic acts as a patron and supporter of international conferences and seminars on the utilisation of renewable sources.

Designed to formulate policies and concepts in the field of RES planning and development, the Steering Committee for the Programme of RES development management (Steering Committee) was established at the Ministry of Economy of the Slovak Republic; it is composed of representatives of Ministries, the Slovak Energy Agency and the Regulation Office for Network Industries. The objective of the Steering Committee is to transform the interest of the state into implementation of specific RES projects at the regional and local level. The Steering Committee proposes tools necessary for the creation of environment suitable for RES utilisation; i.e. by:

- forming legislative environment supportive of RES utilisation;
- involving local councils and local self-governing bodies in the RES development;
- motivating business entities to use RES;
- stirring up interest among residential customers in electricity generation from RES.

In the field of research into sustainable environment, micro-regional systems of renewable energy sources will be given support. It is in particular the specifics of technologies for the utilisation of biomass, solar, wind and geothermal energy, small water energy and the energy of thermal differences, as well as the systematic operation of technologies using RES.

2. Measures to ensure the reliability of guarantees of origin

Guarantees of the origin of electricity produced from renewable energy sources are issued, upon the producer's request, by an independent authority – the Regulatory Office for Network Industries. Ensuring the reliability of guarantees of origin is included in Government Regulation No. 124/2005 Coll., laying down the electricity market rules, which stipulates as follows:

A confirmation on the origin of the electricity produced shall be issued for a producer of electricity from renewable energy sources upon his request. In the application for the issuance of the confirmation on the origin of the electricity produced, the producer shall specify the following:

- a) a time period for which the confirmation is sought;
- b) an accurate designation of the electricity production facility and the offtake point designation;
- c) a plan for electricity production in the respective electricity production facility during the time period for which the confirmation is sought;
- d) a time schedule of planned shutdowns of the electricity production facility.

Records are kept of the issued confirmations on the origin of electricity produced from renewable energy sources and on the actual electricity supply from such sources. A confirmation on the origin of the electricity produced issued in European Union Member States is valid also in the Slovak Republic.

Conclusions

In the period following Slovakia's accession to the European Union several measures have been adopted in the field of promoting the greater use of renewable energy sources which aim to increase the share of electricity produced from renewable energy source on total

electricity consumption, but also to increase the share of heat produced from renewable energy sources. All measures aim towards Slovakia's contribution to meeting the overall EU target of a 21-percent share of electricity produced from RES. However, Slovakia's indicative target set at 31% stated in Directive's annex appears to be too ambitious and application area in reaching the goal seems very questionable from the point of view of the Slovak Republic.

In 2004, Slovakia produced 4,141 GWh of electricity from renewable energy sources, which represents a raise of 574 GWh (16 %) compared to 2003. The share of electricity produced from renewable energy sources on the total electricity consumption in the Slovak Republic in 2004 stood at 14.4%, up by 2% compared to 2003.

The Energy Policy of the Slovak Republic anticipates greater use of renewable energy sources and a continuous increase in the share of electricity produced from such sources. For this purpose, tasks have been assigned to prepare a strategy – an action plan for the greater use of renewable energy sources and an action plan for biomass utilisation. These action plans will be prepared in the course of 2006. The most important incentive for accomplishing the target set for electricity production from RES is the determination of fixed prices for electricity produced from renewable energy sources for 2006 and determination of a formula for their calculation for the following year. Another measure may be a proposal to approve a general economic interest in the energy sector for the use of renewable energy sources and for preferential access to the system in the case of electricity supply produced from RES.

The Slovak Republic will exert its best efforts in the upcoming period in order ensure a more effective use of instruments which, in particular, include:

- investment support for new projects by using the support mechanisms by means of EU structural funds;
- support for the growing of energy crops in the agricultural sector;
- support for economically feasible methods of electricity production from RES;
- support for the use of RES within regional assistance, support for the environmental and air protection;
- support for the use of RES by introduction of emission trading;
- determination of purchase prices for electricity produced from RES in order to ensure a reasonable rate of return on investments.

The basic precondition for further increase of the share of renewable energy sources for electricity production are investments into the construction of new facilities, especially in the field of biomass, wind energy and hydroelectric power plants.