Important notice: this report has been submitted in the language of the Member State, which is the sole authentic version. Translation into the English language is being provided for information purposes only. The European Commission does not guarantee the accuracy of the data or information provided in the translation, nor does it accept responsibility for any use made thereof.

Report on Romania's attainment of its indicative targets for electricity production from renewable sources in 2007

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 (hereinafter "Directive 2001/77/EC"), Member States shall publish every two years a report on the meeting of the targets laid down for the production of electricity from renewable sources.

The report details the production capacity for electricity from renewable sources and the financial support schemes in place to promote the production of electricity from such sources.

1. Regulatory environment

The objective of Directive 2001/77/EC is to develop the use of renewable energy sources for the production of electricity.

The implementation of the Directive in national legislation has led to policies being applied to achieve by 2010 the national targets for the proportion of electricity produced from renewable energy sources (E-RES) in total gross electricity consumption, as laid down in the Directive. The meeting of national targets contributes to the meeting of the EU target of 22% of total gross electricity consumption from E-RES, as laid down in the Directive. The 22% target is correlated with the commitments undertaken by EU Member States on the basis of their ratification of the Kyoto Protocol to reduce greenhouse gas emissions.

National target

Following its accession to the European Union, from 1 January 2007 Romania is committed, on the basis of Directive 2006/108/EC adapting Directive 2001/77/EC, to meeting the target of 33% of total gross electricity consumption from E-RES by 2010, together with all the other EU Member States.

Promotion mechanism

In order to promote the production of electricity from renewable energy sources in Romania, Government Decision No 1892/2004 ("GD1"), as amended by Government Decision No 958/2005, established a mechanism for promoting the production of electricity from renewable energy sources, consisting in an obligatory quota system, combined with a green certificates trading system. The promotion mechanism provides E-RES producers with an additional income, via a green certificate (GC), for each megawatt of electricity supplied to the electricity grid. Green certificates granted to producers may be exchanged in a competitive system, either on the centralised green certificates market or on the bilateral contracts market. The price for exchanging a GC should fall within the price limits set by the Government, which are EUR 24 - 42/GC for transactions carried out by 2012.

To ensure the functioning of GC markets and the stimulation of demand on the markets, under the adopted promotion mechanism, annual obligatory quotas have been established until 2012 for acquisitions of GCs by suppliers of electricity to final consumers. These quotas ensure that the national target laid down by Directive 2006/108/EC is met.

Implementation of the directives at national level has led to the establishment of a legal framework which forms the basis for the support mechanism of green certificates and obligatory quotas, thereby encouraging investment in the production of electricity from renewable energy sources.

Energy strategy

In 2007, the Romanian Government adopted its "National Energy Strategy 2007-2020". The document established the following main objectives:

> The promotion of electricity production from renewable sources of energy;

> The setting of targets for the production of electricity from renewable sources at 33% of national gross electricity consumption for 2010, 35% for 2015 and 38% for 2020;

> Ensuring energy security by diversifying routes and sources of primary materials used to obtain energy;

> Increasing energy efficiency;

> The implementation of new technologies and clean technologies (low carbon technologies);

> The modernisation of existing production facilities;

> Increasing the proportion of electricity produced from nuclear sources in the overall energy mix.

The measures outlined above are intended to ensure the targets for E-RES established both at national and EU level are achieved in an effective manner, to reduce emissions of greenhouse gases and to create an economy based on clean low carbon technologies.

The programme of investments in renewable energy has a value of almost of EUR 1.8 billion. The new capacities will contribute to meeting the intermediate targets and the target of 38% for the year 2020.

2. Green certificates market

The mechanism for promoting E-RES adopted in Romania applies to electricity produced from wind energy, solar energy, geothermal energy, biomass, wave energy, and electricity produced in hydroelectric power station with an installed power less than or equal to 10 MW that have been put into operation or modernised since 2004.

The annual obligatory quotas set for the acquisition of GCs and imposed on suppliers of electricity to final consumers are as follows for the period 2005-2012: 0.7% for 2005, 2.22% for 2006, 3.74% for 2007, 5.26% for 2008, 6.78% for 2009 and 8.3% for the period 2010-2012.

Year	Obligatory quotas set for suppliers % of total quantity of electricity supplied
2005	0.7
2006	2.22
2007	3.74
2008	5.26
2009	6.78

2010-2012	8.3

The participants in the market for GCs are: electricity suppliers and E-RES producers.

The following entities are involved in organising and running the green certificates market:

- SC OPCOM SA, the commercial operator of the wholesale electricity market and Market Operator for the GC market,

- CN Transelectrica SA, the System and Transport Operator (STO), which issues GCs every month to E-RES producers on the basis of the electricity they supply,

- Distribution operators which transmit information to the STO every month on E-RES supplied to the grid by E-RES producers holding distribution licences and which are connected to the grid.

In order to acquire GCs, electricity suppliers are required to register for the GC market, and every year demonstrate that they have met the legally established quotas for a number of acquired GCs equal to the product of the value of the obligatory quota for the year in question and the quantity of energy supplied to their customers.

3. Obligatory quota for 2007

For 2007, each supplier is required to acquire a GC for each 1020 MWh of electricity supplied. From a total number of 133 licensed suppliers in 2007, only 59 were active (i.e. they carried out electricity transactions). Of the 59 active suppliers, 57 were obliged to purchase GCs on the basis of the electricity supplied to final consumers; the remaining two supplied a quantity less than the minimum amount triggering the obligation to buy a GC.

Out of the economic operators holding a distribution licence in 2007, 63 suppliers registered for the GC market.

The number of E-RES producers at the end of 2007 was 33. Of these, 19 producers received green certificates, the remainder being owners of hydroelectric electricity production facilities which either have an installed power greater than 10 MW or which

have an installed power less than 10 MW but were put into operation prior to 2004 and are lacking the relevant technology.

GCs issued by the system and transport operator are traded on a monthly basis on the bilateral contracts market and/or the centralised GC market between E-RES producers and the suppliers of final consumers; GC trading is not conditional on the trading of the electricity to which it relates. A GC may form the subject of a single transaction and is considered "consumed" at the moment when the supplier uses it to demonstrate that it has met its obligatory quota. The trade value of a GC is set via competitive mechanisms specific to the two markets, within the price scale established by law.

If a supplier acquires more GCs than are necessary to meet the quota, the supplier may transfer the surplus of GCs to another supplier. Under such a transfer, the GCs are transferred to the recipient supplier at the price at which the GCs were acquired by the supplier transferring them. The transfer of the GCs from the seller's account to the buyer's account is carried out by the GC Market Operator, SC OPCOM SA, and all transfers are recorded in the GC Register.

In Romania, the body that issues GCs is CN Transelectrica SA, the Transport and System Operator. The GC is in theory valid for an unlimited period. The obligation to purchase E-RES falls on the electricity suppliers. E-RES producers are required to offer to the market all the GCs they own when the annual supply of GCs is lower than the annual demand for GCs for the year in question. An exemption to this obligation may be granted only to producers who are in possession of an electricity supply licence are who use their own GCs to meet their annual obligatory quota.

In 2007, the average sale price of a GC on the GC market was EUR 42/GC.

4. Developments on the green certificates market in 2007

2007 was the second full year in which the green certificates market was operational in Romania. Producers producing 46 299 MWh of electricity, of which 83.7% came from hydroelectric sources and 16.3% from wind energy, benefited from the E-RES support scheme.

The green certificates market for 2007 can be characterised as follows:

There were a total number of 82 participants registered on the green certificates market, of which 63 were suppliers and 19 were producers. 59 of the participants carried out transactions on the centralised green certificates market, while 26 economic operators traded GCs on the bilateral contracts market.

Electricity production from renewable sources that benefitted under the green certificates system in 2007 was 46 299 MWh, double the amount for 2006.

The graph below presents the breakdown over time of the issuing of GCs.

GREEN CERTIFICATES ISSUED TO PRODUCERS IN 2007

[see bar graph on original document]

5. The issuing of guarantees of origin for electricity production from renewable energy sources in 2007

Article 5 of Directive 2001/77/EC on the promotion of E-RES makes provision for the certification of the origin of electricity produced from renewable sources. EU Member States were required to implement a system of certificates of origin for E-RES not later than 27 October 2003.

In Romania, Directive 2001/77/EC was transposed into national legislation via Government Decision No 443/2003 on the promotion of electricity production from renewable energy sources, as amended. The system of certificates of origin for E-RES was detailed in Government Decision No 1429/2004 approving the Rules for certifying the origin of electricity produced from renewable energy sources. The Rules stipulate that the state authority responsible for issuing and monitoring Guarantees of Origin (hereinafter "GO") is the National Energy Regulation Authority (ANRE).

Guarantees of origin must contain the following information at least:

- the energy source from which the electricity was produced, indicating the date and place of production, and, in the case of hydroelectric stations, the installed power of the facility;

- information enabling producers of electricity from renewable energy sources to demonstrate that the electricity they are selling is indeed produced from renewable energy sources.

Guarantees of origin are used for the following:

- to determine and demonstrate the proportion of electricity produced from renewable energy sources in the energy produced and the energy corresponding to final consumption;

- to monitor the meeting of the national target for the proportion of electricity produced from renewable energy sources in gross national electricity consumption;

- to enable producers to access systems for the promotion of electricity produced from renewable energy sources.

In Romania, guarantees of origin are issued solely for statistical purposes and to establish the extent to which the national targets have been met. They do not have any market value. GOs are issued at the request of producers.

6. Results relating to the issue of guarantees of origin in 2007

2007 is the third year in which the system of certificates of origin for E-RES has been operational. Guarantees of origin are issued on a half-yearly basis to E-RES producers.

Analysis of the electricity market indicated the following:

- The total number of guarantees of origin was 594, which breaks down for the two half years as follows: 48.1% in the first half of the year and 51.9% in the second half. Out of the total number of GOs issued, 80.35% were issued to SC Hidroelectrica SA.

- The total electricity production from renewable energy sources was 15 942 980 MWh, 99% of which came from hydroelectric energy.

- Monthly production of hydroelectric energy was on average 1 328 MWh;

- Monthly production of wind energy was on average 600 MWh;

- The target set for Romania of 33% of gross national electricity consumption to come from E-RES by 2010 has been 85.5% achieved, as calculated in accordance with the new European Commission proposals to take into account, when determining the extent to which the national target for hydroelectric energy has been met, the average value for the last 15 years;

In 2007, electricity production of 46 2999, of which 84.47% came from hydroelectric energy and 15.53% from wind energy, benefitted under the support scheme adopted in Romania, namely the system of obligatory quotas combined with green certificates trading.

Comparative analysis of the number of guarantees of origin issued in 2007/2006

- The number of producers rose constantly, reaching 34 producers in 2007 (12 using wind power and 22 hydro) compared to 23 in 2006;

- The total number of guarantees of origin issued to producers of E-RES increased by 13 in 2007 compared to 2006;

- The level of electricity production that benefitted under the support scheme adopted in Romania, i.e. the system of obligatory quotas combined with green certificates trading, doubled in 2007 compared to 2006.

7. Conclusions

- In 2007, the national target of 33% set for 2010 as regards the proportion of electricity produced from E-RES in gross national electricity consumption was 85.5% achieved, as calculated on the basis of the new draft Commission directive for the promotion of renewable energy sources (published on 23 January 2008).

- Total electricity production by E-RES producers for which guarantees of origin was were issued amounted to 15 942 980 MWh, with the bulk of the electricity coming from SC Hidroelectrica SA;

- In Romania, guarantees of origin are used solely for statistical purposes, namely to monitor the extent to which the national target for E-RES has been met;

- The number of licensed E-RES producers has risen from 14 in 2005 to 34 in 2007; of these, 12 use wind power and 22 hydro.

STATE SECRETARY

Darius Me•ca