COUNTRY POLICY PROFILE

Hungary

December 2015

LOG FILE OF CHANGES IN SUPPORT POLICIES AS COMPARED TO LATEST MEMBER STATE PROGRESS REPORT

EurObserv'ER

The EurObserv’ER project

The EurObserv'ER Barometers monitor the renewable energy progress in each Member State of the European Union. Every two months a barometer dedicated to one particular renewable energy technology is published. Moreover, once a year an *Overview Barometer* collects the main indicators published during the year and completes these with additional renewable sectors which have not been detailed in the individual Barometers. Finally, the Overview Barometer also reports on socio-economic aspects: employment and turnover in the field of renewables, and the renewable energy investment climate. The country policy reports monitor policy developments by providing an overview of policy changes compared to the Member State Progress Reports (updated until December 2015).

All Barometers are available for download at http://www.eurobserv-er.org. An overview of direct links to Barometers is available in Annex B.

New Barometer releases are announced on Twitter (https://twitter.com/eurobserv_er).

Co-funded by the Intelligent Energy Europe
Programme of the European Union

The EurObserv’ER barometer is a project supported by the European Commission within the DG Energy "Intelligent Energy Europe" programme. It is also supported by Ademe, the French Environment and Energy management Agency, and Caisse des Dépôts.

Abstract

According to the Directive 2009/28/EC of the European Parliament and of the European Council on the promotion of the use of energy from renewable sources the target for the share of energy from renewable sources in gross final energy consumption in the year 2020 for Hungary is 13%, whereas in 2012 it reached 9,8%.

Hungarian renewable electricity meets the support in shape of feed-in tariffs. In the aspect of transport the main means of support for the energy from renewable sources is a quota system. The connection of renewable energy plants to the grid will be ranked as a priority. The costs for the connection of renewable energy plants to and the expansion of the grid are borne either by the plant operator or by the grid operator, depending on certain criteria.

There are a number of policies intending to promote the development, installation and use of RES installations. However, some policies are currently not available due to exhausted funds of the related subsidy programs.

This report monitors the policy changes after the release of the 2013 Progress Report for Hungary and is regularly updated. In recent months, no significant change in country's RES policies has been reported.

Abbreviations

BTL	Biomass-to-Liquids
CHP	Combined heat and power plant
EEAG	Environmental and energy aid guidelines
EU-27	European Union, 27 Member States (excludes Croatia)
EU-28	European Union, 28 Member States (includes Croatia)
FiP	Feed-in premium (scheme)
FiT	Feed-in tariff (scheme)
GHG	Greenhouse gas(es)
GHG	Greenhouse gas
ktoe	Kiloton oil equivalent
MSW	Municipal solid waste
NREAP	National Renewable Energy Action Plan
PV	Photovoltaic energy
RE	Renewable energy
RED	Renewable Energy Directive
RES	Renewable energy sources
RMSW	Renewable Municipal solid waste (renewable fraction in MSW)
RQS	Renewable quota scheme
TSO	Transmission system operator

Renewable energy mix and 2020 target

According to the EurObserv'ER Bridging Report (2015) the amount of renewable energy in Hungary for the year 2013 was 1550.9 ktoe, +61.5 ktoe (+4.1%) compared to 2012. The 2012 share of renewable energy in Hungary amounted to 9.5%, and for 2013 this share amounted to 9.8%; the target for 2020 has been defined as 13%.

In this total amount, the 2013 contribution from renewable electricity amounted to 227.9 ktoe (2651 GWh), +10.1 ktoe (+4.6%) compared to 2012, for renewable heat the amount was 1156.8 ktoe, +57.1 ktoe (+5.2%) compared to 2012 and for renewable energy in transport the 2013 realisation was 166.1 ktoe, -5.6 ktoe (-3.3%) compared to 2012.

The most important technology in Hungary (2013) is heat from biomass (1039.1 ktoe). Second technology is electricity from biomass (145.8 ktoe). Third comes geothermal heat (111.7 ktoe). The growth rates range from -100.0% (for ambient heat) to 212.5% (for solar power (photovoltaics and concentration solar power)).

Table *Renewable energy production in Hungary. Data have been expressed in ktoe and refer to the years 2012 and 2013*

Hungary		2012	2013	Difference	
		ktoe	ktoe	ktoe	Growth
Renewable Electricity	Hydropower	18.2	18.3	+0.1	+0.5%
	Geothermal	0.0	0.0	0.0	0.0%
	Solar	0.7	2.1	+1.5	+212.5%
	Tidal & wave	0.0	0.0	0.0	0.0%
	Wind	66.2	61.7	-4.6	-6.9%
	Biomass	132.8	145.8	+13.1	+9.8%
	Total	217.9	227.9	+10.1	+4.6%
Renewable Heat	Geothermal	106.7	111.7	+5.0	+4.7%
	Solar	5.9	6.0	+0.1	+1.7%
	Biomass	985.1	1039.1	+54.0	+5.5%
	Ambient heat	2.0	0.0	-2.0	-100.0%
	Total	1099.7	1156.8	+57.1	+5.2%
Renewable Transport	Bioethanol/bio-ETBE	52.1	37.5	-14.6	-28.0%
	Biodiesel	103.0	105.7	+2.7	+2.6%
	Renewable hydrogen	0.0	0.0	0.0	0.0%
	Renewable electricity	16.6	22.9	+6.3	+37.7%
	Other biofuels	0.0	0.0	0.0	0.0%
	Total	171.7	166.1	-5.6	-3.3%
Total Renewable	(calculated)	1489.3	1550.9	+61.5	+4.1%

Source: EurObserv'ER 2015

Recent RES Policy Developments

The current EurObserv'ER policy profile is listing recent policy changes in the EU Member States. Starting point for this monitoring is the situation as it has been described in the country's Progress Report (which were due end of 2013). All Renewable Energy Progress Reports are available in English language from www.eurobserv-er.org (translated versions).

Date	Technology	Policy change
January 2014	General	The European Commission released the Progress Report for the Hungary in January 2014. See Section 2 (page 10) to Section 4 (page 23) for a description of policy measures and support schemes.
January 2014	All renewable electricity	New tariffs set by the Hungarian Energy and Public Utility Regulatory Authority entered into force. New tariffs for 2014 are listed In Annex A.
December 2014	Solar thermal	From 2015 onwards owners of solar panels in Hungary must pay an environmental protection tax averaging HUF 2500 (USD 10) per module due to recycling requirements.
December 2014	Nuclear electricity vs. RES elecricity	Power generation will grow. In December, Hungary formallyawarded nuclear energy contracts worth EUR6bn, mostly to the Russian energy company Atomenergoproekt, to maintain Paks' two 1,200MW reactors after completion
February 2015 – December 2015		*No policy changes to be reported*

In Hungary, electricity generated from renewable energy sources is promoted through feed-in tariffs. The feed-in tariffs are fixed and depend on the time of day. There are three different tariff rates depending on the time of day (peak time, mid-peak time, off-peak time). These time periods are defined by law, depend on the area the electricity is generated in and vary for weekdays and weekends/holidays as well as for summer and winter time. New tariffs for 2014 are listed In Annex A.

Note to the reader: the above overview has been compiled with care. However, in case you miss recent developments please be invited to inform EurObserv'ER on policy changes in a Member State. For communication use e-mail (policy@eurobserv-er.org) or Twitter (https://twitter.com/eurobserv_er).

Glossary

Auctions for granting renewable energy support	An auction is a process, organised by a governmental renewable energy implementation agency, of granting production or investment support to a specified volume of eligible renewable energy (or renewable energy generation capacity) based on the lowest bids per unit of renewable energy (or renewable energy generation capacity) by eligible renewable project developers.
Degression rate	See under 'Sliding feed-in tariff'
Feed-in tariff (FiT)	A technology-specific support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers, typically for a period of 10-20 years. The FiT level is set *ex ante* by the National Regulatory Agency (NRA). It is to cover all future production costs including a *normal* rate of return to capital invested. In many schemes priority network access is offered to eligible renewable electricity generators, whilst a designated third party - e.g. the transmission or distribution network operator concerned - is being mandated to pay the FiT remuneration due. A proper, periodic review of FiT rates is often undertaken with the aim to prevent both too high FiTs so as to minimise regulatory rents, i.e. supra-normal returns and too low FiTs to preclude below-target market uptake because of FiT levels that are perceived by market participants to be less attractive.
Feed-in premium (FiP)	A technology-specific support scheme which provides for a technology-specific subsidy level per unit of renewable energy to eligible renewable energy producers, typically for a period of 10-20 years, at a pre-set fixed or floating (see under 'Floating FiP') rate, projected by the National Regulatory Agency (NRA) to enable renewable energy generation investments deemed commercially attractive by project developers without yielding supra-normal profits.
Floating FiP	A feed-in premium, which is periodically adjusted to exactly offset the change in the average energy wholesale market price, based on a pre-specified benchmark market price. A floating FiP may move freely or may only be allowed to move within a pre-set interval.
Grants	Grants are non-repayable funds disbursed by one party (grant makers), often a government department, corporation, foundation or trust, to a recipient, often (but not always) a non-profit entity, educational institution, business or an individual. (Source: Wikipedia.org)
Green public procurement	In Green public procurement contracting authorities take environmental issues into account when tendering for goods or services. The goal is to reduce the impact of the procurement on human health and the environment. (Source: Wikipedia.org)

NRA	National Regulatory Agency
Renewable quota scheme (RQS)	A renewable quota scheme mandates certain market actors (typically retail suppliers or large energy end-users) to respect a pre-set minimum share or amount of their total energy procurements from renewable sources of energy. Typically a tradable green certificate (TGC) scheme is operated to enable the obligated parties to prove their compliance with the prevailing renewable quota target by means of TGCs. Typically the renewable quota target is increased gradually over time. Renewable quota systems are also known under terms such as quota (obligation) schemes or renewable portfolio standards.
Request for tenders (RFT)	A request for tenders (RFT) is a formal, structured invitation to suppliers, to bid, to supply products or services. In the public sector an official fee is needed to fortify and secure the tender bid engagement/win documents, such a process may be required and determined in detail by law to ensure that such competition for the use of public is open, fair and free from bribery and nepotism. For example, a government may put a certain level of MW of offshore wind energy at a pre-defined location 'out to tender'; that is, publish an invitation for other parties to make a proposal for the construction of offshore wind farms, on the understanding that any competition for the relevant government contract must be conducted in response to the tender, no parties having the unfair advantage of separate, prior, closed-door negotiations for the contract. An evaluation team will go through the tenders and decide who will get the contract. (source: adapted from Wikipedia.org)
RD&D funding	The funding of research, development and demonstration activities and programmes. For technologies far remote from commercial maturity, government grants or subsidies might be considered. For technologies close to commercial maturity which are not taken up for commercial research any way, instruments such as fiscal instruments (tax credits, accelerated depreciation, etc.) and public-private partnerships may be considered, based on shared public and private RD&D funding.
Sliding feed-in-tariff	A FiT scheme which pre-sets technology-specific declining feed-in tariffs for certain prospective vintages in line with the technology-specific learning curve, as projected by the National Regulatory Agency (NRA). Often a degression rate is used indicating the %/annum decrease in the rate level.
Soft loans	Loans at concessional (below market-based) terms, for example at sub-market-conform interest rates, made available in several Member States to stimulate certain renewable energy technologies.
Tax credits	These are amounts a tax paying entity is allowed to deduct when declaring payable taxes, for example company tax or income tax, to the tax authorities , for example the producer tax credits (PTCs) used in the United States to stimulate among others wind energy deployment.
Tenders	See ‘Request for tenders’

References

EurObserv'ER, 2014, www.eurobserv-er.org

http://www.res-legal.eu/search-by-country/hungary/

http://epp.eurostat.ec.europa.eu

http://ec.europa.eu/energy/renewables/reports/2013_en.htm

Annex A

Wind energy	**Plants approved after 01/01/2008:**
	• Plants below 20 MW:
	  ○ peak time: HUF 36.30 per kWh (approx. € 0.12)
	  ○ mid-peak time: HUF 32.49 per kWh (approx. € 0.10)
	  ○ off-peak time: HUF 13.26 per kWh (approx. € 0.04)
	Plants approved after 30/11/2008:
	• Plants between 20 and 50 MW:
	  ○ peak time: HUF 36.30 per kWh (approx. € 0.12)
	  ○ mid-peak time: HUF 32.49 per kWh (approx. € 0.10)
	  ○ off-peak time: HUF 13.26 per kWh (approx. € 0.04)
	According to the Energy Office, no new wind power plants have been approved since 2006. Thus, this tariff has not yet been applied. **Plants of more than 50 MW (the date of approval irrelevant):**
	• peak time: HUF 22.58 per kWh (approx. € 0.07)
	• mid-peak time: HUF 14.45 per kWh (approx. € 0.05)
	• off-peak time: HUF 14.45 per kWh (approx. € 0.05)

Solar energy	**Plants approved after 01/01/2008 and of 20 MW or less:** HUF 32.49 per kWh (approx. € 0.10); No difference between peak and off-peak hours. **Plants of more than 50 MW (date of approval irrelevant):** • peak time: HUF 22.58 per kWh (approx. € 0.07) • mid-peak time: HUF 14.45 per kWh (approx. € 0.05) • off-peak time: HUF 14.45 per kWh (approx. € 0.05)

Geothermal energy	**Plants approved after 01/01/2008:**
	• Plants below 20 MW:
	  ○ peak time: HUF 36.30 per kWh (approx. € 0.12)
	  ○ mid-peak time: HUF 32.49 kWh (approx. € 0.10)
	  ○ off-peak time: HUF 13.26 per kWh (approx. € 0.04)
	• Plants between 20 and 50 MW:
	  ○ peak time: HUF 29.04 per kWh (approx. € 0.09)
	  ○ mid-peak time: HUF 25.99 per kWh (approx. € 0.08)
	  ○ off-peak time: HUF 10.60 per kWh (approx. € 0.03)
	Plants of more than 50 MW (date of approval irrelevant):
	• peak time: HUF 22.58 per kWh (approx. € 0.07)
	• mid-peak time: HUF 14.45 per kWh (approx. € 0.05)
	• off-peak time: HUF 14.45 per kWh (approx. € 0.05)

Biogas	**Plants approved after 01/01/2008:**
	• Plants below 20 MW:
	  ○ peak time: HUF 36.30 per kWh (approx. € 0.12)
	  ○ mid-peak time: HUF 32.49 kWh (approx. € 0.10)
	  ○ off-peak time: HUF 13.26 per kWh (approx. € 0.04)
	• Plants between 20 and 50 MW:
	  ○ peak time: HUF 29.04 per kWh (approx. € 0.09)
	  ○ mid-peak time: HUF 25.99 per kWh (approx. € 0.08)
	  ○ off-peak time: HUF 10.60.per kWh (approx. € 0.03)
	Plants of more than 50 MW (date of approval irrelevant):
	• peak time: HUF 22.58 per kWh (approx. € 0.07)
	• mid-peak time: HUF 14.45 per kWh (approx. € 0.05)
	• off-peak time: HUF 14.45 per kWh (approx. € 0.05)

Hydro-power	**Plants approved after 01/01/2008:**
	• Plants below 5 MW:
	  ○ peak time: HUF 36.30 per kWh (approx. € 0.12)
	  ○ mid-peak time: HUF 32.49 per kWh (approx. € 0.10)
	  ○ off-peak time: HUF 13.26 per kWh (approx. € 0.04)
	Plants of more than 5 MW (date of approval irrelevant):
	• peak time: HUF 22.58 per kWh (approx. € 0.07)
	• mid-peak time: HUF 14.45 per kWh (approx. € 0.05)
	• off-peak time: HUF 14.45 per kWh (approx. € 0.05)

Biomass	**Plants approved after 01/01/2008:**
	• Plants below 20 MW:
	  ○ peak time: HUF 36.30 per kWh (approx. € 0.12)
	  ○ mid-peak time: HUF 32.49 kWh (approx. € 0.10)
	  ○ off-peak time: HUF 13.36 per kWh (approx. € 0.04)
	• Plants between 20 and 50 MW:
	  ○ peak time: HUF 29.04 per kWh (approx. € 0.09)
	  ○ mid-peak time: HUF 25.99 per kWh (approx. € 0.08)
	  ○ off-peak time: HUF 10.60.per kWh (approx. € 0.03)
	Plants of more than 50 MW (date of approval irrelevant):
	• peak time: HUF 22.58 per kWh (approx. € 0.07)
	• mid-peak time: HUF 14.45 per kWh (approx. € 0.05)
	• off-peak time: HUF 14.45 per kWh (approx. € 0.05)

Annex B

EurObserv'ER Barometers published are all available for download. Direct links to all EurObserv'ER publications:

'*The State of Renewable Energies in Europe*' (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-annual-overview-barometers

Wind Energy Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-wind-energy-barometers

Photovoltaic Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-photovoltaic-barometers

Solar Thermal Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-solar-thermal-and-concentrated-solar-power-barometers

Biofuels Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-biofuels-barometers

Biogas Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-biogas-barometers

Renewable Municipal Waste Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-renewable-municipal-waste-barometers

Solid Biomass Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-solid-biomass-barometers

Heat Pump Barometer (PDF, multiple languages)
http://www.eurobserv-er.org/category/all-heat-pumps-barometers