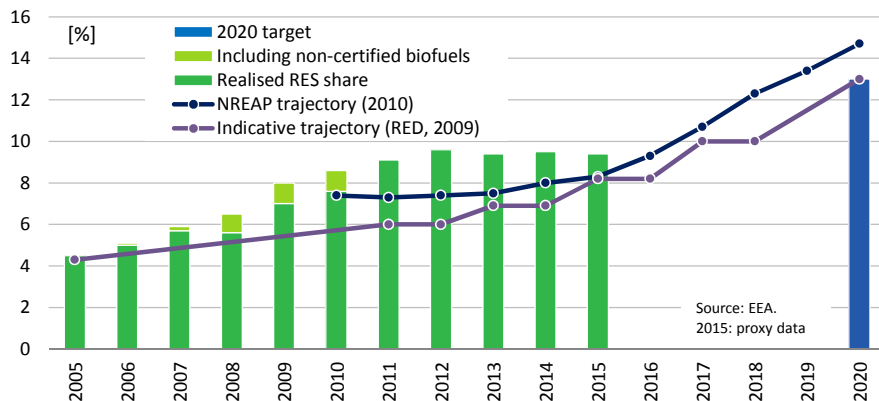


Summary

In Hungary, electricity from renewable energy sources is supported by a feed-in-tariff or a market ('green') premium, depending on the capacity and energy source. Household-sized power plants up to 50 kVA can benefit from net metering. In general, subsidy programmes also promote the use of renewable energy sources in the electricity and heating sector. The main support scheme for the use of renewable energy in the transportation sector is a quota system supplemented by a reimbursement of excise duty.

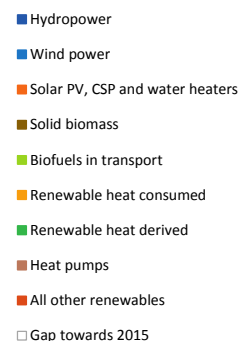
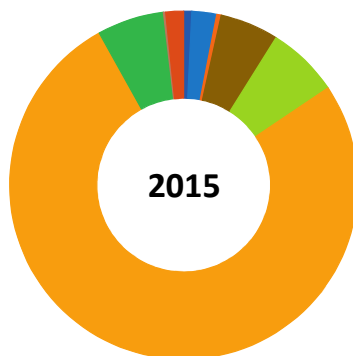
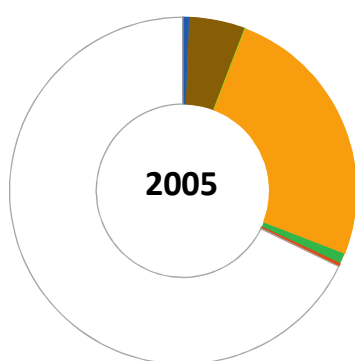


Abbreviations used:

RES: renewable energy sources
 RES-E: renewable electricity
 RES-H/C: renewable heating/cooling
 RES-T: renewable transport fuels

Data for 2015

Overall RES share:	14.5%	Avoided fossil fuels:	2.2 [Mtoe]
Overall RES 2020 target:	13.0%	Avoided fuel expenses:	0.7 [billion euro]
Share RES-E in electricity:	7.3%	RES Turnover:	830 [MEUR]
Share RES-T in transport:	6.2%	RES Employment:	7550 [jobs]
Share RES-H/C in heating:	21.3%		



Source: Eurostat, 2017.

	2005	2015		
	Energy	Energy	Employment	Turnover
Hydropower	15.9 ktoe	19.8 ktoe	100 Jobs	5 MEUR
Wind power	1.1 ktoe	60.3 ktoe	100 Jobs	15 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	10.5 ktoe	1050 Jobs	100 MEUR
Solid biomass	135.3 ktoe	142.8 ktoe	4250 Jobs	410 MEUR
Biofuels in transport	2.6 ktoe	174.0 ktoe	650 Jobs	200 MEUR
Renewable heat consumed	654.5 ktoe	1998.5 ktoe		
Renewable heat derived	25.7 ktoe	162.7 ktoe		
Heat pumps	0.0 ktoe	5.2 ktoe	100 Jobs	5 MEUR
All other renewables	7.2 ktoe	43.0 ktoe	1400 Jobs	100 MEUR
Gap towards 2015	1774.5 ktoe			

Source: Eurostat, EurObserv'ER, 2017.

Hydropower jobs & turnover only covers 'small hydropower'. PV=Photovoltaics, CSP=Concentrated Solar Power. Biofuels in transport only covers compliant fuels (employment and turnover additionally cover the non-compliant biofuels). Derived heat includes heat produced in main activity producer plants and heat sold produced in autoproducer plants. Its counterpart is the final heat consumption in the final consumption sectors (such as households).



CURRENT RENEWABLE ENERGY POLICY

The support system for electricity from renewable sources has been modified in mid-2016 and has been partially replaced by the new Renewable Energy Support Scheme (METÁR) which came into force on January 1st 2017. The system comprises three sub-systems, determined by the plant's capacity, namely a feed-in tariff (which remains unchanged), a 'green premium' without tendering and a 'green premium' granted through tendering procedures. Furthermore, a so-called 'brown premium' has been introduced addressing solid biomass and biogas plants which serves as a technology-specific successive rate to the feed-in tariff. Priority has been given to grid connection and access to electricity generated from renewable energy.

Support for the use of renewable energy sources for generating heat is currently provided by subsidy programmes under the Environmental and Energy Efficiency Operative Programme (EEEOP) and other operative programmes financed through European Union funds in conjunction with funds provided by the Hungarian government. Furthermore, favourable loans are granted within the Economic Development Innovation Operative Programme (EDIOP).

The main support mechanisms for the promotion of renewable energy sources in the transport sector are a quota system, a tax regulation mechanism and investment subsidies provided by certain programmes.

OVERVIEW OF MAIN SUPPORTING POLICIES

Policies and measures promoting the use of renewables for producing electricity:

- The feed-in tariff system remains unchanged for installations between 50 kW-500 kW which are not subject to tendering procedures. The transmission system operator (TSO) MAVIR Ltd. is legally obliged to purchase electricity from renewable sources, to sell it at the electricity stock market and pay a guaranteed price to plant operators.
- The Green Premium is granted for renewable electricity producing plants between 0.5 MW-1 MW. Those plants are not subject to tendering procedures. The tariff is set out by a Government Decree which is determined through a market reference price and an 'administrative premium'.
- Plants with a capacity higher than 1 MW and wind power plants are subject to obligatory tendering procedures.
- In certain cases, feed-in tariffs can be combined with the favourable loans or investment grants within the subsidy programmes.
- Household-sized power plants with a capacity of maximum 50 kVA may benefit from net metering. The electricity surplus injected to the grid is remunerated by the electricity supplier with the electricity retail price.

Policies and measures promoting the use of renewables for producing final heating and cooling energy:

- There is a recommendation in place for considering the use of renewable energy sources in new buildings. This recommendation will turn into an obligation for all buildings ready to move in after 31 December 2020 according to standards set by the Government.
- There is a programme in place on the exemplary role of central government agencies and applies to projects which aim at increasing the energy efficiency of public buildings and which foster the use of renewable energy sources.

Policies and measures promoting the use of renewable energy sources in the transport sector:

- A biofuels quota scheme obliges fuel retailers to ensure that biofuels and hydrogen make up a certain percentage of their annual fuel sales.
- A tax reimbursement applies to certain biofuels in case of engine development projects and vehicles used in the mining industry and in water management. The amount of biofuels used in these cases cannot be taken into account for quota fulfilment.
- Certain subsidy programmes like the Territory and Settlement Development Operational Programme (TOP) and the Competitive Central Hungary Operational Programme (CCHOP) allocate funds from the European Union as well as state funds, targeting the greening of the transport sector.

More details are provided in Table 1 and Table 2 below.

Table 1: Overview of support schemes to promote renewable energy in Hungary

REGULATORY POLICIES						FISCAL INCENTIVE AND PUBLIC FINANCES			
	Feed-in tariff / Feed-in premium	Tendering	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates	Net-metering/ net-billing	Capital subsidy, grants	Tax regulation mechanism		Soft Loans
RES-E									
- Offshore wind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Onshore wind	<input type="checkbox"/>	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Solar	x	x	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Hydro	x	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Geothermal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Solid biomass	x	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Biogas	x	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RES-H/C									
- Solar thermal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x
- Geothermal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x
- Biomass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x
- Biogas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x
- Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Others, i.e. aerothermal, hydrothermal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RES-T									
- Bio gasoline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>	x	x	<input type="checkbox"/>	<input type="checkbox"/>
- Biodiesel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>	x	x	<input type="checkbox"/>	<input type="checkbox"/>

Sources: EurObserv'ER, GSR/REN21, RES-Legal Europe (2017)

Table 2: Brief description of key policy instruments aimed at promoting RES in Hungary

<i>Instrument</i>	<i>Description</i>
Feed-in tariff	For installations between 50 kW-500 kW which are not subject to tendering procedures. The transmission system operator (TSO) MAVIR Ltd. is legally obliged to purchase electricity from renewable sources, to sell it at the electricity stock market and pay a guaranteed price to plant operators.
Green premium without tendering	Is granted for renewable electricity producing plants between 0.5 MW-1 MW. Those plants are not subject to tendering procedures. The tariff is set out by a Government Decree which is determined through a market reference price and an 'administrative premium'.
Green premium with tendering	Plants with a capacity higher than 1 MW and wind power plants are subject to obligatory tendering procedures.
Net metering	Household-sized power plants with a capacity of maximum 50 kVA may benefit from net metering. The electricity surplus injected to the grid is remunerated by the electricity supplier with the electricity retail price.
Subsidy programmes promoting renewable heat	currently provided by subsidy programmes under the Environmental and Energy Efficiency Operative Programme (EEEOP) and other operative programmes financed through European Union funds in conjunction with funds provided by the Hungarian government.
Soft loans	Are granted within the Economic Development Innovation Operative Programme (EDIOP) to support the use of renewable energy sources for generating heat.
Biofuels quota scheme	Obliges fuel retailers to ensure that biofuels and hydrogen make up a certain percentage of their annual fuel sales.
Tax regulation mechanism	A tax reimbursement applies to certain biofuels in case of engine development projects and vehicles used in the mining industry and in water management.
Investment subsidies	Provided by certain programmes to promote renewable energy sources in the transport sector

For further information:

EEA 2017: Progress of renewable energy sources, European Environmental Agency (EEA), <https://www.eea.europa.eu/data-and-maps> (European Union), last accessed June 2017.

EurObservER Annual Overview 2016, <https://www.eurobserv-er.org/category/all-annual-overview-barometers>

Eurostat, 2017. Energy from renewable sources. http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_from_renewable_sources

Global Status Report by REN21

http://www.ren21.net/wp-content/uploads/2016/10/REN21_GSR2016_FullReport_en_11.pdf

Member State Progress Report, available at the Renewable Energy pages of the European Commission, <http://ec.europa.eu/energy/en/topics/renewable-energy>

RES Legal database, <http://www.res-legal.eu/search-by-country/netherlands/>

What is meant by ...?

Auctions for granting renewable energy support	An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers.
Feed-in tariff (FiT)	A support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers. 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. In addition, feed-in tariffs often include "tariff degression", a mechanism according to which the price (or tariff) ratchets down over time.
Feed-in premium (FiP)	A scheme which provides for a support 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 rate. The premium is typically adjusted periodically to exactly offset 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)
Renewable quota scheme (RQS)	A RQS 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.
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.



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Disclaimer

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