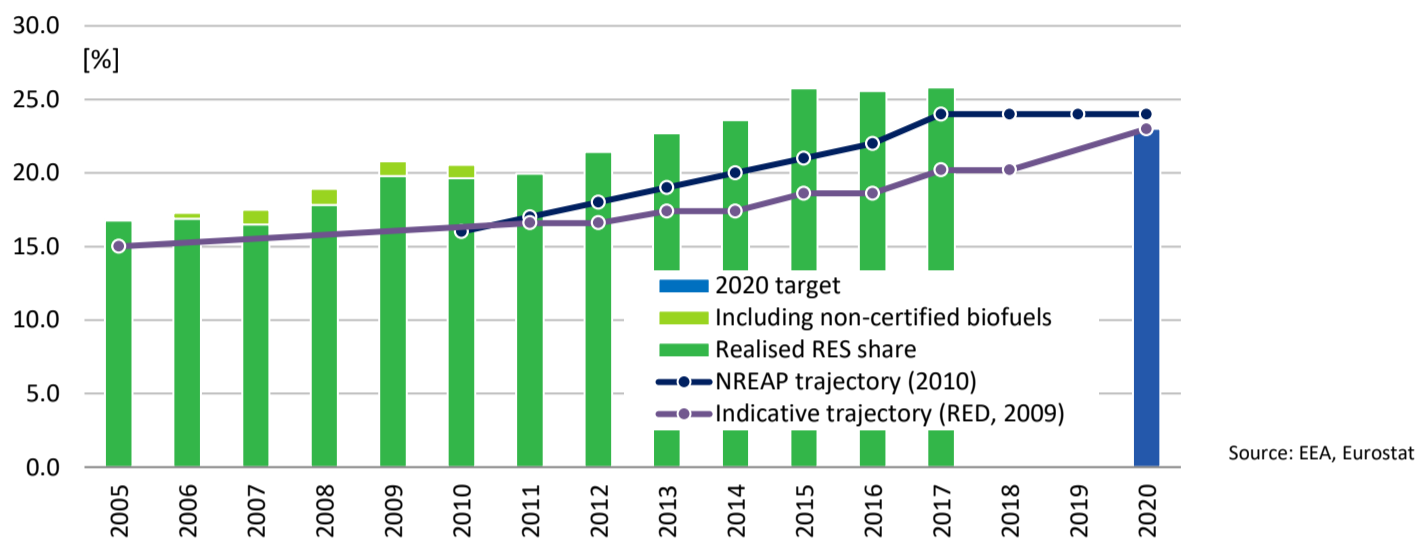


Summary

The main support scheme to stimulate electricity from renewable energy sources is a floating feed-in premium. RES-E project developers with installations > 10 kW have to acquire access to the floating feed-in premium scheme by submitting successful bids in tenders. Currently, Lithuania having already depleted pre-set caps for premium support to new installations up to 2020, for the time being tenders are put on hold. Any upcoming tender is set to offer a fixed premium on a technology-neutral basis. Subsidies and loans can be applied for by RES-E project developers. Renewable electricity generation plants are exempted from excise duty. Producers of solar, wind, and biomass power benefit from net metering. Producers of heating and cooling from renewable energy sources are exempt from environmental pollution tax and are eligible for loans and grants from the Lithuanian Environmental Investment Fund (LEIF) under the Climate Change Special Programme. Moreover, heat suppliers are obliged to procure only heat produced from renewable energy sources. Biogas that is injected into the natural gas system is eligible for feed-in tariffs set by the National Commission for Energy Control and Prices (NCC). Biogenic transport fuels are promoted through reimbursement of raw materials for biofuel production, a biofuels quota (blending) scheme as well as exemption from excise tax and environmental pollution tax.



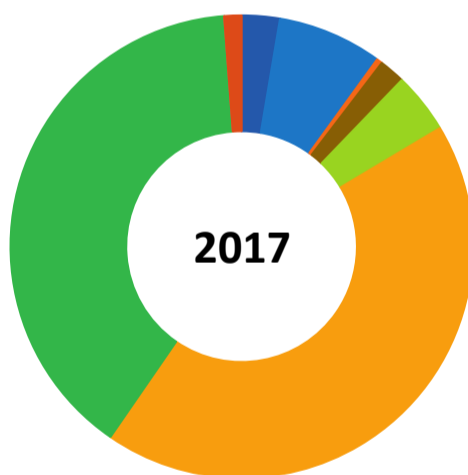
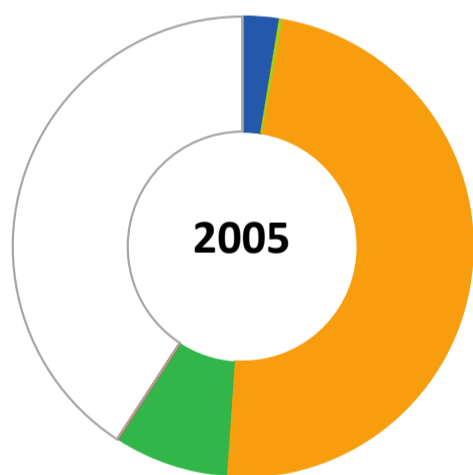
Source: EEA, Eurostat

Abbreviations used:

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

Data for 2017

Overall RES share:	25.8%	Avoided fossil fuels:	1.8 [Mtoe]
Overall RES 2020 target:	23.0%	Avoided fuel expenses:	0.5 [billion euro]
Share RES-E in electricity:	18.3%	RES Turnover:	530 [MEUR]
Share RES-T in transport:	3.7%	RES Employment:	10700 [jobs]
Share RES-H/C in heating:	46.5%		



- Hydropower
- Wind power
- Solar PV, CSP and water heaters
- Solid biomass
- Biofuels in transport
- Renewable heat consumed
- Renewable heat derived
- Heat pumps
- All other renewables
- Gap towards 2017

Source: Eurostat, 2019.

	2005		2017		
	Energy		Energy	Employment	Turnover
Hydropower	36.9 ktoe		38.4 ktoe	700 Jobs	30 MEUR
Wind power	0.2 ktoe		105.3 ktoe	500 Jobs	30 MEUR
Solar PV, CSP and water heaters	0.0 ktoe		5.8 ktoe	200 Jobs	20 MEUR
Solid biomass	0.2 ktoe		26.1 ktoe	3600 Jobs	240 MEUR
Biofuels in transport	3.3 ktoe		61.0 ktoe	4500 Jobs	150 MEUR
Renewable heat consumed	694.8 ktoe		621.5 ktoe		
Renewable heat derived	116.3 ktoe		564.1 ktoe		
Heat pumps	0.0 ktoe		0.0 ktoe	300 Jobs	10 MEUR
All other renewables	0.3 ktoe		17.2 ktoe		
Gap towards 2017	587.3 ktoe				

Source: Eurostat, EurObserv'ER, 2019.

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

Electricity from renewable sources is promoted mainly through a floating feed-in premium. RES-E plants with a capacity ≤ 10 kW are entitled to a pre-set technology-specific feed-in tariff for 50% of their electricity production. Geothermal RES-E installations are non-eligible. RES-E plants with the installed capacity > 10 kW can only acquire a floating feed-in premium through tenders. The contractual support reference price (“the guaranteed price”) is determined by the tender outcomes on a pay-as-bid basis, subject to technology-specific maximum levels. The premium level is determined by subtracting the electricity sales price from the contractual support reference price or last month’s average wholesale electricity price, whichever electricity price is higher. For the time being tenders have been put on hold as Lithuania has depleted pre-set caps for premium support to new installations up to 2020. Any upcoming tenders are set to offer a fixed premium, payable over a 12-year period on a technology-neutral basis. The first such tender with 0.3 TWh on offer is due in July 2019. Furthermore, the producers of renewable electricity may apply for subsidies and loans from the Lithuanian Environmental Investment Fund (LEIF, investment subsidies only) and the Climate Change Special Programme (both loans and subsidies). All operators of RES-E installations are exempt from excise duty. For solar, wind and biomass power installations operated by individuals (≤ 10 kW) and legal persons (≤ 100 kW) net-metering is in place. For the self-generated and consumed amount of electricity prosumers are exempt from paying a Public Service Obligation (PSO) levy. However, they have to pay a fee for the use of electricity grid, set by the National Commission for Energy Control and Prices (NCC). Renewable electricity is exempt from excise duty.

Renewable heat is fostered by a series of instruments. Heat suppliers are obliged to source their heat deliveries from renewable heat producers to the maximum extent possible, provided environmental and quality requirements are met. Gas system operators are obliged to purchase biogas offered to them, which meets set environmental and quality requirements, at pre-set administrative feed-in tariffs. Project developers of renewable heat production installations can file applications for investment and subsidy support at Climate Change Special Programme. Consumers of heat from solid and liquid biomass or biogas are eligible to exemption from an Environmental Pollution Tax.

For the stimulation of *renewable transport fuels* several instruments are in place. Part of the procurement costs of agricultural raw materials for the production of dehydrated ethanol is reimbursed by an agency established by the Ministry of Agriculture. A biofuels (blending) quota scheme is in place prescribing minimum quota of biofuels blended in all gasoline and automotive diesel sold. Excise duty is due on transport fuels. As for biofuels the excise duty is reduced in proportion to the percentage of biomass per tonne of biofuel. The excise reduction is applicable to bioethanol, biodiesel, bio-ETBE and vegetable oil but not to bio-hydrogen. The purchase of battery electric vehicles (BEVs) is stimulated by a package of measures, including:

- Reduced registration tax
- Local incentives include reduced parking fees and permission to use bus lane in Vilnius.

OVERVIEW OF MAIN SUPPORTING POLICIES

The main RES support measures applied in Lithuania are epitomized in Table 1 below. See the previous section and the notes to Table 1 for more details.

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

	NON-FISCAL SUPPORT SCHEMES						FISCAL AND OTHER STATE FUNDED INCENTIVES			
	Feed-in tariffs	Feed-in premium	Tenders	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates 3)	Net-metering/ net-billing	Investment subsidies 1)	Tax credits mechanism I 2)	Tax credits mechanism II 4)	Soft loans 5)
RES-E										
- Offshore wind		x	X				x			x
- Onshore wind	x	x	X				x			x
- Solar	x	x	X			x	x			x
- Hydro	x	x	X				x			x
- Geothermal		x	X				x			x
- Solid biomass	x	x	X				x			x
- Biogas	x	x	X				x			x
RES-H/C										
- Solar thermal							x	x		
- Geothermal							x	x		
- Biomass					x		x	x		
- Biogas					x		x	x		
- Small scale installations, e.g. solar thermal collectors, heat pumps, biomass boilers and pellet stoves							x	x		
- Others, i.e. aerothermal, hydrothermal							x	x		
RES-T										
- Bio gasoline					x				x	
- Biodiesel					x				x	

1) Granted by Climate Change Special Programme or Lithuanian Environmental Investment Fund (LEIF). Geothermal projects are not eligible for an investment subsidy by LEIF.

2) RES-E producers are exempt from excise duty.

3) Heat suppliers are obliged to source all their heat deliveries from renewable heat producers. Gas system operators are obliged to purchase biogas offered to them at pre-set administered prices. A biofuels (blending) quota scheme is in place prescribing minimum quota of biofuels blended in all gasoline and automotive diesel sold.

4) Except for bio-hydrogen, for biofuels the excise duty is reduced in proportion to the percentage of biomass per tonne of biofuel. All consumers using biofuels in vehicles are exempted from environmental pollution tax.

5) Granted by the Climate Change Special Programme.

Sources: RES Legal 2019, EurObserv'ER

Table 2: Overview of main instruments used at present in Lithuania

Instrument	Description
Feed-in premiums	Guaranteed premium on top of the revenues from electricity sold, during the support contract period. The level is determined (pay-as-bid) by way of tenders.
Investment subsidies	Granted upon successful application by Lithuanian Environmental Investment Fund (LEIF) or Climate Change Special Programme (the latter for RES-E projects only)
Tax credits	RES-E producers are exempt from excise duty. Except for bio-hydrogen, for biofuels the excise duty is reduced in proportion to the percentage of biomass per tonne of biofuel.
Tax credits	Consumers of heat from biomass or biogas are eligible for exemption from an Environmental Pollution Tax. All consumers using biofuels in vehicles are exempted from environmental pollution tax.
Quota schemes	Heat suppliers are obliged to source all their heat deliveries from renewable heat producers. Gas system operators are obliged to purchase biogas offered to them at pre-set administered prices. Importers/suppliers of transport fuels are subject to a renewable quota scheme for biofuels. Compliance based on sample testing rather than certificates-based.
Net metering	Solar power producers using all or part of the electricity produced for their own needs are totally or partly exempt from paying Public Service Obligation on this electricity.

For further information:

CEER, 2017. Status Review of Renewable Support Schemes in Europe.

http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/Electricity/2017/C16-SDE-56-03%20Status%20Review%20RES%20Support%20Schemes.pdf

EEA, 2017 <http://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-2>

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

REN21, Global Status Report 2017 http://www.ren21.net/wp-content/uploads/2017/06/170607_GSR_2017_Full_Report.pdf

IEA/IRENA Joint Policies and Measures database

<https://www.iea.org/policiesandmeasures/renewableenergy/?country=Lithuania>

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/lithuania/>

https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-lithuania_en.pdf

(European Commission/ DG ENER, Energy Union Factsheet Lithuania, November 2017)

European Alternative Fuels Observatory, <http://www.eafo.eu/content/lithuania> ;

<http://www.eafo.eu/eu>

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 depression", 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 depression 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.

Disclaimer

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