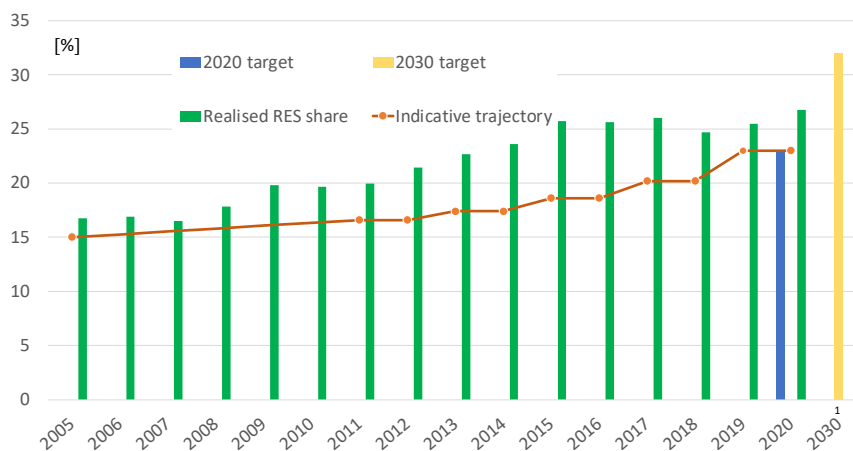


Lithuania

Renewable energy status

Share of energy from renewable sources in total gross final energy consumption



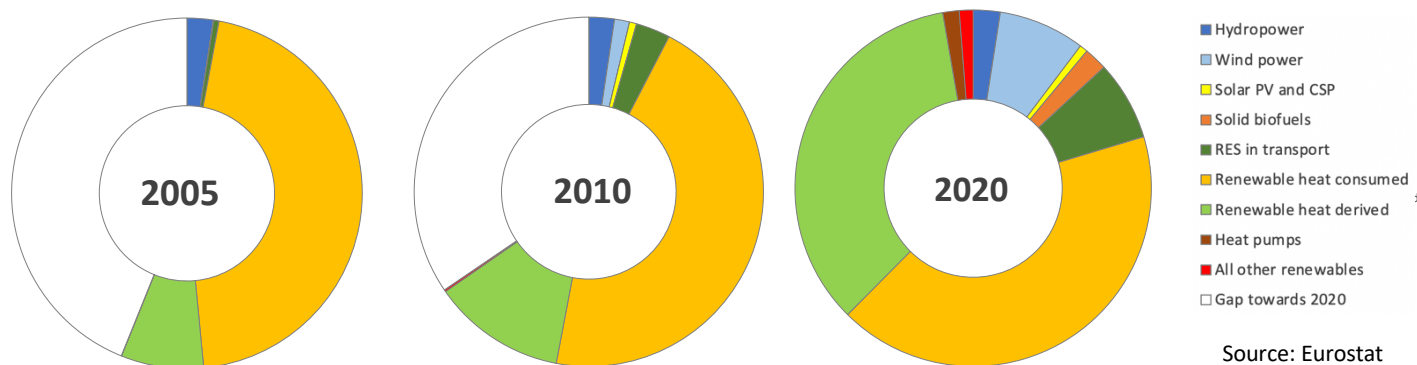
Source: Eurostat

Abbreviations used:

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

Data for 2020

Overall RES share:	26.77%	Avoided fossil fuels:	0.6 [Mtoe]
Overall RES 2020 target:	23.0%	Avoided fuel expenses:	144 [MEUR]
Overall RES 2030 target:	32.0%	RES Turnover:	950 [MEUR]
Share RES-E in electricity:	20.17%	RES Employment:	22 000 [jobs]
Share RES-T in transport:	5.51%	RES imports ² :	110 [MEUR]
Share RES-H/C in heating:	50.35%	RES exports ² :	45 [MEUR]



Source: Eurostat

	2005		2010		2020		
	Energy in ktoe		Energy in ktoe		Energy in ktoe	Employment in FTE	Turnover in MEUR
Hydropower	36.9		36.1		37.4	300	10
Wind power	0.2		21.2		119.7	600	40
Solar PV, and CSP	0.0		0.0		11.1	900	40
Solid biomass	0.3		10.0		32.1	9 800	350
Ren. energy in transport ³	7.5		48.8		110.2	4 800	240
Renew. heat consumed	694.8		692.6		642.4		
Renew. heat derived	116.3		188.2		531.4		
Heat pumps	0.0		0.0		22.7	5 500	240
All other renewables	0.3		2.7		19.0	400	30
Gap towards 2020	669.7		526.4				

Source: Eurostat, EurObserv'ER

FTE = Full time equivalent, 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 auto-producer plants. Its counterpart is the final heat consumption in the final consumption sectors (such as households).

¹ From Integrated National Energy Climate Plan

² Referring to the International Trade chapter from the publication: EurObserv'ER - *The State of Renewable Energy in Europe, 2021 edition*

³ Employment and turnover are only referring to biofuels in transport.



CURRENT RENEWABLE ENERGY POLICY

RES-E

Among the total budget of Lithuania's national Resilience and Recovery Plan, EUR 1.5 billion will be spent to upgrade the country's power grid for renewables including installing batteries to balance power peaks. The Sustainable Electricity measure of the Green Transformation as part of the National Resilience and Recovery Plan is meant to promote production, transmission, and use of electricity consumption using the most cost effective technologies, improving institutional mechanisms, and providing incentives for businesses and citizens to invest. Lithuania will implement 242.39 million EUR from EU funding, 157.44 million from private entities and 55.716 million EUR from its national budget. Planned investments include onshore solar and wind power plants, a solar power park, and storage facilities. Lithuania promotes the activities of electricity self-consumers from renewable energy sources who now will be able to receive the support for the installations up to 10 kW. In September of 2019 the new technology neutral support scheme for electricity production from RES has been launched.

RES H&C

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. The Climate Change program under the Environmental Project Management Agency supports household renovation projects, energy efficiency measures and funds renewable energy installations in the older buildings.

RES-T

In the RES-T sector, Lithuania offers a variety of incentives and legislations to promote the uptake of alternative fuels vehicles and infrastructure:

- Registration tax benefits: CO2 based tax (electric vehicles and vehicles whose emissions do not exceed 130 g/km CO2 are exempted from the paying motor vehicle registration tax)
- Company tax benefits: Purchase incentives (bonus) for vehicles ≤ six months (between 4,000 and 10,000 EUR, additional 1,000 EUR for scrapping an old diesel or petrol M1, owned for at least 12 months, with a valid MOT)
- Purchase subsidies: Purchase incentives for individuals in 2021 (between 2,500 and 5,000 EUR)
- BEV free parking in Vilnius and free parking of BEV and PHEV with special EV registration numbers in other cities (Kaunas, Klaipėda, Panevėžys, Šiauliai, Neringa)
- Bus lanes for EV (BEV+PHEV) in Vilnius

Table 1: Brief description of key policy instruments aimed at promoting RES in Lithuania

<i>Instrument</i>	<i>Description</i>
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.
Renewable Electricity Auctions	<p>Electricity production from renewable energy sources is considered as public interest service. Lithuania seeks to increase the renewable electricity production share up to 45% by 2030 and to produce at least 5 TWh of renewable electricity by the year 2025. In order to develop the renewable electricity generation capacities in a sustainable and balanced way, the state aid is provided under the rules and recommendations of the European Union. The support model is based on the principles of transparency and affordability, which are laid out in the National energy independence strategy. Also the support scheme is based on the market model, meaning, that the electricity producers will be directly affected by the market changes. The support will be allocated through the competitive bidding procedures (technology neutral auctions), priority will be given for the economically most efficient technologies available on the market. The support will be paid for the producers in a form of market premium added to the day-ahead electricity market price.</p> <p>Website: https://enmin.lrv.lt/en/sectoral-policy/renewable-energy-sources/auctions</p>
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:

European Commission: European Alternative Fuels Observatory: Lithuania; Incentives and Legislation, <https://alternative-fuels-observatory.ec.europa.eu/transport-mode/road/lithuania/incentives-legislations>, last accessed June 2022

International Energy Agency (IEA): Country Dossier Lithuania, <https://www.iea.org/countries/lithuania>

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

Ministry of Energy of the Republic of Lithuania: Overview of sectoral policies, <https://enmin.lrv.lt/en/sectoral-policy>, last accessed June 2022

National Energy and Climate Plans (NECPs), <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/governance-energy-union/national-energy-climate-plans>

REN 21 (2022): Renewables Global Status Report 2022, <https://www.ren21.net/gsr-2022/>, last accessed June 2022

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.



Disclaimer

This document was prepared by the EurObserv'ER consortium, which groups together Observ'ER (FR), TNO (NL), RENAC (DE), VITO (BE) and Fraunhofer ISI (DE). This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.