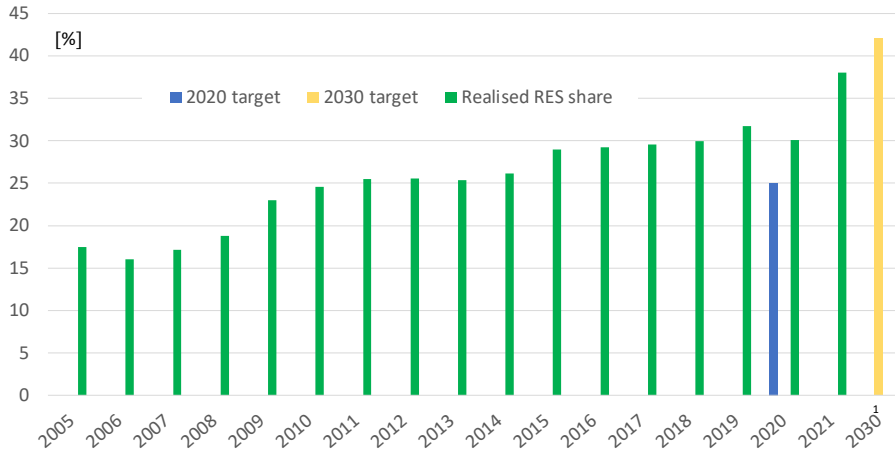


## Estonia

### Renewable energy status

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



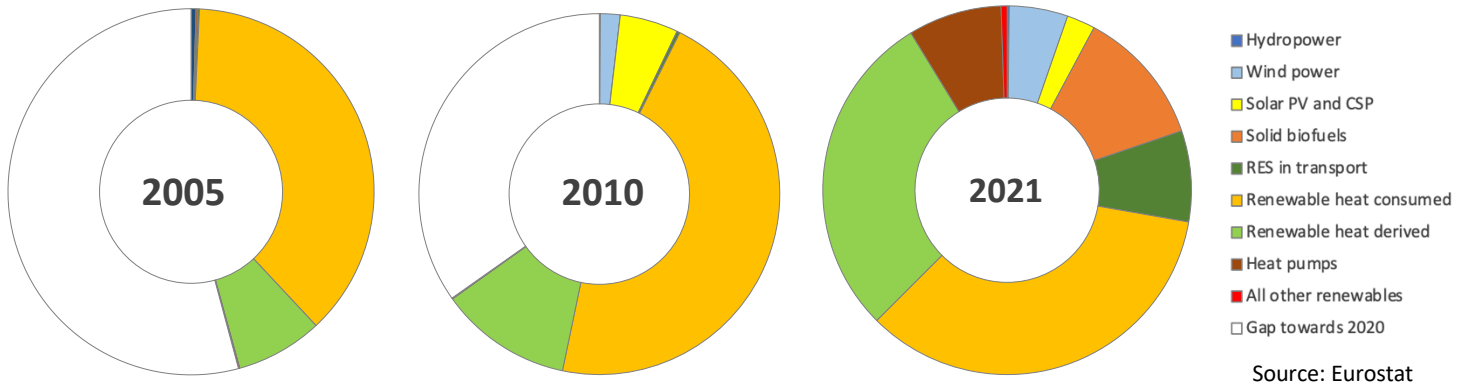
Source: Eurostat

**Abbreviations used:**

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

**Data for 2021**

Overall RES share:	38.0%	Avoided fossil fuels:	1.1[Mtoe]
Overall RES 2020 target:	25.0%	Avoided fuel expenses:	474 [MEUR]
Overall RES 2030 target:	42.0%	RES Turnover:	1 230 [MEUR]
Share RES-E in electricity:	29.3%	RES Employment:	14 300 [jobs]
Share RES-T in transport:	11.2%	RES imports <sup>2</sup> :	35 [MEUR]
Share RES-H/C in heating:	61.3%	RES exports <sup>2</sup> :	11 [MEUR]



Source: Eurostat

	2005		2010		2021		
	Energy in ktoe	Energy in ktoe	Energy in ktoe	Energy in ktoe	Employment in FTE	Turnover in MEUR	
Hydropower	0.3	1.1	2	2	300	30	
Wind power	5.0	21.2	62.8	62.8	2 500	180	
Solar PV, and CSP	0.0	0.0	30.4	30.4	8 300	780	
Solid biomass	1.8	62.8	146.2	146.2	400	20	
Ren. energy in transp	1.7	3.2	97.4	97.4			
Renew. heat consum	447.3	550.5	424.3	424.3			
Renew. heat derived	92.1	1 42.3	351.1	351.1	2 300	170	
Heat pumps	0.0	0.0	100.3	100.3	400	40	
All other renewables	1.2	0.9	6.4	6.4	300	30	
Gap towards 2020	649.5	417.0					

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).

<sup>1</sup> From Integrated National Energy Climate Plan

<sup>2</sup> Referring to the International Trade chapter from the publication: EurObserv'ER - *The State of Renewable Energy in Europe, 2022 edition*

<sup>3</sup> Employment and turnover are only referring to biofuels in transport.



## CURRENT RENEWABLE ENERGY POLICY

The Estonian Recovery and Resilience Plan (RRF), which consists of 969.3 million EUR, was approved by the EU Council in October 2021. Investments account for about 80% of the recovery and resilience plan, with the private and public sectors making an average of 130 million EUR of additional investments per year over six years. The most important investments of the Recovery and Resilience Plan relate to the green and digital transitions with more than 600 million EUR announced. 220 million euros will be directed towards the green transition through a dedicated green fund, the uptake and improvement of innovative and resource-efficient green technologies, the upcycling of bio-resources, the uptake of integrated hydrogen technologies and the development of skills supporting the green transition.

### RES-E

As part of the EU Recovery and Resilience plan submitted to the EU Commission, Estonia plans to allocate 45 million EUR from the Recovery and Resilience Facility to promote the usage of renewable energies. This includes 30 million EUR to strengthen electricity grids and increasing renewable energies' production capacity, anticipating the effects of climate change, as well as 7 million EUR for the introduction of renewable electricity generation equipment in industrial areas and 8 million EUR for energy storage.

### RES H&C

As part of its 2021-27 strategic plan, Estonia will support the renovation and construction of district heating systems and non-fossil fuel boiler equipment to reduce carbon emissions. The programme will make use of the development of energy storage planned under the RRF to reduce power outages and ensure the quality of electricity supply. District heating will also allow heat storage to reduce fossil fuels to cover peak loads. EUR 22.5 million are planned to be spent through this period.

### RES-T

In the field of transport, it is planned to finance investments in rail and tramway traffic related to sustainable mobility with the support of RRF. For example, the plan includes the construction of the Ülemiste joint terminal, which is a part of Rail Baltica, and support for the construction of the Tallinn Old Port tram line in the value of 26 million euros. Furthermore, electric vehicles are exempt from the city public parking fees and can use bus lanes.

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

<i>Instrument</i>	<i>Description</i>
<b>Estonian Recovery and Resilience Plan</b>	Website: <a href="https://www.valitsus.ee/uudised/valitsus-kinnitas-pea-miljardi-euro-suuruse-taastekava">https://www.valitsus.ee/uudised/valitsus-kinnitas-pea-miljardi-euro-suuruse-taastekava</a>
<b>Estonia feed-in premium</b>	<p>Estonia adopted feed-in premium in 2007. The law was amended several times since. A variable feed-in premium is paid to producers of renewable electricity on top of the electricity price. The feed-in premium is paid out for a period of 12 years starting from the commissioning date.</p> <p>The premium amounts to EUR 53.7/MWh and is awarded at the same rate to all renewable technologies. Premium of EUR 32/MWh is paid out to CHP plans with capacity less than 10 MW using waste, peat or oil-shale gas. These are awarded to project under development in 2016.</p> <p>In a July 2012 agreement, Estonia looked to replace the feed-in premium. All renewables-sourced generating capacity will receive a feed-in premium of EUR 93/MWh, inclusive of the electricity market price. This premium will apply to projects commissioned by the end of 2017 (end of 2019 for wind projects). After that, projects have to participate in auctions, which the government can launch, if there is a chance it might not reach its 2020 renewable electricity target or if it aims to benefit from statistical transfers.</p>
<b>Estonia Amendments to the Electricity Market Act establishing reverse auctions and sliding premium</b>	<p>Amendments to the Electricity Market Act, which passed by parliament in June 2018, mandate a reverse auction process in which the government issues tenders for a certain amount of renewable generation. Project developers then compete in a reverse auction where the lowest cost renewable energy projects that meet qualifying standards are selected to receive a feed-in premium subsidy (Government of Estonia, 2018b). The 2018 Electricity Market Act amendments define the process for the government to organise public tenders with the following objectives:</p> <ul style="list-style-type: none"> <li>• tenders to increase renewable generation to meet the 2020 target of 17.6% renewable electricity, limited to projects of over 1 MW</li> <li>• tenders to increase renewable generation by 5 GWh per year from 2019 to 2021, limited to projects of 50 kW to 1 MW</li> <li>• tenders for renewable generation to meet obligations stemming from any statistical transfers of renewable energy established under the EU flexible collaboration mechanism</li> <li>• tenders for renewable generation to meet to any targets established by the government beyond 2020.</li> </ul> <p>Further information (IEA): <a href="https://www.iea.org/policies/6545-estonia-amendments-to-the-electricity-market-act-establishing-reverse-auctions-and-sliding-premium">https://www.iea.org/policies/6545-estonia-amendments-to-the-electricity-market-act-establishing-reverse-auctions-and-sliding-premium</a></p>

***For further information:***

Energy Policy Tracker: Country Dossier Estonia, <https://www.energypolicytracker.org/country/estonia>, last accessed June 2022

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

Government of Estonia: The government approved a recovery plan worth almost a billion euros, <https://www.valitsus.ee/uudised/valitsus-kinnitas-pea-miljardi-euro-suuruse-taastekava>, last accessed June 2022

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

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

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>

## 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

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