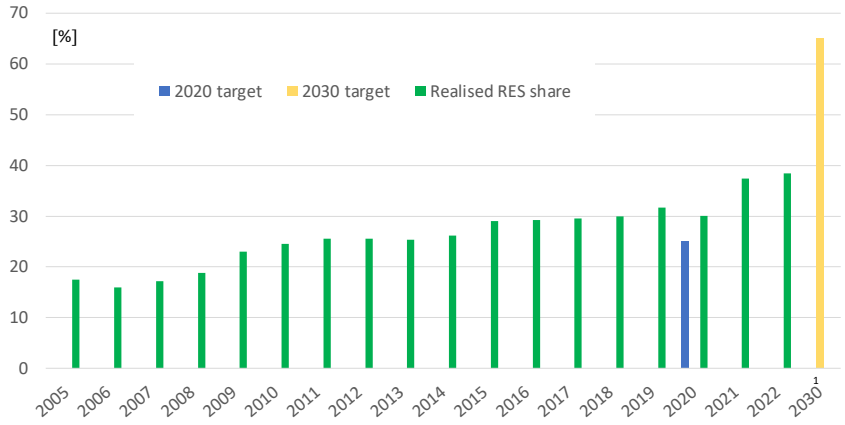
Renewable Energy Policy Factsheet

June 2024

Estonia

Renewable energy status

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



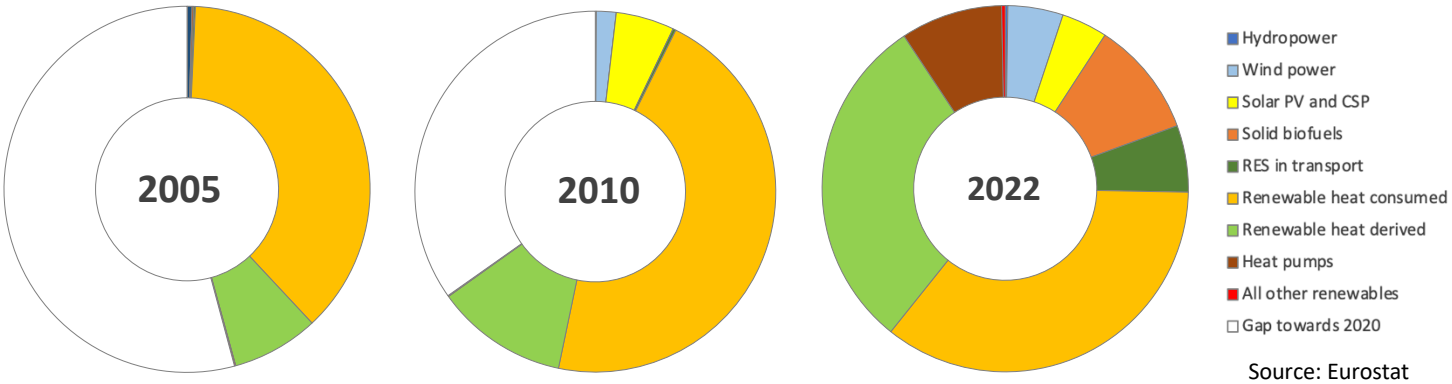
Source: Eurostat

Abbreviations used:

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

Data for 2022

Overall RES share:	38.5%	Avoided fossil fuels:	0.9[Mtoe]
Overall RES 2020 target:	25.0%	Avoided fuel expenses:	664 [MEUR]
Overall RES 2030 target:	65.0%	RES Turnover:	1 140 [MEUR]
Share RES-E in electricity:	29.1%	RES Employment:	12 900 [jobs]
Share RES-T in transport:	8.5%	RES imports[2]:	59 [MEUR]
Share RES-H/C in heating:	65.4%	RES exports[2]:	5 [MEUR]



Source: Eurostat

	2005	2010	2022		
	Energy in ktoe	Energy in ktoe	Energy in ktoe	Employment in FTE	Turnover in MEUR
Hydropower	0.3	1.1	3	100	10
Wind power	5.0	21.2	62	200	20
Solar PV, and CSP	0.0	0.0	51	1 700	130
Solid biomass	1.8	62.8	129	7 700	750
Ren. energy in transp	1.7	3.2	74	300	10
Renew. heat consum	447.3	550.5	447		
Renew. heat derived	92.1	1 42.3	378		
Heat pumps	0.0	0.0	114	2 400	180
All other renewables	1.2	0.9	4	500	40

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, 2022 edition*

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

CURRENT RENEWABLE ENERGY POLICY

RES-E

According to the Estonia National Energy and Climate Plan (NECP) 2021-2030, the share of renewable energy in the electricity sector must double from 19 % in 2020 to 40 % in 2030. By 20230, electricity generation from renewable energy sources will account for 50% of final domestic electricity consumption according to the energy sector development plan.

With the amendment of the electricity market act on 17 March 2023, every person who has a contract for generation of electricity must transmit electricity into the network or pay a fee of 38,000 euros per Megavolt-ampere per year. If a person is unable to do the fulfil two measures, the capacity prescribed in the network contract will not be allocated to the person in the future.

Estonia updated its Recovery and Resilience plan 2023 on 16 June 2023. The updated plan includes a new chapter on REPowerEU under which Estonia aims to synchronize its electricity network with the EU electricity network and allocate 38 million euros to increase renewable energy production in the electricity distribution system.

In Jue 2024, to further encourage renewable energy in the electricity market, the Consumer Protection and Technical Regulatory Authority (TTJA) announced auctions for the development of an offshore wind farm in the Saare 2.1, Saare 2.2 and Saare 3 areas west of Saaremaa. The capacity planned for the offshore wind farm in Saare 2.1 area ranges from s in the range of 1560–2200 MW, in the Saare 2.2 area 840–1200 MW and in the Saare 3 area 120–260 MW.

RES-H&C

Estonia's Energy Policy Development Plan (ENMAK) 2017 sets a target of 37% of the total net area of buildings used by the central government shall be in buildings that meet at least the minimum energy performance requirements. Moreover, Estonia's NECP 2021-2030 targets to increase the share of renewables in the heating sector to 80 percent in 2030.

The country has some support schemes to improve and transition its heating and cooling system. The district heating act of 2003 encouraged network operators, investors, and producers to use renewable energy sources to produce heat. More recently, Under the EU structural funds, Estonia financially supports the renovation of buildings for installation of renewable energy equipment and have the heating system replaced. Apartment buildings could apply to receive this fund if they are eligible until 31 August 2023.

RES-T

The Estonian target for 2030 is to reach a 14% share of renewable in the final share of transport sector consumption and the Estonian Energy Policy Development Plan sets a target that the fuel consumption of the vehicle fleet in 2030 shall not exceed the level 8.3 TWh.

Support schemes and laws such as the liquid act of 2003 was amended on 15 February 2023 are steps to reach these targets. According to this act, all fuel suppliers must release data of the quantities of petrol, diesel, and biofuel for transport monthly to the Environmental board. The amendment to 2023 states that if a fuel supplier is unable to comply to this these obligations, then an individual person can be f fined with up to 300 fine units and a legal entity and up to 10 000 000 euros.

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

Instrument	*Description*
National Energy and Climate Plan (NECP) 2021-2030	The NECP 2030 is a plan that is drawn to meet the energy and climate policy targets agreed in the European Union. This plan is in accordance with the necessities laid down in Regulation (EU) 2018/1999 which states that the national energy and climate plans must be submitted to the European Commission every ten years. Related renewable energy sources the key targets are: • Increase the share of renewable energy in the electricity sector to 40% by 2030. • By 2030, ensure that electricity generation from renewable energy sources accounts for 50% of final domestic electricity consumption. • Increase the share of renewables in the heating
Energy Sector Development Plan until 2030	The Estonian Energy Policy Development Plan (ENMAK) approved on 20 October 2017 guarantees consumers energy supply at a reasonable rate and availability to make sure that it has a positive effect on the European Union's long-term energy and climate policy. By 2030, the development plan sets the following main tasks and targets in the electricity, heating and cooling and transport sector: • free, grant-free, and open fuel and electricity markets shall work • the electricity generation capacity in Estonia shall be sufficient if the N-1-1 criterion is met • electricity generation from renewable energy sources will account for 50% of final domestic electricity consumption • district heating systems will be preserved in areas where they are sustainable and able to offer consumers favorable and environmentally friendly energy solutions • 80% of the heat produced in Estonia shall be based on renewable energy sources • 37% of the total net area of buildings used by the central government shall be in buildings that meet at least the minimum energy performance requirements • the fuel consumption of the vehicle fleet in 2030 shall not exceed the level 8.3 TWh.
Estonia's recovery and resilience plan 2023	The European Council approved Estonia's initial recovery and resilience plan on 25 October 2021 and then the modifies plan on 16 June 2023. This updated version included a REPowerEU chapter amounting to 83.3 million euros in grants in response to the energy market disruption caused by Russia's invasion of Ukraine. However, it continues to make efforts to synchronize its electricity network with the EU electricity network. Under REPowerEU, Estonia planned to allocate 38 million euros to increase access of renewable energy production to the electricity distribution system.
The Consumer Protection and Technical Regulatory Authority (TTJA)	In June 2024, The Consumer Protection and Technical Regulatory Authority (TTJA) announced auctions for the development of an offshore wind farm in the Saare 2.1, Saare 2.2 and Saare 3 areas west of Saaremaa. The auction is based on the first superficies licence application. The capacity planned for the offshore wind farm in Saare 2.1 area ranges from s in the range of 1560–2200 MW, in the Saare 2.2 area 840–1200 MW and in the Saare 3 area 120–260 MW.
Estonia Amendments to the Electricity Market Act	On 17 March 2023, the Electricity Market Act of Estonia was amended. According to this amendment, every person who has a contract for generation of electricity must transmit electricity into the network or pay a fee of 38,000 euros Megavolt-ampere per year. If this person is not able to transmit electricity or pay the fee, the capacity prescribed in the network contract will not be allocated to the person in the future.
The District Heating Act	This act enforced on 1 July 2003, regulates the production, distribution, and sale of heat into the networks. According to this act, when a producer of heat shall make an investment and a network operator shall sign a 12 years contract of generating installation for heat production, the heat produced should preferably be from renewable energy sources such as waste, peat or from carbonization gas.

Apartment buildings reconstruction conditions	These reconstruction conditions are to financially support the renovation of apartment buildings built before 1993 to make then energy efficient. These conditions also support the purchase and installation of renewable energy equipment and replacement of the heating system, in the apartment building. The measure is financed by the EU structural funds and the application for eligibility for the measure ended on 31 August 2023.
Liquid Fuel Act	According to this act that came into force on 1 July 2003, by the 15th day of every month, all fuel suppliers must prepare a monthly report to the Environmental Board which includes the quantities of petrol, diesel, and biofuel for transport in the previous month along with the corresponding total energy content data. This act was last amended in 15 February 2023, according to the amendment the failure to comply with the obligation to release consumption of biofuels can be fined with up to 300 fine units for an individual person and up to 10,000,000 euros for a legal entity.

For further information:

National Energy and Climate Plan (NECP) 2021-2030, https://commission.europa.eu/document/download/81c1c07b-0763-499e-ab8f-068b8e70e018_en?filename=Estonia_Draft_Updated_NECP_2021-2030_en_1.pdf

Energy Sector Development Plan until 2030, https://www.mkm.ee/en/energy-sector-and-mineral-resources/energy-economy/energy-sector-development-plan#:~:text=By%202030%2C%20the%20development%20plan,in%20terms%20of%20generation%20plants)

The Consumer Protection and Technical Regulatory Authority (TTJA), Estonia announced auctions for the development of an offshore wind farm in 3 areas - Baltic Wind

Electricity Market Act, https://www.riigiteataja.ee/en/eli/530032022001/consolide

District Heating Act, https://www.riigiteataja.ee/en/eli/520062017016/consolide#

Apartment buildings reconstruction conditions, https://energy.ec.europa.eu/system/files/2020-09/ee_2020_ltrs_official_translation_en_0.pdf

Liquid Fuel Act, https://www.riigiteataja.ee/en/eli/502012024006/consolide

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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