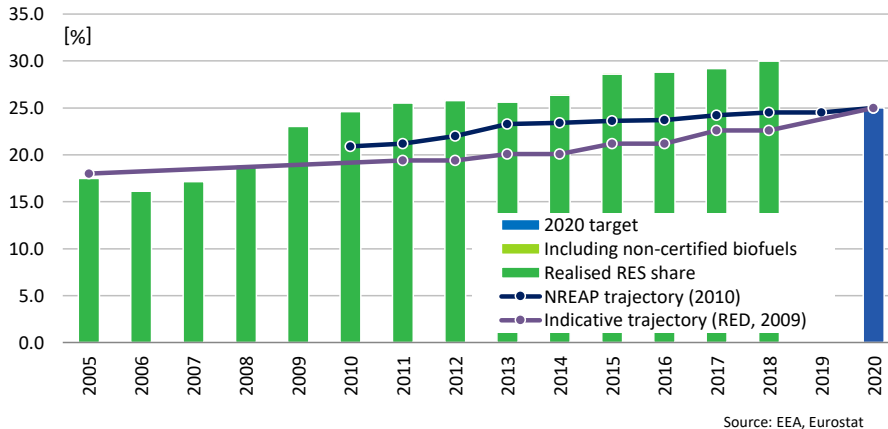


### Summary

In Estonia, electricity from renewable sources is mainly promoted through feed-in premiums. In July 2018, the administratively determined feed-in premiums scheme has been replaced by an auction-based feed-in premiums scheme. In addition, investment subsidies are available for biogas/biomass-based electricity and wind power installations. Renewable heat is stimulated through investment subsidies to CHP plants, as well as for private renewable heat consumers. Renewable transport fuels are currently mainly incentivised by way of a support scheme to promote the use of biomethane and the construction of biomethane fuelling stations. Generally, a number of investment subsidy schemes are in place to promote the development, installation and use of renewable energy production installations.



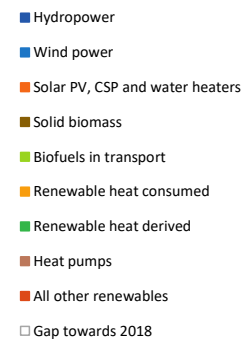
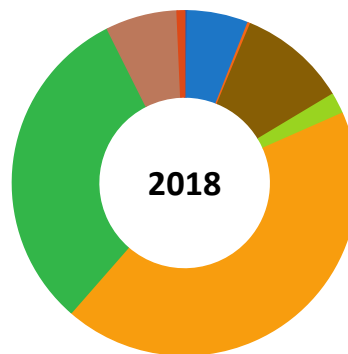
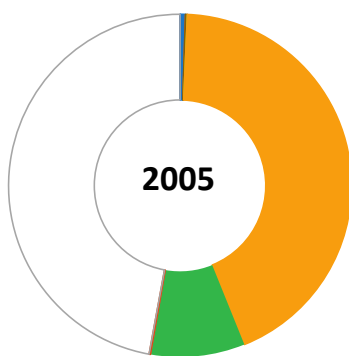
Source: EEA, Eurostat

### Abbreviations used:

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

### Data for 2018

Overall RES share:	30.0%	Avoided fossil fuels:	1.1 [Mtoe]
Overall RES 2020 target:	25.0%	Avoided fuel expenses:	0.5 [billion euro]
Share RES-E in electricity:	19.7%	RES Turnover:	1020 [MEUR]
Share RES-T in transport:	3.3%	RES Employment:	16300 [jobs]
Share RES-H/C in heating:	53.7%		



Source: Eurostat, 2020.

	2005		2018		
	Energy		Energy	Employment	Turnover
Hydropower	0.3 ktOE		2.8 ktOE	<100 Jobs	<10 MEUR
Wind power	5.0 ktOE		59.3 ktOE	400 Jobs	30 MEUR
Solar PV, CSP and water heaters	0.0 ktOE		2.6 ktOE	600 Jobs	40 MEUR
Solid biomass	1.8 ktOE		105.2 ktOE	12200 Jobs	740 MEUR
Biofuels in transport	0.0 ktOE		20.5 ktOE	500 Jobs	30 MEUR
Renewable heat consumed	447.3 ktOE		445.9 ktOE		
Renewable heat derived	92.1 ktOE		322.7 ktOE		
Heat pumps	0.0 ktOE		69.3 ktOE	1800 Jobs	120 MEUR
All other renewables	1.2 ktOE		7.2 ktOE	700 Jobs	50 MEUR
Gap towards 2018	487.9 ktOE				

Source: Eurostat, EurObserv'ER, 2020.

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***

In 2017, the “National Development Plan of the Energy Sector until 2030” (NDPES 2030) was adopted and published, determining various national objectives regarding the legislation and policies to promote the renewable energy sources in electricity, heating and transport sector. However, the specific proceedings in regard to the implementation of further RES support schemes in all respective sectors are yet to be decided. New draft amendments regarding measures to support the RES in heating sector as well as the biomethane producers in the transport sector are being implemented. Furthermore, Estonia seeks to sell surplus “statistical renewable energy transfers” to other EU member states that are not on track in achieving their respective national renewable energy target for year 2020. The relevant legislation was introduced in June 2018.

Currently, a feed-in premium scheme forms the backbone of market support measures for *electricity from renewable sources of energy*. Until recently, the (fixed) feed-in premium levels were determined administratively. Since July 2018, for new renewable electricity plants these levels are determined market-based by way of technology-neutral reverse auctions. A tender was held in 2019 for installations in the 50 kW – 1 MW range and one is forthcoming in 2020 for installations with a capacity above 1 MW. These tenders intend to meet set RES-E sub-targets, e.g. 17.6% RES-E in final electricity consumption by 2020, and contractual obligations for selling statistical transfers at lowest subsidy costs. In principle, contingent on meeting environmental regulations (notably regarding bio-energy) all RES-E technologies with an upper capacity limit of 125 MW are eligible for feed-in premium support. Moreover, investment (including RD&D) support is granted for bio-energy based CHP plants and renewable energy installations for private energy consumers.

*Renewable heating* and energy efficiency improvement is stimulated by investment subsidies and consumer subsidies. Investment subsidies are granted notably to CHP and district heating installations using renewables as well as to municipal community centres, child day care centres, and to households and apartment buildings for the installation of heating installations using biomass as well as solar and geothermal heating installations. The allocation of subsidies proceeds in subsequent rounds based on applications and available funds.

As from May 2018 *renewable transport fuels* is supported by a biofuels (blending) quota scheme. Moreover, use of biomethane in the transport sector is incentivized by means of investment subsidies for biomethane petrol stations and to promote biomethane use in public transport systems in municipalities. As from January 2018 certified biomethane producers receive production subsidies on a per MWh basis for biomethane delivered to the gas network system. A state subsidy is granted to the purchasers of EVs up to 50% of the price of the vehicle with a maximum of € 18.000. Electric vehicles are exempt from the city public parking fees and can use bus lanes.

So far, the assessment by the European Commission of *draft National Energy and Climate Plans* of the Member States is available. The Commission’s assessment of the draft integrated National Energy and Climate Plan of Estonia – regarding the targets for year 2030 for the share of renewable energy and gross final energy consumption only – is shown in Table 1 below.<sup>1</sup>

**Table 1: Overview of Estonia’s actual performance (2018), targets (2020), proposed contributions (2030) under the Governance Regulation, Regulation (EU) 2018/1999 and contribution ambition assessment by the European Commission, regarding the share of renewables and the level of gross final energy consumption**

National targets and contributions	2018	2020	2030	Assessment of 2030 ambition level
Share of energy from renewable sources in gross final consumption of energy (%)	30.0	25.0	42.0	Above 37% (result of RES formula)
Final energy consumption (Mtoe)	3.0	2.8	2.75	Low

Source: European Commission, (2019); eurostat (2020a, 2020b)

Based on the formula contained in Annex II of the Governance Regulation, Estonia’s renewables share would have to reach the level of **37%** in 2030 (European Commission, 2019) against the historical rate of 30.0% in 2018. Hence, the European Commission (2019) concludes that the draft NECP promises a significantly higher renewables contribution than the one suggested by the Commission’s elaboration of Annex II of the Governance Regulation. In contrast, the Commission qualified the ambition level of the proposed **2.75 Mtoe** as contribution to the EU 2030 target for final energy consumption as “low”.

*Estonia’s final 2030 National Energy and Climate Plan* retained the ambitious 42% target for the renewables share by year 2030. Key actions include:

- reverse tenders for renewable energy (development)
- development of wind parks (including offshore), increasing use of electric transport, soft mobility, biofuels
- reducing biodegradable waste
- reuse and reduction of waste materials
- development of public transport
- development of railway infrastructure
- electrification of railways and ferries
- implementation of minimum requirements for zero-energy buildings
- a green technology investment programme.

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<sup>1</sup> The core renewables policy performance metric in the EU is the ratio of annual *gross final renewable energy consumption* and annual *gross final energy consumption*. Other factors remaining the same, gross final energy consumption reduction boosts the share of renewables as defined by the aforementioned metric.

As for the 2030 gross final energy consumption target, Estonia holds on to a 32-33 TWh target range (**2.75-2.84 Mtoe**), the ambition of (the lower bound of) which the European Commission had qualified as “low”. The argument is that “the economy of Estonia is growing, so significant measures are needed to keep (energy) consumption at the same level” (Government of Estonia, 2019: 8), including development of electrical and heating efficiency.

## OVERVIEW OF MAIN SUPPORTING POLICIES

The main RES support measures applied in Estonia are epitomized in Tables 2 and 3 below. See the previous section and the notes to Table 2 for more details.

**Table 2: Overview of support schemes to promote renewable energy in Estonia**

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

1) Fiscal incentive of bio-methane use in the transport sector

Sources: RES-Legal Europe (2019), EurObserv'ER

**Table 3: Overview of instruments used at present in Estonia**

<b>Instrument</b>	<b>Description</b>
Feed-in premiums	Technology-specific guaranteed premium on top of the revenues from electricity sold, during the support contract period.
Investment subsidies	Applied to facilitate the financing of biomass and wind power based RES-E installation and certain renewable heating technologies including bio-based fueled CHP and district heating installations and biomethane facilities in the transport sector
Tax credits scheme	Bio-methane use in the transport sector is fiscally facilitated. Note that in Estonia electric vehicles in combination with renewable electricity is fiscally facilitated as well.
Biofuels quota scheme	Importers/suppliers of transport fuels are subject to a renewable quota scheme for biofuels. Compliance based on sample testing rather than certificates-based.

### ***For further information:***

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

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European Union, 2018. Regulation (EU) 2018/1999 on the Governance of the European Union and Climate Action, OJEU L328/1, Brussels, 21 December

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Government of Estonia, 2019. Estonia's 2030 National Energy and Climate Plan (NECP 2030). Tallinn, 19 December [https://ec.europa.eu/energy/sites/ener/files/documents/ee\\_swd\\_en.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/ee_swd_en.pdf)

International Energy Agency (IEA) database on policies and measures

, <https://www.iea.org/policies?topic=Renewable%20Energy>

Member State Progress Report, available at the Renewable Energy pages of the European Commission,

<http://ec.europa.eu/energy/en/topics/renewable-energy>

REN21, 2020. Global Status Report 2020. Paris, 16 June

[https://www.ren21.net/wp-content/uploads/2019/05/gsr\\_2020\\_full\\_report\\_en.pdf](https://www.ren21.net/wp-content/uploads/2019/05/gsr_2020_full_report_en.pdf)

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

[https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-estonia\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-estonia_en.pdf)

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

## ***What is meant by ...?***

<b>Auctions for granting renewable energy support</b>	An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers.
<b>Feed-in tariff (FiT)</b>	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.
<b>Feed-in premium (FiP)</b>	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.
<b>Grants</b>	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)
<b>Green public procurement</b>	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)
<b>Renewable quota scheme (RQS)</b>	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.
<b>Sliding feed-in-tariff</b>	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.
<b>Soft loans</b>	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.
<b>Tax credits</b>	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 Energy Transition (NL), the Renewables Academy (RENAC, DE), Frankfurt School of Finance and Management (DE), Fraunhofer-ISI (DE) and Statistics Netherlands (CBS, NL). The information and views set out in this publication are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.



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