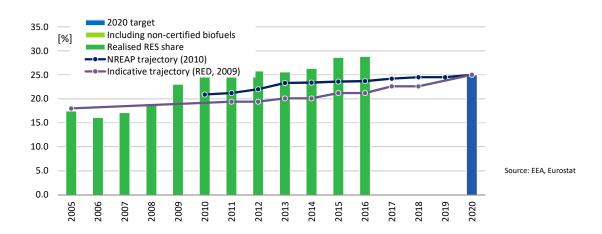
# **Estonia**

#### Summary

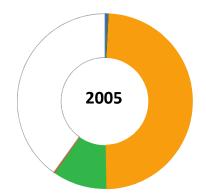
Electricity from renewable sources is mainly promoted through feed-in premiums. In addition, investment subsidies are available for biogas/biomass-based electricity and wind power installations. Renewable heat is stimulated through investment subsidies to CHP plants generating renewable heat and electricity, as well as subsidies for private heat consumers. Renewable transport fuels are currently mainly incentivised by way of a support scheme to promote the purchase of electric cars that use power produced from renewable energy sources. Recently, a measure for supporting bio-methane in the transport sector has been adopted. Generally, a number of investment subsidy schemes are in place to promote the development, installation and use of renewable energy production installations. However, certain subsidy conditions still have to be announced and implemented. The current administratively determined feed-in premiums scheme is proposed to be replaced by an auction-based scheme within short.





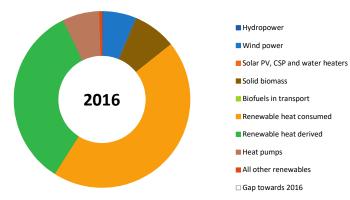
#### Abbreviations used:

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



#### Data for 2016

Overall RES share:	28.8%	Avoided fossil fuels:	1.2 [Mtoe]
Overall RES 2020 target:	25.0%	Avoided fuel expenses:	0.3 [billion euro]
Share RES-E in electricity:	15.5%	RES Turnover:	840 [MEUR]
Share RES-T in transport:	0.4%	RES Employment:	14600 [jobs]
Share RES-H/C in heating:	51.2%		



Source: Eurostat, 2018.

	2005		2016	
	Energy	Energy	Employment	Turnover
Hydropower	1.2 ktoe	2.3 ktoe	< 100 Jobs	< 10 MEUR
Wind power	4.3 ktoe	56.5 ktoe	1600 Jobs	90 MEUR
Solar PV, CSP and water heaters	0.0 ktoe	0.0 ktoe	< 300 Jobs	< 20 MEUR
Solid biomass	1.8 ktoe	72.2 ktoe	10000 Jobs	560 MEUR
Biofuels in transport	0.0 ktoe	0.0 ktoe	200 Jobs	< 10 MEUR
Renewable heat consumed	447.3 ktoe	408.7 ktoe		
Renewable heat derived	92.1 ktoe	308.2 ktoe		
Heat pumps	0.0 ktoe	62.4 ktoe	2100 Jobs	120 MEUR
All other renewables	1.2 ktoe	3.9 ktoe		
Gap towards 2016	366.3 ktoe			Source: Eurostat, EurObserv'ER, 2018

366.3 ktoe Gap towards 2016 Source: Eurostat, EurObserv'ER, 2018

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).

























#### **ESTONIA**

## Renewables policy in a nutshell

Electricity from renewable sources is mainly promoted through feed-in premiums. 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 generating renewable heat and electricity, as well as subsidies for private heat consumers. Renewable transport fuels are currently mainly incentivised by way of a support scheme to promote the purchase of electric cars that use power produced from renewable energy sources. Recently, a measure for supporting bio-methane in the transport sector has been adopted. Generally, a number of investment subsidy schemes are in place to promote the development, installation and use of renewable energy production installations. However, certain subsidy conditions still have to be announced and implemented. The current administratively determined feed-in premiums scheme is proposed to be replaced by an auction-based scheme within short.

#### CURRENT RENEWABLE ENERGY POLICY

Currently, a feed-in premium scheme forms the backbone of market support measures for *electricity from renewable sources of energy*. To date, the premium levels are determined administratively. Within short, these levels are poised to be determined market-based by way of auctions. In principle, all RES-E technologies are eligible for FiP support. Moreover, investment (including RD&D) support is granted to CHP plants using biogas/biomass and wind power installations.

Renewable heating 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.

As from May 2018 *renewable transport fuels* is supported by a biofuels (blending) quota scheme. Electric vehicles using renewable electricity receive fiscal facilitation. Moreover, use of biomethane in the transport sector is incentivized by means of investment subsidies. Estonia has no incentives for electric vehicles.

### **OVERVIEW OF MAIN SUPPORTING POLICIES**

The main RES support measures applied in Estonia 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

		REGULATORY POLICIES			FISCAL INCENTIVE AND PUBLIC FINANCES					
	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 l 1)	Tax credits mechanism II	Soft Ioans
RES-E										
- Offshore wind		х					х			
- Onshore wind		х					х			
- Solar		Х								
- Hydro		Х								
- Geothermal		Х								
- Solid biomass		Х					Х			
- Biogas		Х					Х			
RES-H/C										
- Solar thermal							Х			
- Geothermal							Х			
- Biomass							х			
- Biogas							х			
- Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves							х			
- Others, i.e. aerothermal, hydrothermal										
RES-T										
- Bio gasoline					х			Х		
- Biodiesel					X			X		

<sup>1)</sup> Fiscal incentive of bio-methane use in the transport sector

Sources: RES-Legal Europe (2017), EurObserv'ER, GSR/REN21

Instrument	Description
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.

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 <a href="http://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-2">http://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-2</a>

Eurostat, 2017. Energy from renewable sources. <a href="http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy">http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy</a> from renewable sources

REN21, Global Status Report 2017 <a href="http://www.ren21.net/wp-content/uploads/2017/06/170607">http://www.ren21.net/wp-content/uploads/2017/06/170607</a> GSR 2017 Full Report.pdf

IEA/IRENA Joint Policies and Measures database

https://www.iea.org/policiesandmeasures/renewableenergy/?country=Estonia

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

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

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)

European Alternative Fuels Observatory, <a href="http://www.eafo.eu/content/estonia">http://www.eafo.eu/eu</a> ; <a href="http://www.eafo.eu/content/estonia">http://www.eafo.eu/eu</a>

## What is meant by ...?

Auctions for granting renewable energy support Feed-in tariff (FiT) An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers.

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-intariff 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), the Energy research Centre of the Netherlands (ECN, 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.