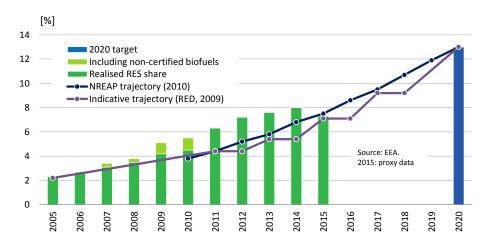


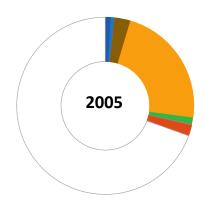
Belgium consists of three regions: Brussels, Flanders and Wallonia, each with much autonomy in determining renewable support policies, except for support to offshore wind and hydro power which fall under the competence of the federal government. Electricity from renewable sources is promoted at regional and federal levels mainly through a quota system based on the trade of certificates, complemented by regional support measures. In the three regions small PV installations benefit from net metering. The federal government supports renewable heating and cooling by way of a tax deduction on investment costs. The main support scheme for renewable energy sources used in transport is a quota system under the competence of the federal government.





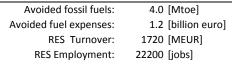
### Abbreviations used:

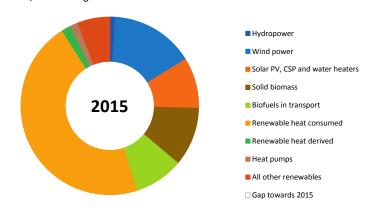
RES: renewable energy sources RES-E: renewable electricity RES-H/C: renewable heating/cooling RES-T: renewable transport fuels



## Data for 2015

Overall RES share:	7.9%
Overall RES 2020 target:	13.0%
Share RES-E in electricity:	15.4%
Share RES-T in transport:	3.8%
Share RES-H/C in heating:	7.6%





Source: Eurostat, 2017.

	2005			
	Energy	Energy	Employment	Turnover
Hydropower	29.1 ktoe	28.4 ktoe	350 Jobs	15 MEUR
Wind power	20.1 ktoe	434.8 ktoe	2800 Jobs	565 MEUR
Solar PV, CSP and water heaters	0.1 ktoe	263.5 ktoe	3850 Jobs	220 MEUR
Solid biomass	82.5 ktoe	305.6 ktoe	3500 Jobs	340 MEUR
Biofuels in transport	0.0 ktoe	254.6 ktoe	7500 Jobs	250 MEUR
Renewable heat consumed	643.7 ktoe	1314.8 ktoe		
Renewable heat derived	35.5 ktoe	48.6 ktoe		
Heat pumps	5.9 ktoe	40.3 ktoe	3000 Jobs	260 MEUR
All other renewables	54.2 ktoe	168.0 ktoe	1550 Jobs	85 MEUR
Gap towards 2015	1987.3 ktoe			Source: Eurostat, EurObserv'ER, 2017.

Source: Eurostat, EurObserv'ER, 2017.

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 each of the three regions, *electricity from renewable sources* is promoted mainly through a quota system based on the trade of certificates. As for these schemes, national TSO Elia has the obligation - when renewable electricity generators wish so - to purchase green certificates at a minimum price set by law for certain renewable electricity generation technologies. Note that the regional certificate schemes are based on a framework set by the federal government, but may have region-specific features including the level of quotas set. Region-specific complementary support measures include:

- Brussels: investment support to companies and households, net metering (small PV), RES obligations in new public buildings, an overall RES volume target and a RES share target for 2020
- Flanders: an ecological premium, net metering (small PV)
- Wallonia: investment support to companies and public-sector organisations, net metering (small PV). Investment support concerns eligible CHP installations using biogas or (solid) biomass, eligible installations using solar energy including the Qualiwatt programme for PV only, hydro power and onshore wind.

As for *renewable heating and cooling*, the federal government provides support to companies investing in technologies producing renewable heat and/or cooling by way of a tax deduction measure and indirect measures such as applicable RD&D programmes. Region-specific complementary support measures include:

- Brussels: an overall RES volume target and a RES share target for year 2020; support to a voluntary national certification body RESCert; subsidies for installation of solar water heaters and heat pumps
- Flanders: a renewable heating quota scheme; obligation to use renewable heat in schools and public office buildings; premiums to be granted by network operators and municipalities; support to a national certification body RESCert; training programmes for installers of heat pumps and PV installations
- Wallonia: building obligation to use renewable heat for certain new buildings and existing
  buildings with a floor area greater than 1000 m<sup>2</sup>; investment support to companies and publicsector organisations; a zero-percent interest loans programme; applicable RD&D programmes
  support to a national certification body RESCert; training programmes for installers of heat
  pumps and PV installations, investment subsidies biogas and biomass CHP installations, biomass
  heating plants, aerothermal, geothermal as well as solar thermal installations.

Promotion of the use of renewables in transportation is the competence of the federal government. The main instrument is a renewable transportation fuels quota scheme. This instrument is applicable to biofuels only. The law governing the renewable transport quota scheme obliges companies that sell gasoline E5 or E10 or bio-diesel to satisfy a defined volume of sustainable biofuels within the calendar year concerned. The defined volume relates to the total energy volume of transport fuels sold by the respective companies. Furthermore, two fiscal stimulation measures are in place:

- A reduction of the excise tax on automotive fuels in proportion to the share of biofuels in automotive fuels
- A full exemption on the excise taxes for automotive fuels, applicable to rapeseed oil directly sold by manufacturers thereof to the final consumers.

# **OVERVIEW OF MAIN SUPPORTING POLICIES**

The main RES support measures are epitomized in Table 1 below, applied by the Belgium federal government and/or in (at least one of) the three regional administrations. Note that all these measures are currently in place.

Table 1: Overview of support schemes to promote renewable energy

		REGULATORY POLICIES							
	Feed-in tariiffs	Feed-in premiums 1)	Tenders	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates	Net-metering/ net-billing	Investment subsidies	Tax credits mechanisms	Soft loans
RES-E									
- Offshore wind		Х	Х	X					
- Onshore wind				Х			х		
- Solar PV		Х		Х		Х	х		
- Hydro				Х			Х		
- Geothermal				Х			х		
- Solid biomass				Х			х		
- Biogas				Х			Х		
RES-H/C									
- Solar thermal							х		Х
- Geothermal							Х		Х
- Biomass							х		Х
- Biogas							Х		Х
<ul> <li>Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves</li> </ul>							Х		х
- Others, i.e. aerothermal, hydrothermal							Х		х
RES-T									
- Bio gasoline					х			Х	
- Biodiesel					х			Х	

<sup>1)</sup> Formally no feed-in tariffs and premiums whatsoever are in place in Belgium. But the public service obligations imposed on TSO Elia and DSOs to grant technology-specific minimum payments to operators of renewable electricity generation installations if the latter desire so, boil down to feed-in premiums in the case on offshore wind and certain medium and large scale PV installations.

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

Table 2: Overview of instruments used at present

Instrument	Description
Feed-in premiums	Guaranteed premium during the support contract period on top of revenues from
	electricity sales: the guaranteed minimum certificate price granted by Elia works out as
	a feed-in premium for offshore wind and medium and large PV projects.
Tendering	Applied in offshore wind sub-sector
Renewable quota	Obligation upon electricity suppliers to surrender on the settlement day of the current
scheme, certificates-	year a number of certificates corresponding to a pre-set minimum share of their annual
based	sales volume last year.
Net metering	Possibility for an operator of a small roof-top PV installations to settle electricity fed
	into the grid in the course of a calendar year at the retail electricity tariff (including
	taxes and surcharges) up to a maximum level, i.e. the aggregated volume of electricity
	absorbed by the operator concerned from the grid during the same calendar year.
Tax credits scheme	Renewable heating & cooling installations in buildings are eligible for an exemption
	from property tax for building owners.
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. No (direct)
	incentives for other alternative transport fuels.

# 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 http://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-2

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 <a href="https://www.iea.org/policiesandmeasures/renewableenergy/?country=Belgium">https://www.iea.org/policiesandmeasures/renewableenergy/?country=Belgium</a>

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/belgium/">http://www.res-legal.eu/search-by-country/belgium/</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.