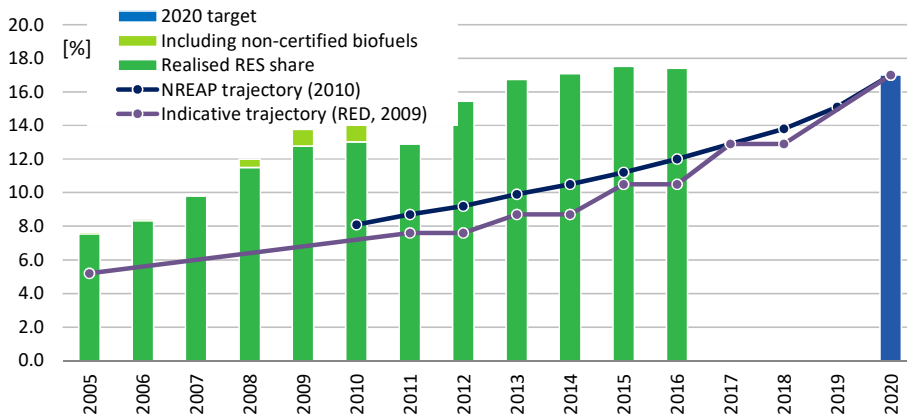


### Summary

Italy approved the National Energy Strategy in 2013. It is built around 7 priorities and focusses on a sustainable deployment of renewable energy and stresses the importance of energy efficiency. The Strategy contains targets and measures until 2020 as well as long-term strategies until 2050. In 2013, the green certificate scheme was replaced by other support schemes to promote RES-E, namely different feed-in and premium tariffs. Very large plants are awarded contracts under a tender scheme (auction process). For RES-H, there exists a tax regulation scheme and incentive for small RES-H sources. RES-T is promoted by quotas.



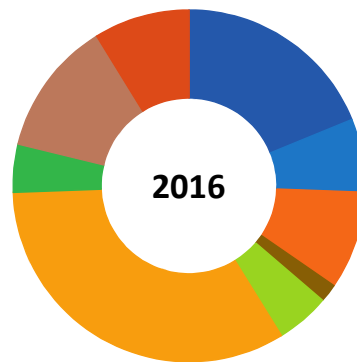
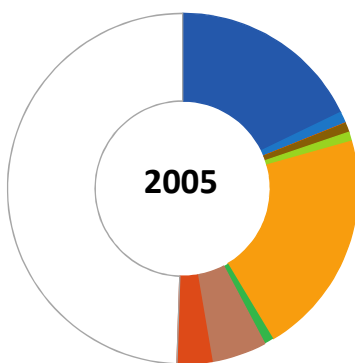
Source: EEA, Eurostat

### Abbreviations used:

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

### Data for 2016

Overall RES share:	17.4%	Avoided fossil fuels:	33.1 [Mtoe]
Overall RES 2020 target:	17.0%	Avoided fuel expenses:	8.7 [billion euro]
Share RES-E in electricity:	34.0%	RES Turnover:	21420 [MEUR]
Share RES-T in transport:	7.2%	RES Employment:	179000 [jobs]
Share RES-H/C in heating:	18.9%		



- Hydropower
- Wind power
- Solar PV, CSP and water heaters
- Solid biomass
- Biofuels in transport
- Renewable heat consumed
- Renewable heat derived
- Heat pumps
- All other renewables
- Gap towards 2016

Source: Eurostat, 2018.

	2005		2016		
	Energy		Energy	Employment	Turnover
Hydropower	3764.8 ktoe		3971.7 ktoe	13400 Jobs	1760 MEUR
Wind power	220.0 ktoe		1420.3 ktoe	6300 Jobs	950 MEUR
Solar PV, CSP and water heaters	2.7 ktoe		1900.6 ktoe	12100 Jobs	1570 MEUR
Solid biomass	186.3 ktoe		354.6 ktoe	32600 Jobs	2540 MEUR
Biofuels in transport	176.7 ktoe		1038.9 ktoe	6500 Jobs	630 MEUR
Renewable heat consumed	4366.6 ktoe		7001.9 ktoe		
Renewable heat derived	190.5 ktoe		927.9 ktoe		
Heat pumps	1070.0 ktoe		2608.6 ktoe	94000 Jobs	12280 MEUR
All other renewables	673.4 ktoe		1856.3 ktoe		
Gap towards 2016	10430.0 ktoe				

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).



## ***CURRENT RENEWABLE ENERGY POLICY***

In 2013, the National Energy Strategy (NES) was approved in Italy. The NES identifies seven priorities in order to achieve the 2020 objectives. While a main focus of the NES is on energy efficiency, the deployment of renewable energy plays also a crucial role. The NES stresses the economic efficiency of RES deployment as well as a gradual integration of renewable electricity with the electricity market and the grid. In the long-term, the strategy aims to achieve a share of renewables in gross final energy consumption of about 60-65% by 2050.

The main goals highlighted for the period until 2020 include:

- 19-20% of renewables in gross final energy consumption;
- 34-38% (and potentially more) of final consumption of electricity consumption to be supplied by renewables;
- A greater focus on renewables for heating and cooling: renewable heat should cover up to 20% of final consumption;
- More than 7% reduction in gross energy consumption in relation to 2010.

Highlighted initiatives to expand renewable energy production include:

- Alignment of per-unit incentives for RES-E more closely to European levels, such that the system is gradually guided to grid parity;
- Economically efficient development of RES-E through auction mechanisms and governance of volumes;
- White certificates and the activation of a guarantee fund for investment in district heating/cooling.

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

Italy has different supporting policies for promoting renewable energy sources in the electricity, heating and cooling, and transport sectors. Electricity from renewable sources is mainly promoted through feed-in tariffs and feed-in premiums. Furthermore, there is a tendering scheme for larger RES plants. There are tax exemptions for photovoltaic and wind power plants. With respect to RES-H, there is a tax regulation scheme, incentives for small RES-H sources, as well as a guarantee fund for district heating. The main incentive for renewable energy use in transport is a quota system.

More details are provided in Table 2 and Table 3 below.

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

	REGULATORY POLICIES					FISCAL INCENTIVE AND PUBLIC FINANCES			
	Feed-in premium / tariff	Tendering	Quota obligation with Tradable Green certificates	Quota obligation without Tradable Green certificates	Net-metering/ net-billing	Capital subsidy, grants	Tax regulation mechanism	Direct premium	Loans guarantees to finance feasibility studies
<b>RES-E</b>									
- Offshore wind	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Onshore wind	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Solar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Hydro	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Geothermal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Solid biomass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Biogas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>RES-H/C</b>									
- Solar thermal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Geothermal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Biomass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Biogas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Others, i.e. aerothermal, hydrothermal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>RES-T</b>									
- Bio gasoline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Biodiesel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

**Table 3:** Brief description of key policy instruments aimed at promoting RES in Italy

<i>Instrument</i>	<i>Description</i>
Feed-in tariff	There are two different feed-in tariffs. One Feed-in-tariff applies to all RES plants (except photovoltaic) with an installed capacity between 1 kW and 0.5 MW. Another feed-in tariff applies for PV plants connected to the grid with a minimum capacity of 1 kW.
Feed-in premium	The feed-in premium can be applied for all RES plants except PV. The installed capacity must be between 1 kW and 5MW. Plants with a capacity below 0.5 MW can choose between this premium and the feed-in tariff.
Tenders (Auction Process)	All RES plants with a capacity above 5MW, which are not eligible to use the feed-in tariff or -premium, are eligible for the tendering mechanism. There are different base tariffs for all RES and bidders offer prices (percentage reductions of the base tariffs) and receive this premium in case of a successful tender.
Net metering	Net metering is available for RES-E plants below 200kW (20kW) of installed capacity for plants commissioned after (before) 31 December 2007 as well as high-efficiency CHP plants with a capacity below 200 kW.
Incentive for small-scale RES-H sources	For small scale RES-H sources, there are incentives granted for a period between two and five years.
Tax regulation scheme	There is tax deduction for expenses for installing RES-H technologies.
Biofuel quota	Biofuels are promoted through a quota system. The quota is to gradually increase from 5% in 2015 to 10% in 2020.

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

EurObserv'ER 16th annual overview barometer, <https://www.eurobserv-er.org/category/all-annual-overview-barometers>

EEA 2017: Progress of renewable energy sources, European Environmental Agency (EEA), <https://www.eea.europa.eu/data-and-maps> (European Union), last accessed June 2017

IEA database on policies and measures, <https://www.iea.org/policiesandmeasures/renewableenergy/?country=Italy>

IEA (2017), Energy Policies of IEA Countries: Italy 2016, <https://www.iea.org/publications/freepublications/publication/energy-policies-of-iea-countries---italy-2016-review.html>

Global Status Report by REN21, <http://www.ren21.net/gsr-2017>

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

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

## 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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