

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.

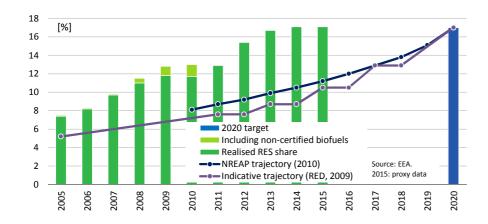


[Mtoe]

[MEUR]

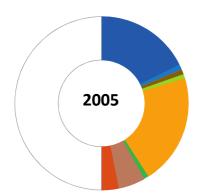
[jobs]

[billion euro]



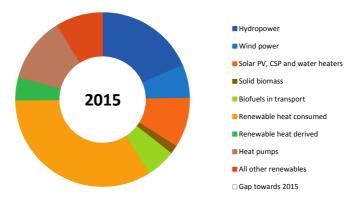
Abbreviations used:

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:	17.5%	Avoided fossil fuels:	32.8
Overall RES 2020 target:	17.0%	Avoided fuel expenses:	9.8
Share RES-E in electricity:	33.5%	RES Turnover:	18700
Share RES-T in transport:	6.4%	RES Employment:	97100
Share RES-H/C in heating:	19.2%		



Source: Eurostat, 2017.

	2005		2015				
	Energy	Energy	Employment	Turnover			
Hydropower	3764.8 ktoe	3949.5 ktoe	5000 Jobs	1000 MEUR			
Wind power	220.0 ktoe	1315.4 ktoe	26000 Jobs	2000 MEUR			
Solar PV, CSP and water heaters	2.7 ktoe	1972.7 ktoe	15500 Jobs	2750 MEUR			
Solid biomass	186.3 ktoe	339.4 ktoe	22000 Jobs	2150 MEUR			
Biofuels in transport	176.7 ktoe	1164.0 ktoe	6000 Jobs	1100 MEUR			
Renewable heat consumed	4366.6 ktoe	7198.1 ktoe					
Renewable heat derived	190.5 ktoe	904.6 ktoe					
Heat pumps	1070.0 ktoe	2584.5 ktoe	10000 Jobs	6500 MEUR			
All other renewables	673.4 ktoe	1857.7 ktoe	17600 Jobs	4200 MEUR			
Gap towards 2015	10634.8 ktoe			Source: Furostat FurObserv'FR 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 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 polices 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
RES-E									
- Offshore wind		\boxtimes							
- Onshore wind									
- Solar									
- Hydro									
- Geothermal									
- Solid biomass									
- Biogas									
RES-H/C - Solar thermal									
- Geothermal									
- Biomass				\vdash	\vdash		\vdash	\vdash	
- Biogas	H			H					
- Small scale installations, e.g.	Ш			ш					
solar thermal collects, heat									
pumps, biomass boilers and	ΙШ	Ш			Ш		Ш	Ш	Ш
pellet stoves									
- Others, i.e. aerothermal,									
hydrothermal					Ш				
RES-T									
- Bio gasoline									
- Biodiesel									

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

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

Instrument	Description
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 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 are non-repayable funds disbursed by one party (grant makers), often a government Grants department, corporation, foundation or trust, to a recipient, often (but not always) a nonprofit entity, educational institution, business or an individual. (Source: Wikipedia.org)

In Green public procurement contracting authorities take environmental issues into account Green public 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)

A RQS mandates certain market actors (typically retail suppliers or large energy end-users) Renewable quota 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.

> 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.

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.

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.



This project is funded by the European Union under contract nº ENER/C2/2016-487/SI2.742173

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.

procurement

scheme (RQS)

Sliding feed-intariff

Soft loans

Tax credits