



August 2015

LOG FILE OF CHANGES IN SUPPORT POLICIES AS COMPARED TO LATEST MEMBER STATE PROGRESS REPORT

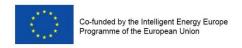


The EurObserv'ER project

The EurObserv'ER Barometers monitor the renewable energy progress in each Member State of the European Union. Every two months a barometer dedicated to one particular renewable energy technology is published. Moreover, once a year an <u>Overview Barometer</u> collects the main indicators published during the year and completes these with additional renewable sectors which have not been detailed in the individual Barometers. Finally, the Overview Barometer also reports on socioeconomic aspects: employment and turnover in the field of renewables, and the renewable energy investment climate. The country policy reports monitor policy developments by providing an overview of policy changes compared to the Member State Progress Reports.

All Barometers are available for download at http://www.eurobserv-er.org/. An overview of direct links to Barometers is available in Annex B.

New Barometer releases are announced on Twitter (https://twitter.com/eurobserv_er).



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Abstract

In Italy, Renewable energy sources in are promoted through **price and tax regulations** mechanisms. Several kinds of feed-in and premium tariffs co exist besides tendering schemes depending on technology and size of RES systems. Additionally regional support schemes exist for RES electricity. The thermal (heating and cooling) energy generated from renewable energies is incentivized through tax regulation and loans. A quota system is presently used for biofuels (transport).

In the year 2012 the major share of renewable electricity generation is accounted for by hydropower (3796 ktoe), mainly large plants. PV (1622 ktoe and wind power (1066 ktoe) provide the next largest contributions. As for renewable heating, solid biomass makes the largest contribution with 4671 ktoe ktoe, followed by geo thermal at 3228 ktoe. Biofuels used in renewable transport amount to 1343 ktoe (source: EurObserv'ER, 2014, www.eurobserv-er.org).

Under the country's NREAP, Italy has set a renewable energy target (electricity) of 26% to be achieved by 2020. The 2012 total share of renewable energy in Italy amounted to 13.5%; the target for 2020 has been defined as 17% (source: 'The State of Renewable Energies in Europe', 2013 edition).

Abbreviations

| ANEV | Associazione Nazionale Energia del Vento (Italian Wind Energy Association) | |
|---------|--|--|
| ВСНР | Block-type heating power station | |
| BTL | Biomass-to-Liquids | |
| CHP | Combined heat and power plant | |
| EEAG | Environmental and energy aid guidelines (issued 9 April 2014) | |
| EU-27 | European Union, 27 Member States (excludes Croatia) | |
| EU-28 | European Union, 28 Member States (includes Croatia) | |
| FEC | Final energy consumption | |
| FiT | Feed-in tariff (scheme) | |
| FiP | Feed-in premium (scheme) | |
| GDP | Gross domestic product | |
| GHG | Greenhouse gas(es) | |
| GWh | Gigawatt hour | |
| HH | Households | |
| HP | Heating plant | |
| HVDC | High-voltage direct current transmission | |
| IEA | International Energy Agency | |
| ktoe | Kiloton oil equivalent | |
| kWh | Kilowatt hour | |
| MSW | Municipal solid waste | |
| Mtoe | Megaton oil equivalent | |
| MWh | Megawatt hour | |
| N/A | Not available | |
| NREAP | National Renewable Energy Action Plan | |
| PEC | Primary energy consumption | |
| PV | Photovoltaic energy | |
| RE | Renewable energy | |
| RED | Renewable Energy Directive | |
| RES | Renewable energy sources | |
| RES-E | Electricity from Renewable Energy Sources | |
| RES-H/C | Heating and Cooling from Renewable Energy Sources | |
| RES-T | Transport from Renewable Energy Sources | |
| RMSW | Renewable Municipal solid waste (renewable fraction in MSW) | |
| RQS | Renewable quota scheme, typically administered with a certificate scheme | |
| TSO | Transmission system operator | |
| · | | |

Renewable energy mix and 2020 target

In the year 2012 the major share of renewable electricity generation is accounted for by hydropower (3796 ktoe), mainly large plants. PV (1622 ktoe and wind power (1066 ktoe) provide the next largest contributions. As for renewable heating, solid biomass makes the largest contribution with 4671 ktoe ktoe, followed by geo thermal at 3228 ktoe. Biofuels used in renewable transport amount to 1343 ktoe (source: EurObserv'ER, 2014, www.eurobserv-er.org).

The 2012 share of renewable energy in Italy amounted to 13.5%; the target for 2020 has been defined as 17% (source: 'The State of Renewable Energies in Europe', 2013 edition).

Table Renewable energy production in the 27 Member States of the European Union (EU-27) and the corresponding figures for Italy. Data have been expressed in ktoe and refer to the year 2012

| | European Union | | Contribution of |
|------------------|----------------|-------|-----------------|
| [ktoe, 2012] | (27 countries) | Italy | Italy to EU-27 |
| Hydro* | 29408 | 3796 | 12.9% |
| Wind* | 17089 | 1066 | 6.2% |
| Solar PV | 5732 | 1622 | 28.3% |
| Solar thermal** | 2116 | 155 | 7.3% |
| Solid Biomass*** | 74804 | 4671 | 6.2% |
| Biogas | 6212 | 581 | 9.3% |
| MSW*** | 4426 | 257 | 5.8% |
| Geothermal | 7825 | 3228 | 41.3% |
| Biofuels | 11711 | 1343 | 11.5% |
| Ocean energy | 44 | 0 | 0.0% |

^{*} Normalised electricity generation

Source: EurObserv'ER, 2014 (www.eurobserv-er.org)

^{**} including electricity generation from Concentrated Solar Power

^{***} including liquid biomass

^{****} Municipal Solid Waste only regards the renewable fraction in the waste

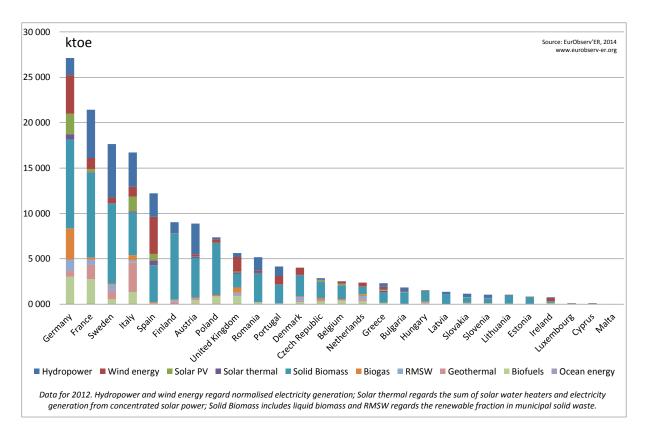


Figure Renewable energy production in the European Union Member States. Data have been expressed in ktoe and refer to the year 2012. Source: EurObserv'ER, 2014 (www.eurobserv-er.org)

Recent RES Policy Developments

The current EurObserv'ER policy profile is listing recent policy changes in the EU Member States. Starting point for this monitoring is the situation as it has been described in the country's Progress Report (which were due end of 2013). All Renewable Energy Progress Reports are available in English language from www.eurobserv-er.org (translated versions).

| Date | Technology | Policy change |
|---------------|--|---|
| January 2014 | | The Italian progress report was released by the EC in |
| | | December 2013. |
| February 2014 | | <no be="" change="" reported="" to=""></no> |
| April 2014 | | <no be="" change="" reported="" to=""></no> |
| June 2014 | | <no be="" change="" reported="" to=""></no> |
| August 2014 | PV | A decree-law adopted in August introduced retroactive FiT cuts and new taxes for self-consumed electricity. Self-consumed PV electricity will be subject to a 5% "general system charge" as of 1 January 2015. |
| November 2014 | All RES excluding (PV) Electrical renewable energy – not PV | Decreto n.268/2014. The Decreto offers the possibility to choose the reshaping of the incentive: in this case, the manufacturer will access an incentive reduced by a certain percentage, but for a longer period of 7 years. |
| December 2014 | Al RES (self- consumption) | Delibera n. 609-612. The Delibera n. 609 and 612 change from 2015 rules, costs and rates on autoconsumption of renewable energy and "Scambio sul posto". Rates of the auto-consumption-systems can be updated every year, (always according to criteria such as the maximum possible increase of 2.5% on the previous year). The "Scambio sul posto" is extended to plants up to 500 kW, activated by 2015. An exemption for those up to 20 kW, independently of the entry into operation, is introduced. |
| April 2015 | All RES, energy efficiency | Decreto ministeriale 24 aprile 2015 - POI Energie rinnovabili ed efficienza energetica. Up to 120 ml€ for financing investment (min 3000€) in the sector of renewable energy and energy efficiency. |
| July 2015 | | <no be="" change="" reported="" to=""></no> |
| Summer 2015 | Renewable heat | The Conto Termico is under revision. A new version should come into force before summer 2015. |

Note to the reader: the above overview had been compiled with care. However, in case you miss recent developments please be invited to inform EurObserv'ER on policy changes in a Member State. For communication use the e-mail (policy@eurobserv-er.org) or Twitter (https://twitter.com/eurobserv_er).

Glossary

Auctions for granting renewable energy support

An auction is a process, organised by a governmental renewable energy implementation agency, of granting production or investment support to a specified volume of eligible renewable energy (or renewable energy generation capacity) based on the lowest bids per unit of renewable energy (or renewable energy generation capacity) by eligible renewable project developers.

Degression rate

See under 'Sliding feed-in tariff'

Feed-in tariff (FiT)

A technology-specific support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers, typically for a period of 10-20 years. The FiT level is set *ex ante* by the National Regulatory Agency (NRA). It is to cover all future production costs including a *normal* rate of return to capital invested. In many schemes priority network access is offered to eligible renewable electricity generators, whilst a designated third party - e.g. the transmission or distribution network operator concerned - is being mandated to pay the FiT remuneration due. 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.

Feed-in premium (FiP)

A technology-specific support scheme which provides for a technology-specific subsidy 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 (see under 'Floating FiP') rate, projected by the National Regulatory Agency (NRA) to enable renewable energy generation investments deemed commercially attractive by project developers without yielding supranormal profits.

Floating FiP

A feed-in premium, which is periodically adjusted to exactly offset the change in the average energy wholesale market price, based on a prespecified 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)

NRA

National Regulatory Agency

Renewable quota scheme (RQS)

A renewable quota scheme 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. Typically the renewable quota target is increased gradually over time. Renewable quota systems are also known under terms such as quota (obligation) schemes or renewable portfolio standards.

Request for tenders (RFT)

A request for tenders (RFT) is a formal, structured invitation to suppliers, to bid, to supply products or services. In the public sector an official fee is needed to fortify and secure the tender bid engagement/win documents, such a process may be required and determined in detail by law to ensure that such competition for the use of public is open, fair and free from bribery and nepotism. For example, a government may put a certain level of MW of offshore wind energy at a pre-defined location 'out to tender'; that is, publish an invitation for other parties to make a proposal for the construction of offshore wind farms, on the understanding that any competition for the relevant government contract must be conducted in response to the tender, no parties having the unfair advantage of separate, prior, closed-door negotiations for the contract. An evaluation team will go through the tenders and decide who will get the contract. (source: adapted from Wikipedia.org)

RD&D funding

The funding of research, development and demonstration activities and programmes. For technologies far remote from commercial maturity, government grants or subsidies might be considered. For technologies close to commercial maturity which are not taken up for commercial research any way, instruments such as fiscal instruments (tax credits, accelerated depreciation, etc.) and public-private partnerships may be considered, based on shared public and private RD&D funding.

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 submarket-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.

Tenders

See 'Request for tenders'

References

EurObserv'ER, 2014, www.eurobserv-er.org

Agenzia delle Entrate: website's page for tax reduction.

ANEV 2012: <u>Proposta ANEV sul DM attuativo al D.lgs 28/2011 sulle modalità per l'attuazione dei sistemi d'incentivazione</u>, Associazione Nazionale Energia del Vento, (sourced January 2012).

Delibera 609/2014 http://www.autorita.energia.it/allegati/docs/14/609-14.pdf

Delibera 612/2014 http://www.autorita.energia.it/allegati/docs/14/612-14.pdf

<u>Decreto 268/2014 http://www.gazzettaufficiale.it/eli/id/2014/11/18/14A08877/sg;jsessionid=R-Wu5jEvePls3q7sw07esQ .ntc-as2-guri2b</u>

ENEA 2012: website for tax reduction of 55%

Gazzetta Ufficiale 2013: <u>Decree introducing the new incentive mechanism for renewable heating systems</u>, (sourced, April 2013).

GSE 2013: GSE: website's page about all inclusive tariff, Gestore dei Servizi Elettrici (GSE).

GSE 2013: Fifth feed-in scheme, Gestore dei Servizi Elettrici (GSE), (sourced April 2013).

GIFI 2013: <u>Conto Energia V 2013</u>, Gruppo Imprese Fotovoltaiche Italiane(Italian Photovoltaic Industry Association), (sourced August 2014).

Ministero Sviluppo Economico 2015: Decreto Ministeriale, (sourced May 2015).

NREAP Italy 2010: English version, (sourced August 2011).

PV Magazine2014: Italian FiT cuts destabilizing PV market, 8 Sep 2014, (sourced October 2014).

RES Legal 2014: Legal Sources on renewable energy in Italy: <u>Electricity</u>, <u>Heating and Cooling</u>, <u>Transport</u>, (last updated November 2014).

Seconda relazione dell'Italia in merito ai progressi ai sensi della direttiva 2009/28/CE

Solathermal World 2015: Italy: <u>Conto Termico is under revision and an improved version should</u> <u>come into force before summer</u>, 1 May 2015.

Annex A

Overview of support schemes in Italy

Renewable Electricity

Feed-in tariff I (tariffa onnicomprensiva)

All plants except for PV plants with an installed power between 1kW and 1 MW are entitled to choose this feed-in tariff in alternative to the premium tariff

Wind onshore: € 127 – 291 per MWh
Wind offshore: € 165-176 per MWh
Geothermal: € 135 per MWh

Biogas: € 140 and € 236 per MWh. (over 20 years)

Biomass: € 180 and € 257 per MWh Hydropower: € 155 – 257 per MWh

Photovoltaic energy:

| Type of plant | Incentives mechanism | Duration of the incentives | Incentive | Tariff |
|---------------------|---------------------------------|----------------------------|---|-----------------------------------|
| Photovoltaic Energi | 5° "Conto | 20 years | Installed power <=1 MW: total comprehensive tariff and premium tariff for the energy to the grid and the auto-consumed energy | |
| | Energia" (Energy Account) | | Installed power >1 MW Variable premium tariff for the energy to the grid and premium tariff for the auto-consumed energy | Auto-consumption or energy market |

Feed-in tariff II (Ritiro dedicato)

"Ritiro Dedicato" is the regulation of the sale of electricity in Italy rather than a "classical" feed-in tariff. Producers up to certain capacities (100kW for PV and 500kW for Hydro if they make use of support schemes, 1 MW for all sources if they do not make use of support schemes) may choose between the minimum tariff (prezzo minimo garantito) determined by the energy authority and the market prices. Eleigible technologies are wind energy, solar energy, geothermal energy, biogas, hydropower and biomass. The amount of payment decreases with increasing output and are adjusted for inflation.

Net-Metering (scambio sul posto)

In Italy, RES-E producers can make use of net-metering ("Scambio Sul Posto") if their plant's capacity is 20 kW to 200 kW (lower than 20 kW if commissioned before 31 December 2007) This possibility may be taken instead of the tariffa onnicomprensiva or the sale of electricity in the free market or in the market governed by "Ritiro Dedicato, or the Premium Tariff I or the Tendering Scheme. The principle of Scambio sul Posto is not based on direct payments but on the balance of the energy fed in and consumed (Art. 1, 2 570/2012/R/efr).

Tax regulation

Wind and solar energy are eligible for a 10% reduced value added tax (instead of 20%)

Premium tariff II (for CSP)

The tariff varies according to the amount directly attributable to the solar source. A degression of 5% in 2015 and 2016 is in place.

For plants with a surface up to 2,500 m²:

- 0 % to 15 % € 0.36 per kWh
- 15 % to 50 %, € 0.32 per kWh
- 50 % or more € 0.30 per kWh

For plants with a surface above 2,500 m²:

- 0 % to 15 % € 0.32 per kWh
- 15 % to 50 %, € 0.30 per kWh
- 50 % or more € 0.27 per kWh

CSP

The Feed-in Tariff system in place since 31 December 2012, involves banding by total receiver surface, around the 2 500-m² threshold and the amount of electricity from non-solar sources required to integrate the solar output. The FiT for large plants (>2 500 m²) is € 0.32/kWh where the solar fraction is over 85%, € 0.30/kWh from 50 to 85%, and € 0.27€/kWh where is it less than 50%. The Feed-in Tariff will be paid for 25 years and drop by 5% from 2016 onwards and by a further 5% from 2017 onwards. The Feed-in Tariffs for small plants (<2 500 m²) adopt the same solar fraction rules and are € 0.36/kWh, € 0.32/kWh and € 0.30/kWh respectively and apply the same sliding scale rules. Plants with more than 10 000 m² of receivers will be required to have an energy storage system.

Renewable Heat (Biomass, biogas, geothermal, biodegradable waste use)

a) Conto Termico

The price-based scheme "Conto Termico" provides an incentive for small RES-H sources. Heat pumps (aerothermal, geothermal, hydrothermal), biomass and solar thermal are eligible technologies and the incentive is granted for a period varying between 2 and 5 years.

b) Loan (Fondo Kyoto)

The fund has a total amount of \in 600 million and a life-span of three years (2012 – 2013 – 2014). It supports biomass, biogas, geothermal and solar thermal plants.

c) Tax regulation scheme

The tax regulation scheme allows for a 55 % tax deduction from personal income tax (IRPEF) and corporate income tax (IRES) ("detrazione") for expenses related to refurbishment of existing buildings and / or energetic requalification of buildings and / or installation of RES-H technologies. This disposition is valid for works undertaken up to 31 December 2013.

Solar thermal heat

The legal framework setting a Feed-in Tariff for heat production has been in place since the law of 2 January 2013 (law no. 28, art. 28). Beyond, the Conto Termico was implemented, which is a dressed-up installation subsidy system. Solar thermal installations (hot water-only or combined

systems) of less than 50 m² are eligible for \le 170/m2 of aid per annum for two years. When combined with a cooling system, the incentive rises to \le 255/m² for two years. Systems with more than 50 m² of collectors are eligible for \le 55/m² of aid per annum for 5 years and when combined with a solar-powered cooling system \le 83/m² is payable.

Biofuels (biodiesel, bio-ethanol, biogas and other fuels)

A quota system for biofuels is currently in place in Italy. This system is the main tool through which the 10% goal of biofuels in consumption is to be reached by 2020. Decree 28/2011 set the obligatory share of biofuels in fuel consumption at 4.5 % in 2012. The projected blending targets in fuel consumption are given in the table below.

The current goal foresees 5 % of biofuels in consumption by 2015.

| Year | Blending target |
|-------------------|-----------------|
| 2010 | 3.5 % |
| 2011 | 4.0 % |
| From 2012 to 2014 | 4.5 % |
| 2015 | 5% |

There are no subsidies or tax reliefs for biofuels in Italy, as the government removed excise exemptions for biodiesel and bioethanol in 2011.

Italy has become the first member of the European Union to mandate the use of renewable fuel made from inedible crops. The law states that as of January 2018, petrol and diesel must contain at least 1.2% advanced biofuel. By 2020, this will increase to 1.6% and two years later, a minimum 2% biofuel blend will be adopted.

ANNEX B

The EurObserv'ER Barometers are all available for download.

Links to all EurObserv'ER publications:

'The State of Renewable Energies in Europe' (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-annual-overview-barometers

Wind Energy Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-wind-energy-barometers

Photovoltaic Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-photovoltaic-barometers

Solar Thermal Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-solar-thermal-and-concentrated-solar-power-barometers

Biofuels Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-biofuels-barometers

Biogas Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-biogas-barometers

Renewable Municipal Waste Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-renewable-municipal-waste-barometers

Solid Biomass Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-solid-biomass-barometers

Heat Pump Barometer (PDF, multiple languages)

http://www.eurobserv-er.org/category/all-heat-pumps-barometers