

Residential Prosumers in the European Energy Union

EAHC/2013/CP/04

Mapping the legal and regulatory framework in the 28 Member States, Iceland and Norway

Italy



This study is part of the mapping of the legal and regulatory framework for residential prosumers in the 28 Member States, Iceland and Norway, within the project on Residential Prosumers in the European Energy Union EAHC/2013/CP/04, and carried out by Milieu Ltd (Belgium), Chaussée de Charleroi, 112, B-1060 Brussels, tel: +32 (0)2 506 1000; web address: www.milieu.be

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National report on the regulatory framework for residential prosumers: Italy

General Description of the national legal and regulatory framework

General

Italy has one of the highest energy import dependence rates as compared to other EU member states. Lowering dependence on energy imports and complying with the European 20-20-20 targets are two objectives at the heart of Italy's domestic energy policy¹.

The economic downturn in Italy and the EU has led to a dramatic drop in total electricity consumption. However, the proportion of electricity generated from renewable energy sources has increased impressively due to the priority granted to renewable energy (dispatching priority). To meet the EU renewable energy targets, Italian electricity regulations give priority to energy produced by renewable energy sources².

Italy is today a leading producer of electricity from renewable energy sources (RES). The solar photovoltaic (PV) sector has historically been the dominant renewable energy technology in Italy due to the Italian incentive regime for solar PV projects and also to Italy's advantageous geographic position and resulting sun exposure.³ Solar PV plants located in the south of Italy achieve a very high level of utilisation - over 1,500 hours a year - which has led developers from around the world to choose the regions in southern Italy to build some of the world's largest solar PV parks⁴.

The focus on ground-mounted solar PV has lessened slightly in recent years, mainly because of cuts in public incentives that were announced in 2012. Nevertheless, Italy's renewable energy market remains vital. Interest has been increasing in developing other types of renewable projects, including wind, geothermal, wave and tidal power, biomass, biogas, landfill gas and sewage treatment gas. Italy's current legislative regime provides for incentives for the generation and distribution of energy produced by each of these RES.

Renewable energy production

During 2014 Italy produced 120,678.9 GWh of electricity from renewable energy sources. This corresponded to 43.3% of net domestic electricity production⁵.

Out of total energy production in 2014, renewable sources made the following contribution:

- Hydroelectric plants: 58,545.4 GWh
- Biomass plants: 18,732.4 GWh
- Wind powered plants: 15,178.3 GWh
- Photovoltaic plants (the technology mainly used in generating electricity from solar light, the other being a number of solar thermal technologies): 22,306.4 GWh
- Geothermic plants: 5,916.3 GWh

Regulatory framework

The production, transmission and distribution of energy is a shared competence between state and the regions as established by Article 117 of the Italian Constitutions. As a consequence, the regulatory framework of renewables is quite fragmented. The applicable legislation to prosumers is: Decree 79/1999 which transposed the first EU Electricity Directive (96/92/EC), Decree 387/2003 which transposed Directive 2001/77/EC on the promotion of electricity produced from

¹ Gestore Servizi Energetici, 2015, *Rapporto Attività 2015*.

² Ibid.

³ For such reason, the present report focuses mainly on energy production through PV systems.

⁴ Ibid.

⁵ ISTAT, 2014, Energy – Consumption for domestic use, http://dati.istat.it/Index.aspx?DataSetCode=DCCV_CNSENRG.

renewable energy sources in the internal electricity market, Law 239/2004 implementing the second EU Electricity Directive (54/2003/EC), and Decree 28/2011 implementing Directive 2009/28/EC on the promotion of the use of energy from renewable sources.

1. What types of residential prosumers are there in your country on the basis of type of RES used and size of the installation?

Answer:

The concept of residential prosumers in Italy is not yet recognised by law. However, Article 2, paragraph 2 of Decree 79/99 defines ‘**Self-producer**’ (for the definition, see Question 3.3.) which is the closest term to ‘prosumers’.

Specific rules and incentives established by the Energy Authority apply to owners of PV systems of up to 20 MW who can consume their produced electricity or sell such electricity to a unique consumer located within the same local, private grid. Local consumption is called ‘Utility Efficient System’ (*Sistema Efficiente di Utenza*) as established by the Energy Authority Resolution 578/2013/R/eel.

2. What is the institutional framework & division of competences regarding residential prosumers in your country?

Answer:

The **Ministry of Economic Development** (*Ministero dello Sviluppo Economico/Settore Energia*) (MSE)⁶ issues regulations that affect the general framework of the electricity industry. In particular, it manages and co-ordinates at the high level:

- The security of supply and energy infrastructure,
- Mineral and energy resources,
- Nuclear fission, renewable energies and energy efficiency.

The **Authority for Electric Energy, Gas and the Water System** (AEEG, hereinafter the Energy Authority)⁷ is the independent body that regulates, controls and monitors the electricity market in Italy. It provides an advisory and reporting service to the government and parliament, and formulates observations and recommendations concerning issues in the regulated sectors of electricity and gas. The Energy Authority may issue regulations that apply to market operators, and orders and decisions that affect single operators. The authority’s main responsibilities are:

- Sets tariffs for the regulated sectors.
- Establishes guidelines for production and distribution services.
- Formulates observations and recommendations regarding market structure.
- Reports to the Anti-trust Authority any suspected competition infringement.
- Makes observations to the government and Parliament concerning licences and authorisations.
- Issues detailed regulations, either independently or in accordance with principles laid down by the MSE.

Electricity Services Operator (*Gestore dei Servizi Energetici*) (GSE)⁸. In the context of renewable energy, the Electricity Services Operator, manages support schemes for renewable energy sources (RES) throughout Italy. GSE is a state-owned company, whose sole shareholder is the Ministry of Economy and Finance, which exercises its tasks under the vigilance of the MSE. GSE fosters sustainable development by providing support for renewable electricity generation

⁶ Ministry of Economic Development website: www.sviluppoeconomico.gov.it

⁷ Authority for Electric Energy, Gas and the Water System website: www.autorita.energia.it

⁸ Electricity Services Operator website: www.gse.it (English version of the website is available).

and by taking action to build awareness of environmentally efficient energy uses. The GSE is responsible for:

- Support for renewable electricity.
- Purchase of electricity from producers and resale in the market.
- Support to institutions and to the Public Administration.
- Promotion of renewables and of the renewable-energy industry.

In Italy there are different permitting authorities depending on the type and size of the RES installations. For PV plants of capacity below 20 KW, the permitting authority is the local municipality; in other specific cases of PV plants of capacity below 20 KW (see point 4 below for more details), the permitting authority is the network manager, Enel Distribuzione (e-distribuzione), the Enel Group company in charge of electricity distribution in Italy. If the photovoltaic system to be installed is above the 20 kW or if the applicant has not full property of the areas or the building concerned, another type of authorization is necessary. In this case, responsibility is, depending on the case, the Province or the Region in which the installation is located.

Specific Questions on the regulatory framework for residential prosumers

3. What is the regulatory framework for residential prosumers in your country?

General

The concept of residential prosumers in Italy is not yet recognised by law. However, Article 2, paragraph 2 of Decree 79/99 defines ‘Self-producer’ (for the definition, see Question 3.3.).

In addition, Decree 79/99 recognises that each citizen and enterprise can produce energy to meet part of its needs, and can also sell the surplus energy to get income. The sale of the energy produced can be made on the national grid of Enel (and paid by the GSE), or to another end user as established by the Energy Authority *Resolution 578/2013/R/eel* on ‘Simple systems of production and consumption’ (SSPC), among which are the ‘Utility Efficient System’ (*Sistemi Efficienti di Utenza*, SEU).

3.1. What is the existing legislative framework regulating Renewable Energy Projects in your country?

Answer:

The production, transmission and distribution of energy is a shared competence between state and the regions as established by Article 117 of the Italian Constitutions. As a consequence, the regulatory framework of renewables is quite fragmented.

The first EU Electricity Directive (96/92/EC) was implemented by the Legislative Decree No. 79 of 16 March 1999 (**Bersani Decree**)⁹. The Bersani Decree introduced the first steps for liberalisation of the electricity market, by reviewing the entire power industry, reorganising its legal framework and laying down fundamental principles, including: independence between generation, trading activities and transmission and dispatching activities from 2005 (unbundling) and the introduction of third party access to the grid (TPA), that includes:

- fair and non-discriminatory terms and conditions for new connections to the grid;
- regulated and non-discriminatory grid tariffs; and
- fair and non-discriminatory dispatching activity.

⁹ Legislative Decree No. 79 of 16 March 1999 (Bersani Decree), available at: <http://www.parlamento.it/parlam/leggi/deleghe/99079dl.htm>.

In implementing the second EU Electricity Directive (54/2003/EC) in 2004, **Law No. 239/2004**¹⁰ introduced further measures.

Further to Legislative Decree No. 79/99 and Law No. 239/04, subsequent legislation has been introduced reflecting EU law developments and demands in the electricity market.

In addition, pricing mechanisms have been amended to address some of the unintended consequences of the installation of large numbers of photovoltaic power generation plants by Law Decree No. 83/2012 converted into Law No. 27 dated 24 March 2012. The aim is to reduce the impact on operators of conventional plants and certain intraday pricing distortions. A capacity payment mechanism has been introduced; conventional plants using non-renewable sources are granted specific compensation for making available their capacity to normalise input from non-programmable renewable sources and ensure grid security.

Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market was transposed through Decree no. 387/2003¹¹. Article 12 of this decree established the simplification of permit procedures (through a single authorisation procedure managed by the region) for the installation of renewable energy plants¹². Each region has therefore regulated the discipline differently through regional laws¹³, thus the legislative fragmentation.

To avoid regulatory fragmentation at the regional level in the field of renewables, the government has published in 2009 'Guidelines for the authorization of plants powered by renewable sources'¹⁴. The aim of the guidelines is to provide a unique discipline, valid throughout the national territory.

Directive 2009/28/EC on the promotion of the use of energy from renewable sources was transposed through Decree 28/2011¹⁵. The decree introduced further simplifications for the installation of renewable energy plants.

3.2. Does the Renewables National Action Plan include any objectives for residential prosumers (if so, please specify)

The National Action Plan on the promotion of energy from renewable sources¹⁶, adopted in 2009, is the planning document that outlines the actions needed to achieve, by 2020, the binding target to reach 17% of gross domestic consumption of energy produced from renewable sources. The plan does not include objectives for residential prosumers.

3.3. Is there a definition (legal or regulatory) of residential prosumers (or self-consumption) in your country? If so, state it and describe the elements of this definition?

There is no definition of 'prosumers' in legislative or regulatory texts, although the concept has appeared in recent policy documents prepared by the Energy Authority. However, Article 2,

¹⁰ Law No. 239/2004, available at: <http://www.camera.it/parlam/leggi/04239l.htm>.

¹¹ Legislative Decree no. 387/2003, available at: <http://www.camera.it/parlam/leggi/deleghe/03387dl.htm>.

¹² The general principles of the administrative procedure are set by Law no. 241/1990 and subsequent amendments.

¹³ A list of all regional laws on renewables is available at the following link:

<http://enerweb.casaccia.enea.it/enearegioni/UserFiles/Fontirinnovabili/normativa/normativa.htm> (in Italian only).

¹⁴ Ministry of Economic Development, 2010, *Guidelines for the authorization of plants powered by renewable sources*, viewed 7 February 2017, http://www.minambiente.it/sites/default/files/GAB-00_2010-0026108.pdf.pdf

¹⁵ Legislative Decree 28/2011, available at: <http://www.gazzettaufficiale.it/eli/id/2011/03/28/011G0067/sg>.

¹⁶ Ministry of Economic Development, 2010, *National Action Plan on the promotion of energy from renewable sources*, viewed 7 February 2017,

<http://www.gse.it/it/Statistiche/Simeri/AreaDocumentale/Documenti%20Piano%20di%20Azione%20Nazionale/PAN%20DETTAGLIO.pdf>.

paragraph 2 of Decree 79/99 defines 'Self-producer' as: *'the natural or legal person who produces electricity and uses it for no less than 70% a year for their own use or for the use of the company subsidiaries, as well as for use of members of electricity production and distribution cooperatives referred to in Article 4, number 8 of law 6 December 1962, n. 1643, for members of the consortia formed for the production of electricity from renewable energy sources and for the supply authorized uses in industrial sites prior to the effective date of this decree'*. The definition is quite broad as it does not specify the size of the installations that self-produce electricity as well as refers to all types of electricity installations and not specifically to RES installations.

As explained under Question 3, although not using the term 'prosumers', the same Decree recognises that each citizen and enterprise can produce energy to meet part of its needs, and can also sell the surplus energy to get income. The sale of the energy produced can be made on the national grid of Enel (and paid by the GSE), or to another end user as established by the Energy Authority Resolution 578/2013/R/eel on 'Simple systems of production and consumption' (SSPC), among which are the 'Utility Efficient System' (*Sistemi Efficienti di Utenza*, SEU).

4. What are the permitting requirements for each type of residential prosumer?

General

The Italian legislature has adopted and promoted rules to simplify the authorisation process for building and operating all types of renewable energy projects. The authorization for photovoltaic plants in Italy is sometimes simple, sometimes very complex: it all depends on 1) the regional regulations governing permits, each according to its own criteria, which have to stay consistent with national guidelines, 2) the area in which the plant installed and 3) the size of the plant.

For PV plants of capacity below 20 KW a communication (*Prior Notification*) to the local municipality is sufficient, except for specific cases in which a *Simplified Authorization Procedure* can be followed. If the photovoltaic system to be installed is above to the 20 kW, or if the applicant has not full property of the areas or the building concerned, another type of authorization is necessary: the *'Single Authorization'*. In this case, responsibility is no longer of the municipality, but, depending on the case, the Province or the Region.

Prior Notification

For small domestic plants or small industrial plants of capacity below 20 KW, the simple 'Communication to the municipality', which is a 'prior notification', is enough to have the authorisation to start the construction works.

The '*Prior Notification*' consists of a simple notification of the start of the construction works. It can be submitted electronically in many municipalities and no reply from the municipality is required.

Simplified Authorization Procedure

From November 2015, a further simplified procedure facilitates and speeds up the bureaucratic process for the construction of many small installations: the "Simplified Procedure for the construction, connection and start-up of small PV systems on the roofs of buildings"¹⁷. The bureaucratic process only requires the compilation and submission of a Single Application Form in two stages.

In the case of Simplified Authorisation Procedure, the contact person for permits is no longer the municipality where the plant is installed, but the Network Manager which, in this case, is Enel Distribuzione. Enel distribution becomes the only interlocutor of the applicant. The Single Application Form is available only in electronic form on Enel Distribuzione's portal.

¹⁷ Ministry of Economic Developer, 2015, *Due soli click per impianto fotovoltaico sui tetti fino a 20kw*, viewed 7 February 2017, <http://www.sviluppoeconomico.gov.it/index.php/it/194-comunicati-stampa/2032755-due-soli-click-per-impianto-fotovoltaico-sui-tetti-fino-a-20kw> .

With this single procedure all permitting requirements are complied with in two steps: the launch of the installation works is communicated to the municipality, the connection request is forwarded to the network facility Enel and request for access to net metering is forwarded to the GSE.

The first part of the Form, to be submitted prior to the starting of the installation works, consists of the communication of the start of construction to the municipality and specifies the cadastral information and the registry of the applicant. Within 20 days Enel Distribuzione checks the compatibility of the application and verifies that the network connection works are scheduled. Enel Distribuzione then informs the applicant, and sends a copy of the Form to the municipality, the Region and the GSE.

The second part of the Form, to be forwarded to Enel Distribuzione when the works are completed, consists in the communication of completion of work and communicates the technical data of the plant, the declaration of conformity and the application for starting the net metering.

Single Authorization procedure

Article 12 of Legislative Decree No. 387/2003 introduces a Single Authorization procedure for both the construction and operation of generation plants using renewable energy sources. The capacity threshold for the application of the Single Authorization procedure for PV plants is above 20 kW. In relation to renewable energy generation plants, the Single Authorization takes the place of most other necessary permits and consents, and also covers the connection cable. The Single Authorization is issued by regions (or by provinces when delegated), after a *conferenza dei servizi*. This is a non-judicial process ending in a hearing attended by authorised public representatives of interested bodies that may be affected by the planned RES generation plant. The decision is made by vote either in person or by absentee poll. The time limit for the issuing of the Single Authorization is 90 days from the relevant application¹⁸.

- 4.1. Does your country recognize certain forms of self-consumption and subject prosumers to certain
- requirements,
 - application fees and
 - one-off costs
- in order to give them a **permit or licence to generate energy**?

Answer:

Yes, specific requirements must be complied with in order receive the permit depending on the regional regulations governing permits which have to be consistent with national guidelines.

For the *prior notification* permit, photovoltaic systems must be attached to or integrated into the roofs of the buildings with the same inclination and the same orientation of the ground on which they are installed. The system components of photovoltaic panels must not alter the buildings on which they are installed. These criteria are valid if the system is not installed in protected areas or those subject to the constraints of the Code of cultural heritage and landscape. In these cases, other procedures are applicable and permissions are not always granted by the responsible bodies (municipality, province or region)¹⁹.

¹⁸ GSE, 2016, *Il quadro autorizzativo per impianti di produzione di energia elettrica da fonti rinnovabili*. Ricognizione della normativa nazionale e regionale, viewed 21 February 2017, <http://briareo.it/wp-content/uploads/2016/05/GSE-normative-regionali.pdf>.

¹⁹ L' autorizzazione per gli impianti fotovoltaici, Comune o Modello Unico?, 2016, Fotovoltaico Nord Italia, viewed 7 February 2017, <https://www.fotovoltaiconorditalia.it/mondo-fotovoltaico/l-autorizzazione-per-gli-impianti-fotovoltaici-la-comunicazione-al-comune>.

The prior communication to the municipality is the permit applicable also to other renewable energy plants that are compatible with the regime of *Net Metering* (see point 6.1). However, the installation must not:

- alter the volume of the building,
- alter the property surfaces,
- alter the use of the building,
- alter the number of units of which the property is made,
- imply an increase of the urban parameters,
- damaging structural parts of the building,
- be on buildings within the historic centers.

In addition, for the prior communication to the municipality to be the unique valid permit, the plant owner must have full property of the areas and the goods concerned by the plant construction works.

The *Simplified Authorization Procedure* is applicable to most of the new small household plants and small industrial facilities. It can be used by those who install a photovoltaic system with the following characteristics:

- must tap into a pickup point of low voltage, which already exists, and to which no other power plants are connected,
- must be of a capacity below or equal to the capacity on pickup point,
- must be, in any case, a plant up to a maximum of 20 kW of capacity,
- must be built on the roof,
- will have to tie in with the network mode "Net Metering" with GSE.

The installation types which refer to these requirements are most of the new small plants installed on the roofs of houses, small businesses, small warehouses and apartment buildings.

No fees or one-off costs are applied for the permit procedure.

- 4.2. Does the national legal/regulatory framework determine the contractual conditions under which prosumers are allowed to feed or sell their surplus back into the grid or to other consumers?

Answer:

Yes, the energy produced can be sold in the market or to the GSE.

The Italian law (Decree 79/99) recognises that each citizen and enterprise can produce energy to meet part of its needs, and can also sell the surplus energy to get income. The sale of the energy produced can be made on the national grid of Enel (and paid by the GSE), or to another end user as established by the Energy Authority *Resolution 578/2013/R/eel* on 'Simple systems of production and consumption' (SSPC), among which are the 'Utility Efficient System' (*Sistemi Efficienti di Utenza*, SEU).

Through the mechanism of simplified purchase and resale arrangements (***ritiro dedicato*** - see point 6.1 for more information), producers can sell the electricity generated and to be injected into the grid to GSE, instead of selling it through bilateral contracts or directly on IPEX (Italian Power Exchange).

5. What are the rules applicable to the access to the grid?

General

According to Decree 79/99, in Italy, grid operators are obliged to give priority access to renewable energy plants in the operation of their grids. They are also obliged to give priority dispatch to electricity from renewable sources. Plant operators may request their grid operator to expand the grid if the connection of a plant requires this expansion.

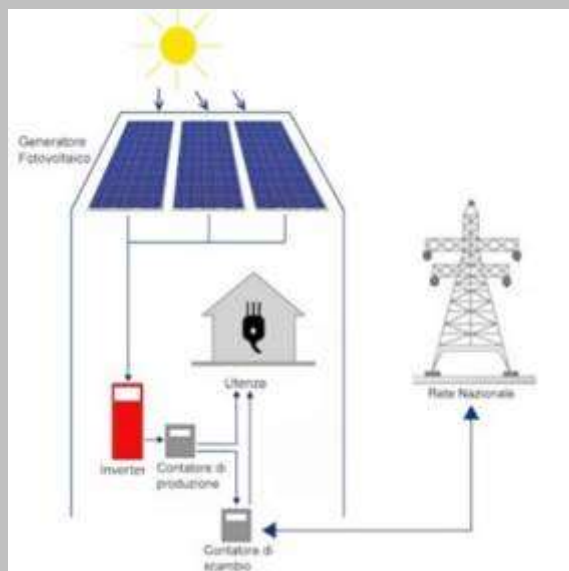
For interconnection of a new renewable plant to the grid, an agreement must be reached between the developer and the local grid operator, pursuant to the rules and criteria established by the Integrated Text of active connections (*Testo Integrato delle connessioni attive*, TICA)²⁰. The developer or plant owner must enter into an agreement with the grid operator for the management of the interconnection and the provision of relevant services.

5.1. What is the inter-connection configuration used for each type of residential prosumer?

Answer:

Operators of renewable energy plants are entitled to be connected to the national electricity grid upon request (Articles 3.1 and 9.1 DL 79/99). To this aim, the grid operator and a given plant operator conclude a contract (*contratto per la connessione*). The grid operator is obliged to conclude this contract (Articles 10.14 and 23.10 Annex 1 ARG/elt 99/08).

The scheme bellows describes the interconnection configurations for FV plants: the production unit is installed in the location of consumption and the electric power produced is instantaneously injected in the consumption unit. However, whenever there is a surplus, it can be injected in the grid, thereby avoiding waste.



Source: Fotovoltaico Nord Italia, 2016, *Come connettere alla rete il fotovoltaico*, <https://www.fotovoltaiconorditalia.it/idee/connettere-alla-rete-il-fotovoltaico>

5.2. Does the competence to determine the inter-connection configuration lie at State level or at a regional/lander level?

²⁰ Energy Authority, 2009, *Testo Integrato delle connessioni attive*, viewed 7 February 2017, <http://www.autorita.energia.it/it/schede/O/faq-tica.htm>.

Answer:

The competence to determine the inter-connection configuration lies at state level. Procedural and economic aspects of connection to the network are defined in Resolutions by the Energy Authority in relation to the value of the input power required (and not the "peak power" of the system e.g. 5 kWp, 100 kWp):

- Resolution ARG / elt 281/05: sets out the procedural and economic conditions for the connection service to the electricity grids²¹.
- Resolution ARG / elt 348/07: mainly establishes the economic conditions for the connection service to the networks with the obligation to connect third parties²².
- Resolution ARG / elt 99/08 - TICA: establishes the procedural and economic conditions of the service connecting to networks with an obligation to third connections²³.

- 5.3. Are there any rules to ensure that prosumers are inter-connected to the distribution network/the grid?

Answer:

No specific connection rules apply to prosumers. The same rules apply to all types of plant operators (see point 5.1).

- 5.4. What are the grid access and grid use principles and rules for the energy generated by each type of residential prosumer?

Answer:

Each photovoltaic system that injects renewable energy to the grid must be connected to the network of the national electricity distribution system. It must have a connection in injection and withdrawal with a single point of connection to the network.

According to Decree 79/99, the photovoltaic plant connected to the electricity grid, which in the most frequent cases is the connection to Enel (the national energy distributor), must take into account the costs and benefits of collective use of renewable energy sources. For this a plant from renewable sources has always the connection priority compared to traditional sources.

- 5.5. What are the network costs and charges for each type of residential prosumer?

Answer:

The costs for connection of PV plants to the grid are divided into two tranches: the first at the request of the estimate, the second to the acceptance of the estimate. The first tranche consists in different tariffs depending on the input power required:

- 30 € → up to 6 kW
- 50 € → between 6kW and 10 kW
- 100 € → up to 50 Kw
- 200 € → between 50 Kw and 100 Kw
- 500 € → between 100 and 500 Kw
- 1.500 € → between 500 and 1.000 Kw
- 2.500 € → above 1.000 Kw

²¹ Resolution ARG / elt 281/05, available at: <http://www.autorita.energia.it/allegati/docs/10/005-10arg.pdf>.

²² Resolution ARG / elt 348/07, available at: <http://www.autorita.energia.it/allegati/docs/07/348-07.pdf>.

²³ Resolution ARG / elt 99/08, available at: <http://www.autorita.energia.it/allegati/docs/08/099-08arg.pdf>.

The second tranche is calculated taking into account the input power and the distances between the point of connection and transformation cabin:

P: power for the purpose of connection (Kw)

DA: distance (in km) between the connection point and the cabin of media processing / low voltage of the grid operator

DB: distance (in km) between the point of connection and the high / medium voltage transformer station of the network operator

Given these variables, the rate is found in the minimum value between A and B, where:

$$A = 35 \text{ €} * P + 90 \text{ €} * P * DA + 100$$

$$B = 4 \text{ €} * P + 7,5 \text{ €} * P * DB + 6.000$$

The minimum value resulting from the calculation of these two formulas will be the rate for the connection. Such rate is to be paid for 30% of the work before, 70% at the end of work, or paying all in one solution²⁴.

The connection request must be submitted after obtaining all necessary approvals for the construction of photovoltaic system and must use a standard form made available by the network operator.

The timing for obtaining the estimate are the following:

- 20 working days for input powers up to 100 Kw
- 45 working days for input power between 100 to 1,000 kW
- 60 working days for input powers over 1,000 Kw

Once obtained, the estimate remains valid for 45 days. The plant operator must then, within these 45 days, accept the budget, paying immediately 30% of the total and the remaining balance at the end of work. The effective realization of the connection works ranges from 30 to 90 days, and beyond, for the most complex jobs²⁵.

6. What are the incentives (e.g. through taxes or tariffs) for each type of residential prosumers?

General

Since the energy production of a PV system does not necessarily equal the energy consumption of the owner, specific tariffs are applied to manage the energy produced but not consumed. In the majority of photovoltaic markets, these types of tariffs are typically agreements Net Metering (*Scambio Sul Posto*) or feed-in tariffs. The owner receives a credit by the system operator for the excess of energy produced which helps to reduce the electricity bill.

Depending on the size, plant operators may be obliged to opt for a certain system or may choose between the available ones (for more details see Question 6.1. below).

In addition, photovoltaic and wind energy plants are eligible for a reduced VAT of 10% (instead of 20%). This tax benefit applies to enterprises, professionals and private individuals.

In addition to these national incentives, Italy provides for a series of regional incentives.

²⁴ Allacciamento impianto fotovoltaico in rete: costi e tempistiche di enel, 2014, Fotovoltaico Nord Italia, viewed 7 February 2017, <https://www.fotovoltaiconorditalia.it/conto-energia/conto-energia-2011/enel-costi-e-tempistiche-per-la-connessione-dellimpianto-fotovoltaico-alla-rete-elettrica>.

²⁵ Allacciamento impianto fotovoltaico in rete: costi e tempistiche di enel, 2014, Fotovoltaico Nord Italia, viewed 7 February 2017, <https://www.fotovoltaiconorditalia.it/conto-energia/conto-energia-2011/enel-costi-e-tempistiche-per-la-connessione-dellimpianto-fotovoltaico-alla-rete-elettrica>.

- 6.1. Does your country apply specific tariffs to prosumers
- to charge them for the electricity they draw from the grid for consumption?
 - or to compensate them for the electricity they feed back into the grid?

Answer:

The **Conto Energia regime**. The Conto Energia regime (also referred to as 'feed-in premium' tariff) applies specifically to photovoltaic plants. The GSE pays a premium tariff for all the energy produced by the plant, irrespective of its use (whether it is fed into the network or immediately self-consumed) for 20 years from the moment the plant becomes operational. With this feed in premium tariff the subject responsible for the photovoltaic system receive the sum of the incentive plus the value of the energy transferred to the network. The MSE has approved five different Conto Energia decrees in the last eight years with different tariff levels and conditions. Independently from the payment of the premium tariff, the electricity produced by the plant can be sold by the generator on the market or directly to GSE, by entering into a power purchase agreement (*convenzione per il ritiro dedicato*). During 2013, the Conto Energia incentives scheme was terminated having reached the threshold of 6.7 billion in cumulative annual costs fixed by the Fifth Conto Energia Decree for photovoltaic plants (*Ministerial Decree of July 5, 2012*).

The **simplified purchase and resale arrangements** (*ritiro dedicato*). GSE has offered simplified purchase and resale arrangements (*ritiro dedicato*) to small producers since 1 January 2008. **Ritiro Dedicato** is the regulation for the sale of electricity in Italy rather than a "classical" feed-in tariff. Under these arrangements (Energy Authority's *Decision no. 280/07*), producers sell the electricity generated and to be injected into the grid to GSE, instead of selling it through bilateral contracts or directly on IPEX (*Italian Power Exchange*). An agreement is entered between the producer and GSE, where GSE:

- purchases and resells the electricity to be fed into the grid at the zonal price or at a minimum guaranteed price;
- transfers the fees on behalf of the producer for the use of the grid (dispatch and transmission fees) to distributors and the TSO.

The eligible parties are producers with:

- plants having a nominal apparent power of less than 10 MVA, RES plants or hybrid plants for the portion of electricity generated from RES;
- plants of any capacity using the following RES: wind; solar; geothermal; waves; tides; hydro (run-of-river only);
- plants having a nominal apparent power greater than or equal to 10 MVA, plants using RES other than wind, solar, geothermal, waves, tides and hydro (run-of-river only), provided they are owned by a self-producer as defined in paragraph 2, Article 2 of Legislative Decree no. 79/99.

The simplified purchase and resale arrangements are not compatible with net metering and it is not applicable to solar energy (*Scambio Sul Posto* – see below).

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 sale of electricity in the free market or in the market governed by *Ritiro Dedicato*. The principle of *Scambio Sul Posto* is not based on direct payments but on the balance of the energy fed in and consumed (*Article 1, 2 570/2012/R/efr*).

Scambio Sul Posto in accordance with 570/2012/R/efr differs from traditional net metering, as the plant operator pays the supplier for the electricity consumed, while GSE gives credit for the electricity fed in. This method can lead to a surplus on behalf of the plant operator (*Article 1 par. 1 a 570/2012/R/efr*). The balance is calculated once a year (*Article 8 par. 2 570/2012/R/efr*). More

specifically, the owner of such plants will receive a compensation equal to the difference between the value of electricity exported to the grid (e.g. for PV installations the energy fed in during daytime) and the value of the electricity consumed in a different period. If more energy is fed in than is consumed, this positive balance can compensate for a possible negative balance in the following years (*Article 6 par. 7 570/2012/R/efr*). Plant operators receive as much energy for free as they produce (*Article 6 par. 2 570/2012/R/efr*). For this reason, *Scambio Sul Posto* is cost-effective only if the amount of electricity produced does not substantially exceed the amount consumed. In case the electricity fed in the grid is more than the one taken from the grid, plant operators are entitled to have an economic compensation, based on the formulas in Article 6, 570/2012/R/efr.

Since 1 January 2015, RES plant operators that present, for at least one day during the year, a valid *Scambio sul posto* Convention - except for facilities with a capacity up to 3 kW - must pay to GSE a fee to cover the costs of management, verification and control. Tariffs are applied annually. There is a fixed fee of € 30 per each *Scambio Sul Posto* Convention and a variable fee depending on the RES plant capacity. Variable fee is about € 1 /kW and only applies for RES units with a capacity between 20 kW and 500 kW.

For cases in which net metering is used under several offtake and injection points, an additional contribution of € 4 /year for each connection point applies (DM 24/12/2014)²⁶.

From a government perspective, the *Scambio Sul Posto* scheme has been an alternative model to the regular incentive scheme initially adopted. It has fostered distributed renewable energy power generation and has provided a clear view of energy prices. For the user, the scheme provides a clear framework for working out the economic credit from network feed-in. It will also allow consumers to determine whether self-consumption through electricity storage systems is economically more attractive than feeding into the grid. On the down side, the scheme creates a high administrative burden for both government and users. This is due to the considerable number of players involved and the high quantity of data to be matched and verified to calculate economic compensation²⁷.

6.2. Does your country

- tax prosumers in a specific way?
- allocate to them a certain part of the cost to upgrade the grid to accommodate the extra generation they feed into the grid?

Answer:

The consumption of energy produced by photovoltaic panels is subject to specific taxes. Law 116/14²⁸ established that a charge of 5% of the energy produced has to be paid for the energy self-consumed, except for plants below 20kW. However, since the calculation appears to be impossible, the Authority has subsequently established fixed quotas through Resolution 609/2014²⁹.

- For installations connected in low voltage (excluding renewable plants below 20kW) a fixed amount of around 30-40 euro per year was set;
- **for installations in medium voltage different charges are set depending on the size and the source** (for example, a PV plant of 200 kW in medium voltage will pay 273 Euro/year);

²⁶ RES LEGAL Europe, 2016, Legal sources on renewable energy, Italy country profile, viewed 7 February 2017, <http://www.res-legal.eu/search-by-country/italy/tools-list/c/italy/s/res-e/t/promotion/sum/152/lpid/151/>.

²⁷ IRENA, 2015, Renewables and electricity storage, A technology roadmap for Remap 2030, p. 16, viewed 7 February 2017, [http://thecleannetwork.org/downloads/46-IRENA_REmap_Electricity_Storage_2015-\(1\).pdf](http://thecleannetwork.org/downloads/46-IRENA_REmap_Electricity_Storage_2015-(1).pdf).

²⁸ Law 116/14, available at: <http://www.gazzettaufficiale.it/eli/id/2014/08/20/14A06580/sg>.

²⁹ Resolution 609/2014, available at: <http://www.autorita.energia.it/allegati/docs/14/609-14.pdf>.

- for installations in high and very high voltage users **must pay based on the energy they use**³⁰. In addition, photovoltaic and wind energy plants are eligible for a **reduced VAT** of 10% (instead of 20%). This tax benefit applies to enterprises, professionals and private individuals.

7. A. What are the conditions that may encourage residential prosumers (to entry into activity or during functioning)?

General

One of the conditions that encourage the spread of photovoltaics is their integration into the building regulations. In Italy there are 979 municipalities (out of 7,987) that have introduced within the Municipal Building Regulations a mandatory installation of PV³¹.

While the rate of developing ground mounted PV plants has slowed in the last years as a result of recent cuts in incentives, roof-top installations are still benefiting from a favourable public incentive regime (see point 6.1 above for more details on the different incentives). However one obstacle is the continuous change in the incentive regime, which has made financial planning difficult. The changes are a natural result of an unexpectedly high level of investment in renewable energy.

B. What are the conditions that may act as barriers for residential prosumers (to entry into activity or during functioning)?

General

In the past, typical obstacles to the development of renewable energy were delays in the permitting procedures and grid congestion in certain areas of the country. Solutions have been found to streamline permitting procedures and cut back the red tape for obtaining the authorisations for new PV plants (see the *Prior Notification* and the *Simplified Authorization Procedure* described in point 4).

According to Legambiente³² (the Italian environmental protection association), the regulatory framework for residential prosumers is complicated and contradictory. In addition, the reform of the electricity tariffs in 2015 has made the regulatory framework unfavourable for residential prosumers. (see points 7.2 below for more details on the tariffs reform). In addition, despite having regulated the Efficient Utility Systems (SEU), the Energy Authority Resolution 539/2015³³ has prohibited to make new private networks (closed distribution networks) which are not exempted from the charges and are necessary, for example, to serve with a single photovoltaic system, more users at a single site (energy community). In other words, the Resolution prohibits local distribution of energy from renewable sources in buildings and manufacturing districts (except in some towns in the Alps where energy cooperatives were created in the Twenties thanks to a favourable regulatory framework- see point 7.3).

³⁰ Qualeenergia, 2015, *Oneri di sistema sull'autoconsumo: quanto e come si paga nel 2015*, viewed 22 February 2017, <http://www.qualeenergia.it/articoli/20150127-oneri-di-sistema-sull-autoconsumo-quanto-e-come-si-paga-nel-2015>.

³¹ Legambiente, 2016, Rapporto "Comuni Rinnovabili" 2016, viewed 7 February 2017, <https://www.legambiente.it/contenuti/comunicati/comuni-rinnovabili-2016-l-innovazione-nei-territori-un-futuro-energetico-rinnov>.

³² Legambiente, 2016, *Fonti rinnovabili, liberiamole*, viewed 7 February 2017, <https://www.legambiente.it/contenuti/articoli/fonti-rinnovabili-liberiamole>.

³³ Resolution 539/2015, available at: <http://www.autorita.energia.it/allegati/docs/15/539-15.pdf>.

7.1. What are the metering systems for each type of residential prosumer? Do these systems provide adequate conditions for prosumers integration in the market?

Answer:

Legislative Decree 102/2014 has transposed Directive 27/2012 on energy efficiency into national law. Article 9, paragraph 3 of this decree requested the Energy Authority to define the functional specifications of the second generation smart meters of low voltage energy.

In a consultation document³⁴ the Authority identified the main objectives for the new regulatory intervention in this field, among which the need to adapt the metering system to new consumer behaviours is mentioned, namely: *encourage energy efficiency including through greater customer awareness about their own consumption behaviour (withdrawal and, for the prosumer, consumption of self-produced energy).*

The document goes on explaining that the transformations underway are connected to the evolution of the distribution networks in order to meet the rapid increase in the number of prosumers (i.e. customers with self-production plants).

The new characteristics of the new metering systems, which is in place since 2017, are the following³⁵:

- Two chains for the distributor with different technologies to increase the efficiency of meter reading,
- The consumed energy is recorded every 15 minutes and transmitted to the distribution company,
- Energy curves recorded daily, validated by the distributor and transmitted to the seller through the SII (integrated informatics system),
- One chain for the clients to transmit in real time data to the client,
- Possibility for the meter to forward messages (e.g. regarding an interruption) spontaneously.

Overall, the new metering system will ensure a greater precision in the calculation of billing information and thus reduce claims, ensure a greater involvement of the consumer with greater control of the client over the energy spending, reduction of consumption and generally a change of habits in the use of the electric energy.

7.2. What are the billing conditions for each type of residential prosumer?

Answer:

After a long consultation phase and two consultation documents, the Energy Authority approved, with resolution 582/2015 / R / eel³⁶, the reform of electricity tariffs for domestic customers that has affected the electricity bill.

The reform, introduced by the European Directive 27/2012 on energy efficiency, implemented in Italy with the Decree 102/14, intended to phase out the progressive structure of network tariffs and costs. The reform requires that the unit costs of energy per kWh do not gradually increase based on the increase of withdrawals.

Starting from 2018, a new non-progressive tariff structure is defined, that will be the same for all

³⁴ Energy Authority, 2015, [consultation document on the second generation smart metering](http://www.autorita.energia.it/allegati/docs/15/416-15.pdf), viewed 7 February 2017, <http://www.autorita.energia.it/allegati/docs/15/416-15.pdf>.

³⁵ Energy Authority, 2017, presentation on the *Second Generation Smart Metering*, new regulation, viewed 7 February 2017, <http://www.slideshare.net/aeegnet/smart-metering-di-seconda-generazione>.

³⁶ Resolution 582/2015 / R / eel, available at: <http://www.autorita.energia.it/allegati/docs/15/582-15.pdf>.

residential customers, according to the criterion of adherence to the costs of the different services:

- metering, marketing and distribution costs will be covered in a fixed per-customer fee (€ / year) and Power share (€ / kW / year);
- transmission costs in the energy quota (c € / kWh).
- For the tariff for system charges instead a differentiation is maintained between:
- Resident clients, which is charges are applied in all energy quota as today, i.e. in c € per kWh derived;
- and non-residents, to which charges are applied both in fixed rate, both in the energy quota.

In summary, from 1 January 2018, the network tariffs (i.e. the costs paid for the transmission, distribution and metering) and the tariff for the system costs (i.e. costs to support activities of general interest for the system electric) - in total more than 40% of the bill - will be equal for all users and for each consumption level.

Except in cases where network withdrawals remain high, the non-progressive tariffs structure introduced with the reform will penalise small residential prosumers that produce energy at home with PV technology (those who consume less will pay more and those who have the highest withdrawals will pay less)³⁷.

- 7.3. Are there measures to encourage the creation of energy communities at municipal level, or other schemes to encourage inclusive development of the market?

Answer:

Italian legislation has not yet intervened to regulate 'community cooperatives' in general, nor energy community in particular. Legislative references to community cooperatives can only be found in regional laws³⁸ and in the Civil Code (rules relating to cooperative enterprises).

The initiatives currently being implemented in Italy on the Energy Community topic are rather limited. This is explained by the fact that the current legal-regulatory framework in Italy does not provide for the definition of the 'Energy Community'. In addition, the current legal-regulatory framework focuses primarily on encouraging incentives developing individual technology solutions, neglecting aggregations of multiple technologies / users (energy community)³⁹.

On the other hand, there are various energy systems that could be easily associated with the concept of energy community and that are currently regulated. These all fall under the definition of 'Simple production and consumption systems' (SSPC) contained in the Energy Authority Resolution n. 578/2013/R/EEL⁴⁰. These systems are not considered networks, but energy self-sufficiency activities. Among them feature the self-production systems (SAP) that are composed by:

- Historical cooperatives with their own network,
- Historical consortia with their own network,

Other self-production systems (which are not further defined in legislation, it is a broader concept that includes everything that is not a cooperative, thus potentially prosumers) In Italy there are currently 73 historical electrical cooperatives where the energy is self-produced through renewable

³⁷ Riforma tariffe elettriche, approvata la delibera: ecco come cambia la bolletta, 2015, *QualeEnergia*, viewed 7 February 2017, <http://www.qualeenergia.it/articoli/20151202-riforma-tariffe-elettriche-approvata-la-delibera-ecco-come-cambia-la-bolletta>.

³⁸ A summary of regional law regarding community cooperatives is available at: <http://www.legacoop.coop/cooperativedicomunita/sintesi-delle-leggi-regionali/>.

³⁹ Comunità energetiche, in Italia potenziale di 450.000 Energy Community, 2014, *Case e Clima*, viewed 7 February, http://www.casaclima.com/ar_18760_SMART-CITY-Energia-e-citt-comunit-energetiche-smart-grid-report-Energy--Strategy-Group-Comunit-energetiche-in-Italia-potenziale-di-450.000-Energy-Community.html.

⁴⁰ Resolution n. 578/2013/R/EEL, available at: <http://www.autorita.energia.it/allegati/docs/13/578-13.pdf>.

sources. This is a network involving 300.000 citizens which is distributed on 2000 km, an area of nearly 1,000 square kilometers, where almost 500 million KWh are produced and distributed locally in 60 municipalities and 110 villages in the northern mountainous regions (Friuli Venezia Giulia, Trentino Alto Adige, Lombardia, Piemonte and Valle d'Aosta)⁴¹. These are closed systems, which means that new members cannot join the cooperative and they cannot expand to new areas.

Energy cooperatives have as legal references Decree 79/1999 (Bersani, Article 2, paragraph 2) and Energy Authority Resolution ARG / elt 113/10. These co-operatives remained active after the nationalization of the electricity in 1962. They can produce and distribute electricity to members of the cooperative and they are exempted from major components of system charges. The current regulatory framework does not allow the creation of new cooperatives. In addition, in Italy there are 39 municipalities '100% renewables' where the production of renewable energy satisfies all consumption needs internally⁴².

- 7.4. Are there rules facilitating the creation of energy cooperatives to provide a legal entity to energy communities? Are there measures facilitating other type of schemes and if so which ones?

Answer:

As explained under point 7.3, there are no specific rules that would facilitate the creation of energy cooperatives in Italy. All energy cooperatives existent in Italy are historical cooperative founded at the beginning of the 20th century. The current regulatory framework does not allow the creation of new cooperatives⁴³.

- 7.5. What are the procedures/provisions for establishing cooperatives for prosumers? Are they more simple/less costly than those for other schemes?

Answer:

See point 7.3.

8. Other questions on the regulatory framework

- 8.1. What are the provisions for establishing a complaint procedure? What are the complaint handling procedures for each type of residential prosumer?

Answer:

According to Energy Authority Resolution 209/2016/E/com⁴⁴, since 1 January 2017, for disputes in the electricity and gas sectors, the end user and the prosumer⁴⁵ can try to solve the problem with their service provider through conciliation, which is now obligatory before contacting the judge eventually⁴⁶.

Mandatory conciliation can be done before the Conciliation Service of the Energy Authority or,

⁴¹ Legambiente, 2016, Rapporto "Comuni Rinnovabili" 2016, viewed 7 February 2017, <https://www.legambiente.it/contenuti/comunicati/comuni-rinnovabili-2016-l-innovazione-nei-territori-un-futuro-energetico-rinnov>.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Resolution 209/2016/E/com, available at: www.autorita.energia.it/allegati/docs/16/209-16.pdf.

⁴⁵ Despite the term 'prosumer' is not yet defined by Italian legislation, it has started to appear in recent policy documents of the Energy Authority, including Resolution 209/2016/E/com on complaint handling procedures.

⁴⁶ Energy Authority, 2016, Conciliation Service, viewed 7 February 2017, <http://www.autorita.energia.it/it/consumatori/conciliazione.htm>.

alternatively, in an institution that offers alternative dispute resolution services and that is registered in the list kept by the Authority.

The Conciliation Service has been introduced by the authority to make available to end users a quick and easy procedure for resolution of disputes with operators, which involves the intervention of a conciliator specifically trained in ‘mediation and energy’ who helps the parties to find a conflict resolution. The Conciliation Service is also available for prosumers (producers and consumers of electricity) for disputes with operators and the GSE.

All operators, sellers or distributors are requested to take part in the conciliation procedure at the Conciliation Service of the Energy Authority. The GSE is required to participate in procedures triggered by prosumers if the dispute is related to the *Scambio Sul Posto* or the *ritiro dedicato* systems. In all other cases, the GSE can decide each time whether to join the procedure or not. Any agreement reached through the Conciliation Service is enforceable, that means it can be brought by the parties before the competent court in case of non-compliance of the contents.

8.2. Are there any specific redress procedures available only to residential prosumers?

Answer:

No specific redress procedures are available only to residential prosumers. However, the Conciliation service described under point 8.1 is also explicitly dedicated to prosumers⁴⁷.

⁴⁷ *ibid.*

Country fiche (Summary and ranking)

The **country fiche** below summarises the information from the report and ranks the **level of favourable impact** of measures in relation to its favourable impact to the take up of residential prosumers.

Country fiche	Ranking Low/Medium/High
General Description of the national regulatory framework The solar photovoltaic (PV) sector has historically been the dominant renewable energy technology in Italy due to the Italian incentive regime for solar PV projects and also to Italy's advantageous geographic position and resulting sun exposure. The concept of residential prosumers in Italy is not yet recognised by law. However, specific rules and incentives apply to owners of PV systems of up to 20 MW who can consume their produced electricity or sell such electricity to a unique consumer located within the same local, private grid. The institutional framework is composed of the Ministry of Economic Development, The Authority for Electric Energy, Gas and the Water System and the Electricity Services Operator. The production, transmission and distribution of energy is a shared competence between state and the regions as established by Article 117 of the Italian Constitutions. As a consequence, the regulatory framework of renewables is quite fragmented. The current plan in the field of renewable energies is the National Action Plan on the promotion of energy from renewable sources, adopted in 2009. It does not contain specific objectives for prosumers. There is no definition of 'prosumers' in legislative or regulatory texts. However, Article 2, paragraph of Decree 79/99 defines 'Self-producer'. In addition, the Italian law recognises that each citizen and enterprise can produce energy to meet part of its needs, and can also sell the surplus energy to get income.	Medium
Specific Questions on the regulatory framework for residential prosumers Permitting requirements for each type of residential prosumer The Italian legislature has adopted and promoted rules to simplify the authorisation process for building and operating all types of renewable energy projects. For PV plants of capacity below 20 KW a communication (<i>Prior Notification</i>) to the local municipality is sufficient, except for specific cases in which a <i>Simplified Authorization Procedure</i> can be followed. Rules applicable to the access to the grid In Italy, grid operators are obliged to give priority access to renewable energy plants in the operation of their grids. For interconnection of a new renewable plant to the grid, an agreement must be reached between the developer and the local grid operator, pursuant to the rules and criteria established by the Integrated Text of active connections (<i>Testo Integrato delle connessioni attive</i>, TICA)	High Medium

Incentives (e.g. taxes and tariffs) for each type of residential prosumers Since the energy production of a PV system does not necessarily equal the energy consumption of the owner, specific tariffs are applied to manage the energy produced but not consumed. In the majority of photovoltaic markets, these types of tariffs are typically agreements "Scambio sul Posto" (Net Metering) or simplified purchase and resale arrangements (ritiro dedicato). The owner receives a credit by the system operator for the excess energy produced which helps to reduce the electricity bill.	Medium
Conditions encouraging or acting as barriers for residential prosumers The functional specifications of second generation smart meters have been recently approved by the Energy Authority. Overall, the new metering system, in place since 2017, will ensure a greater precision in the calculation of billing information and thus reduce claims, ensure a greater involvement of the consumer with greater control of the client over the energy spending, reduction of consumption and generally a change of habits in the use of the electric energy. Starting from 2018, a new non-progressive tariff structure is defined, that will be the same for all residential customers, according to the criterion of adherence to the costs of the different services. The network tariffs and the tariff for the system costs will be equal for all users and for each consumption level. At the national level there are no specific measures to encourage the creation of energy communities at municipal level. All energy cooperative existent in Italy are historical cooperatives founded at the beginning of the 20th century. The current regulatory framework does not allow the creation of new cooperatives.	Medium
Other questions on the regulatory framework Since 1 January 2017, for disputes in the electricity and gas sectors, the end user and the prosumer can try to solve the problem with their service provider through conciliation, which is now obligatory before contacting the judge eventually. No specific redress procedures are available only to residential prosumers. However, the Conciliation service of the Energy Authority is also explicitly dedicated to prosumers.	Medium

Executive summary – Italy

The solar photovoltaic (PV) sector has historically been the dominant renewable energy technology in Italy due to the encouraging Italian incentive regime. The Italian law recognises that each citizen and enterprise **can produce energy to meet part of its needs**, and can also sell the surplus energy to get income. Article 2, paragraph of Decree 79/99 defines ‘Self-producer’. However, the concept of residential prosumers in Italy is not yet recognised by law.

The Italian legislature has adopted and promoted rules to **simplify the authorisation process** for building and operating PV energy projects: for plants of capacity below 20 KW a simple communication to the local municipality is sufficient, except for specific cases in which a *Simplified Authorization Procedure* must be followed. Specific rules and **incentives** apply to owners of PV systems of up to 20 MW who can consume their produced electricity or sell such electricity to a unique consumer located within the same local, private grid. In the majority of photovoltaic markets, applied incentives are typically agreements “*Scambio sul Posto*” (Net Metering) or simplified purchase and resale arrangements (*ritiro dedicato*). The owner receives a credit by the system operator for the excess energy produced which helps to reduce the electricity bill. Another positive aspect of the Italian PV system is the **new metering system**, in place since 2017, which will ensure a greater precision in the calculation of billing information and thus reduce claims, ensure a greater involvement of the consumer with greater control of the client over the energy spending.

At the same time, a number of **obstacles may limit** the development of residential prosumers. At the national level there are no specific measures to encourage the creation of energy communities at municipal level. All energy cooperative existent in Italy are historical cooperatives founded at the beginning of the 20th century. The current regulatory framework does not allow the creation of new cooperatives. Furthermore, no specific redress procedures are available only to residential prosumers. However, the Conciliation service of the Energy Authority is also explicitly dedicated to prosumers.