

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

France



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National report on the regulatory framework for residential prosumers: France

General Description of the national legal and regulatory framework

General

According to the International Energy Agency (IEA), the French total primary energy supply (TPES) in 2015 was divided as follows:

- 46.4% nuclear energy;
- 28.2% oil;
- 14.3% natural gas;
- 6.1% **biofuels and waste**;
- 3.6% **coal**;
- 1.9% **hydro**;
- 0.7% **wind**;
- 0.3% solar;
- 0.1% **geothermal 0.1%**.¹

France relies mainly on nuclear energy for consumption at national level. In 2015, nuclear power accounted for nearly 78% of France's electricity generation.² This percentage has remained stable over the years. At the same time, the part of renewable energy in the French TPES has increased by 35.4% over the past decade.³ **Installed capacity** of renewable electricity generation **surged from 26,639 MW in 2004 to 41,858 MW in 2014**.⁴

As of 31 December 2015, the installed capacity of facilities producing renewable energy and interconnected to the grid was 43,6 GW in metropolitan France:

- Hydropower: 25,4 GW;
- Solar energy: 6,2 GW;
- Wind power: 10,3 GW;
- Bioenergy: 1,7 GW.⁵

In 2015, the production of renewable energy reached 88.4 TWh:

- Hydropower: 54 TWh;
- Wind power: 21 TWh;
- Solar energy: 7,4 TWh;
- Bioenergy: 6 TWh.⁶

The French energy market is highly concentrated (see Question 2). Electricity de France (EDF), a company controlled by the French State, still dominates electricity generation and indirectly operates the transmission system and the distribution network.⁷ Liberalization of the energy market started in 1999 when industrial sites became eligible to choose their suppliers. This shift continued in 2004 for SMEs and was completed in 2007 for residential customers. Residential customers have the choice between contracts at regulated tariffs or contracts at market prices. In 2012, EDF still dominated the market, with a market share of roughly 80%, leaving the

¹ IEA, 2017, *Energy Policies of IEA countries – France 2016 Review*, p. 17, viewed 08 February 2017
https://www.iea.org/publications/freepublications/publication/Energy_Policies_of_IEA_Countries_France_2016_Review.pdf

² IEA, 2017, p. 10.

³ IEA, 2017, p. 149.

⁴ IEA, 2017, p. 150.

⁵ RTE, SER, ERDF & ADEeF, 2016, *Panorama de l'électricité renouvelable en 2015*, p. 5, viewed 08 February 2017
<http://www.enr.fr/userfiles/files/Panorama2015.pdf>

⁶ RTE, SER, ERDF & ADEeF, 2016, p. 5.

⁷ Deloitte, 2015, *European energy market reform – Country profile : France*, p. 3, viewed 08 February 2017
<https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-er-market-reform-france.pdf>

remaining share to alternative market suppliers. In 2012, 64% of electricity was sold at regulated prices.⁸

According to IEA-RETD, prosumer development has been modest in France so far.⁹ Several reasons explain this situation: relatively low retail electricity rates; a slower development of solar energy following recent changes in the policy framework and the financial crisis; slightly higher installed PV costs; and a fee **representing the costs of connecting to the network**, and irrespective of consumption, in residential electricity bills (*Tarif d'utilisation des réseaux publics d'électricité* or **TURPE**) (see Question 5.5).¹⁰ However, according to ADEME, self-consumption should develop considerably in France in the future due to various factors: future increase in the cost of energy;¹¹ legal obligations to develop Energy-Plus House (*bâtiment à énergie positive* or BEPOS); decrease in the cost of PV; recent aid schemes dedicated to the production of renewable energy for self-consumption; etc.¹²

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:

There is no official data on residential prosumers in France. According to one source, as of June 2016, there were between 30,000 and 40,000 households that were both producers and consumers of electricity.¹³ In 2016, 37% of all the inter-connection requests made by producers to Enedis pertained to self-consumption installations (by comparison, there were 17% in 2015 and less than 4% in 2014).¹⁴ Self-consumption installations represent an installed capacity of 27 MW on the low-voltage network.¹⁵

In the context of this mapping, solar PV was identified as the main source of renewable energy used by residential prosumers, followed by wind power. However, there is a lack of information on the potential of renewable energy generation by prosumers, especially wind power and bioenergy. A 2014 IEA-RETD report on residential prosumers and focusing on solar PV provided that, as of March 2014, facilities producing solar energy had a cumulative installed solar PV capacity of almost 5,000 MW, from which almost 1,000 was residential (systems under 9kW).¹⁶

France applies different sets of rules to prosumers in various subject-matters (e.g. tariffs) according to the installed capacity of the production facility. **Article 2 Energy Transition Law** foresees a specific regime for individual installations whose capacity is less than 100 kW as opposed to commercial producers. Furthermore, **Article L315-3 French Energy Code** provides that the CRE establishes specific tariffs for the use of public networks for self-consumption operations where the installed capacity of the production facility is less than 100 kW.

⁸ Deloitte, 2015, p. 4.

⁹ IEA-RETD, 2014, *Residential Prosumers – Drivers and Policy Options (Re-Prosumers)*, p. 93, viewed 8 February 2017 http://iea-rettd.org/wp-content/uploads/2014/06/RE-PROSUMERS_IEA-RETD_2014.pdf

¹⁰ IEA-RETD, 2014, p. 93.

¹¹ ADEME, 2015, *Etude technico-économique filière photovoltaïque française : bilan, perspectives et stratégie*, viewed 8 February 2017 <http://www.ademe.fr/etude-technico-economique-filiere-photovoltaïque-française-bilan-perspectives-strategie>. See also CRE, 2014, *Le fonctionnement des marchés de détail français de l'électricité et du gaz naturel - Rapport 2011-2012*.

¹² ADEME, 2015.

¹³ Bourbon, J.C., 2016, 'Les offres d'autoconsommation d'électricité se développent', *La Croix*, viewed 8 February 2017 <http://www.la-croix.com/Economie/France/Les-offres-autoconsommation-electricite-developpent-2016-06-02-1200765576>

¹⁴ Rapport n° 285 (2016-2017) de M. Ladislav PONIATOWSKI, fait au nom de la commission des affaires économiques, déposé le 11 janvier 2017, p.8.

¹⁵ *ibid*, p. 8.

¹⁶ However, the report specified that 'France does not track which systems under 9kW are residential and which are small commercial.' IEA-RETD, 2014, p. 103.

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

Answer:

Generally, French energy policy has been characterized by a centralised approach with strong government involvement. Nonetheless, regional and local actors are playing an increasing role in the development of renewable energy.

Several institutions at various levels (national, regional, local) share competences regarding residential prosumers in France:

- At national level the **Ministry of Environment** prepares and implements the governmental policy regarding renewables. It is in charge of the implementation of the Self-Consumption Ordinance. The **Ministry of Economy and Finance** oversees the energy taxation, including the contribution to the electricity public service (CSPE) which supports renewable energies.¹⁷
- **Regional Directorates of Environment, Planning and Housing** (regional level) are the regional representation of the Ministry of Environment.
- **The Energy Regulatory Commission (CRE)**¹⁸ (national level) is responsible for ensuring an open, equal and non-discriminatory access to the electricity transmission and distribution networks for all eligible suppliers and customers. It also proposes specific transmission and distribution tariffs, some of them applying to self-consumption operations, to the government.
- **The French Environment & Energy Management Agency (ADEME)**¹⁹ (national level) is a State agency that has various competences (providing services, informing, supporting) in a number of environmental topics, including the development of renewable energy and financing for renewable energy.²⁰
- **Mayors** (local level) are competent to deliver land-planning permits.
- **Prefects** (regional level) are competent to deliver land-planning permits in specific situations. They are involved in the development of regional framework on energy and inter-connection to the grid by facilities producing renewable energy.
- Town/cities (local level) usually own the distribution network and subcontract an operator to manage the electricity distribution network. Furthermore, some **departments** and/or **towns/cities** also own local distribution networks. They may ensure local supply of electricity or enter into concession contracts with electricity providers to ensure the functioning of electricity supply.
- **Regions** (regional level) play an important role in the implementation of the energy transition.²¹ They have competences in relation to the development of renewable energy production and inter-connection to the grid by facilities producing renewable energy.

Several companies play an important role in the generation, transportation, and distribution of energy in France:

- **EDF** is the main energy utility company in France. In 2007, it accounted for 88.1 % of total electricity generation. The French State has a majority ownership of EDF.
- **Réseau de transport d'électricité (RTE)** owns and operates the French transmission network. RTE also plans the development and manages the high-voltage grid, for which

¹⁷ IEA, 2017, p. 151

¹⁸ Articles L131-1 to L135-16 French Energy Code govern the role, powers and competences of the Energy Regulatory Commission.

¹⁹ IEA, 2017, p. 152.

²⁰ Article L131-3 French Environment Code.

²¹ Observ'ER, 2015, *Le Baromètre des énergies renouvelables électriques en France*, viewed 8 February 2017

http://www.energies-renouvelables.org/observ-er/html/energie_renouvelable_france/get_doc.asp?an=2015&part=Observer&doc=Observ-ER-Barometre-Electrique-2015-Integral.pdf

it has a monopoly. RTE is a subsidiary of EDF and its activities are controlled by the Energy Regulatory Commission.

- **Enedis (previously ERDF)** owns and operates around 95% of the French distribution network. This network belongs to French municipalities or groups of municipalities that subcontract Enedis as an operator through a public service delegation.²² Enedis is a subsidiary 100% owned by EDF.
- **Local distribution companies (Entreprises locales de distribution or ELD)** own the remainder of France's distribution assets. They have the local monopoly of electricity distribution in France.

Specific Questions on the regulatory framework for residential prosumers

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

General.

Until recently, there was no regulatory framework governing self-consumption. However, France initiated a national discussion on the future of prosumer development in 2013. This led to the creation of a National working group on self-production of renewable electricity, the production of a report on self-production and self-consumption in 2014,²³ and the adoption of legislation relevant to prosumer development.

In 2015, France enacted **Law No 2015-992 pertaining to energy transition for green growth (Energy Transition Law)**. This law created a new legal framework governing the development of clean energy.²⁴ A number of provisions are relevant for self-consumption:

- **Article 2:** French public policies must support self-consumption of electricity.
- **Article 119(I)(3):** the French government may adopt an ordinance to establish the necessary measures for 'the controlled and safe development of installations intended to consume all or part of their electricity production.'

In July 2016, France adopted **Ordinance No 2016-1019 of 27 July 2016 pertaining to electricity self-consumption (Self-Consumption Ordinance)**.²⁵ This Ordinance created a new chapter on self-consumption of electricity in the French Energy Code (Articles L315-1 to L315-8).²⁶ Pursuant to Article L315-8, a decree should define the implementing conditions of the Self-Consumption Ordinance.²⁷ At the time of writing, the French parliament was discussing a Bill to ratify the Self-Consumption Ordinance.²⁸ It is likely that this bill will modify aspects of the legal framework governing self-consumption; some of these aspects are raised in this report.

The French Energy Code gathers the abovementioned rules governing self-consumption operations. However, other codes, such as the Environment Code, the Land Planning Code, or the Construction and Housing Code, are also applicable to self-consumption operations.

²² Deloitte, 2015, p. 3.

²³ MEDDE, 2015, *Rapport sur l'autoconsommation et l'autoproduction de l'électricité renouvelable*, Ministère de l'écologie, du développement durable et de l'énergie, viewed 08 February 2017 <http://www.developpement-durable.gouv.fr/Rapport-sur-l-autoconsommation-et.html>

²⁴ Loi n° 2015-992 du 17 août 2015 relative à la transition énergétique pour la croissance verte.

²⁵ Ordonnance n° 2016-1019 du 27 juillet 2016 relative à l'autoconsommation d'électricité.

²⁶ Chapitre V: L'autoconsommation (under 'Partie Législative, Livre III : Les dispositions relatives à l'électricité, Titre Ier : La production').

²⁷ At the time of writing, such a decree had not yet been adopted.

²⁸ Projet de loi ratifiant les ordonnances n° 2016-1019 du 27 juillet 2016 relative à l'autoconsommation d'électricité et n° 2016-1059 du 3 août 2016 relative à la production d'électricité à partir d'énergies renouvelables et visant à adapter certaines dispositions relatives aux réseaux d'électricité et de gaz et aux énergies renouvelables. For more information, see Assemblée Nationale, *Energie : autoconsommation d'électricité et énergies renouvelables*, viewed on 8 February 2017 http://www.assemblee-nationale.fr/14/dossiers/ratification_ordonnances_2016-1019_2016-1059.asp

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

The Energy Transition Law is the most recent and relevant legislation governing renewables in France. Pursuant to **Article 1(III)(4) Energy Transition Law**, France has for mandatory objective to increase the share of renewables in the final gross energy consumption to 23% in 2020 and to 32% in 2030. At that date, renewables must account for 40% of electricity production.

Furthermore, over the last few years, France has enacted various laws & regulations which impact renewable energy use, including:

- **Framework Law No 2005-781 of 13 July 2005 setting the orientations of the energy policy (POPE Energy Law):**²⁹ POPE Energy Law defined targets of a 10% share of renewable energy sources in total primary energy supply and a 21% share of renewables in gross electricity consumption.
- **The Grenelle Laws 1 and 2:**³⁰ both laws introduced measures to support renewable energy sources and renewables-based heating.
- **Ordinance No 2016-1059 of 3 August 2016 pertaining to electricity production from renewables (Renewables Ordinance):**³¹ The Renewable Ordinance specifies various rules on renewable energy production, including power purchase agreements or conditions under which renewable energy can be bought.

The French Energy Code contains the majority of the rules governing the development and regulation of renewables.

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

In 2010, France notified its National Renewable Energy Action Plan³² to the European Commission. This Plan does not specify any 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 a legal definition of self-consumption in France since July 2016.

Article L315-1 French Energy Code defines an ‘operation of self-consumption’ as ‘the fact for a producer, called self-producer, to consume for himself all or part of the electricity produced by his facility.’

Furthermore, **Article L315-2 French Energy Code** provides that an operation of self-consumption is collective ‘when the electricity supply occurs between one or several producers and one or several final consumers bound together within a legal person and whose draw-off and

²⁹ Loi n° 2005-781 du 13 juillet 2005 de programme fixant les orientations de la politique énergétique.

³⁰ Loi n° 2009-967 du 3 août 2009 de programmation relative à la mise en œuvre du Grenelle de l’environnement (1) and Loi n° 2010-788 du 12 juillet 2010 portant engagement national pour l’environnement

³¹ Ordonnance n° 2016-1059 du 3 août 2016 relative à la production d’électricité à partir d’énergies renouvelables. At the time of writing, the French parliament was discussing a Bill to ratify the Renewables Ordinance. This Bill is likely to change some of the rules governing self-consumption. See *Projet de Loi*, 2017.

³² MEDDE, 2010, *National action plan for the promotion of renewable energies 2009-2020, Plan d’action national en faveur des énergies renouvelables – Période 2009-2020*.

injection points are located on the same low-voltage antenna of the public distribution network.’

Several conclusions can be drawn here:

- French law distinguishes between individual and collective self-consumption. Both definitions of general self-consumption and collective self-consumption are not restricted to the production and consumption of renewable energy (reference to ‘electricity’ in general). Furthermore, they do not distinguish between self-consumption for household needs and in the context of professional activities.
- The definition of self-consumption under **Article L315-1** focuses on the producer of electricity without referring to consumers other than the producer. A producer can be a natural or a legal person. This leaves the door open for individual residential prosumers. Moreover, contrary to a recommendation made by the National working group on self-production of renewable electricity in 2014,³³ the legal definition of self-consumption does not refer to aspects such as interconnection to the public network or downstream self-consumption. It is not necessary for both production and consumption to take place on the same site. As a result, the definition of self-consumption under Article L315-1 is particularly broad.
- However, the draft Bill on self-consumption is likely to affect the definition of self-consumption by adding that electricity is produced either instantly or after a period of storage. The Parliament rejected the application of net metering.³⁴
- Under Article L315-2, there is no restriction as to the nature of the legal relationship between both producers and consumers in the context of operations of collective self-consumption. The only condition is that they must be bound together within a legal person.
- The government restricted the definition of collective self-consumption to situations where producers and consumers are located on the same low-voltage antenna (such as in the case of a collective building or a mall). **Energy cooperatives** are, therefore, excluded from the definition of collective self-consumption. The current draft Bill on self-consumption aims to extend the scope of collective self-consumption to downstream draw-off and injection points on the same distribution network. However, energy cooperatives remain excluded from this scope.

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

General

The installation of a facility producing renewable energy may require obtaining specific land-planning permits (building permit; improvement permit; prior declaration). For households, these permits are usually delivered by mayors (in towns where a local urban planning scheme (*Plan local d’urbanisme* or PLU) or other land planning schemes exist) and sometimes prefects (**Article L422-1 French Land Planning Code**). However, local State authorities (usually, the prefect) are competent to deliver land-planning permits to energy production, transport, distribution and storage facilities (**Articles L422-2 and R422-2 French Land Planning Code**).

For small PV installations, the following rules apply:³⁵

- **Solar PV on roof:** prior declaration required.
- **Solar PV on ground (peak power less than 3 kW and less than 1.80M):** no prior authorisation, no building permit (**Article R421-1 French Land Planning Code**).

³³ Groupe de travail national sur l’autoproduction de l’électricité renouvelable, MEDDE, 2014, *Rapport sur l’autoconsommation et l’autoproduction de l’électricité renouvelable*, p. 25.

³⁴ Projet de loi, 2017.

³⁵ See Service-Public-Pro.fr, *Urbanisme-BTP*, viewed 08 February 2017 <https://www.service-public.fr/professionnels-entreprises/vosdroits/N13345>

For other types of renewable energy, the following rules apply to small installations:

- **Wind turbine on ground (less than 12m):** no prior authorisation, no building permit required. A forest clearing authorization may be needed (**Article R421-1 French Land Planning Code**).
- **Wind turbine on ground (between 12m and 50m):** building permit required (mayor is competent when self-consumption; prefect is competent when energy sale). Wind turbines above 12m are considered establishments classified for environmental protection (*installation classée pour la protection de l'environnement* or ICPE) and are subject to a specific legal regime. Therefore, the energy producer must declare as an ICPE any wind turbines between 12m and 50m with an installed capacity under 20 MW and obtain an authorization for an ICPE any wind turbines between 12m and 50m with an installed capacity above 20 MW. A forest clearing authorization may be needed.

Importantly, **Article L111-16 French Land Planning Code** provides that various land planning permits (e.g. building permit, improvement permit, any decision made on the basis of a prior declaration) cannot oppose the use of materials that allow the production of renewable energy for the domestic consumption of the occupants of the building. A decree should specify the list of materials and processes to which Article L111-16 applies.

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?

All operations of self-consumption are subject to the following requirements:

- **Article L315-7 French Energy Code:** the operators of electricity production facilities, which participate in an operation of self-consumption, must declare these facilities to the competent public distribution network operator before the facilities go into operation.
- Operators of facilities which went into operation before the publication of the Self-Consumption Ordinance must declare them before 31 March 2017.

Operations of collective self-consumption are also subject to specific requirements:

- **Article L315-2 French Energy Code:** an operation of collective self-consumption requires that producers and consumers are bound together within a legal person.
- **Article L315-4(1) French Energy Code:** the legal person organising the operation of collective self-consumption under Article L315-2 must inform the competent public distribution network operator of the distribution of the self-consumed production between **the relevant final consumers**. (For fees and one-off costs see below).

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?

According to **Article L314-1 French Energy Code**, EDF and local distribution and supply companies have the obligation to buy electricity from renewable energy producers through power purchase agreements (*contrat pour l'achat de l'électricité*) and at a fixed price (feed-in tariffs).

Power purchase agreements used to be available to a large number of renewable energy facilities.³⁶ However, since 2016, they are only available to small-scale facilities (less than 500 kW) producing specific types of renewable energy.³⁷ **Article D314-15 French Energy Code** provides that **PV installations on building with an installed peak power equal to or less than 100 kW are eligible** for power purchase agreements.

Other facilities can also benefit from power purchase agreements, including:

- **Hydropower facilities with an installed capacity equal to or less than 500 kW;**
- **Facilities on the ground using wind energy;**
- **Facilities using biogas produced by vegetable waste, by sewage treatment, or by non-dangerous waste storage with an installed peak power less than 500 kW;**
- **Co-generation facilities with an installed peak power equal to or less than 300 kW; etc.**

To enjoy power purchase agreements, renewable energy facilities must obtain a certificate of compliance by an approved certification body³⁸ (**Article R314-7 French Energy Code**). Furthermore, they can only benefit from a power purchase agreement once in their lifetime (**Article L314-2 French Energy Code**).

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

General

In general, producers and consumers of electricity must have an equal and non-discriminatory access to the grid.³⁹ The CRE controls the equal and non-discriminatory access to the grid.

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

Articles D342-5 to R342-14-1 French Energy Code provides the rules on inter-connection by production and consumption facilities to energy public networks. Inter-connection to the grid is subject to the compatibility of the injected or consumed power with the different voltage levels of that network. An order of the Ministry of Energy determines the voltage used as reference for the inter-connection of the facility (**Article D342-6 French Energy Code**). A producer and the network operator must conclude an inter-connection contract and an exploitation contract for every facility that is inter-connected to the grid before its entry into service (**Article D342-10 French Energy Code**).

Enedis offers two types of inter-connection contracts to self-consumption operations:

- **Inter-connection, access and exploitation contract (*contrat de raccordement, accès et***

³⁶ IEA, 2017, p. 151.

³⁷ Décret n° 2016-691 du 28 mai 2016 définissant les listes et les caractéristiques des installations mentionnées aux articles L. 314-1, L. 314-2, L. 314-18, L. 314-19 et L.314-21 du code de l'énergie. See also Observ'ER, 2015.

³⁸ The National Comity for the Security of Electricity Users ('Comité National pour la Sécurité des Usagers de l'Électricité' or CONSUEL) is the certification body that usually delivers this certificate of compliance.

³⁹ Articles L111-91 to L111-96 French Energy Code govern the right to access electrical networks and installations.

exploitation or CRAE): when the facility injects electricity into the grid;

- **Self-consumption contract:** when the facility consumes all its production. This contract allows self-consumption facilities with storage capacity and suppresses the 18 kVA limits.

There are three types of inter-connection for facilities whose production is less than or equal to 36 kVA:

- **Sale of all the production:** the self-producer must conclude a CRAE.
- **Sale of the surplus:** the self-producer must conclude a CRAE.
- **Total self-consumption:** the self-producer must conclude a self-consumption contract (*Convention d'autoconsommation* or CAC) and does not pay any fee to be inter-connected. The self-producer commits not to inject any power on the network. He must also use an electronic meter.

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

Answer:

Regions play an important role in defining inter-connection configuration.

The Grenelle Laws 1 and 2 created the **Regional Framework on Climate Air Energy (Schéma régional climat air énergie** or SRCAE). A SRCAE is a policy framework which includes various planning documents organising the regional climate and energy policy. It must set specific objectives, and support the development of, renewable energy production. Each region – involving various regional actors such as the prefect, the regional council, public authorities, GIPs – must develop a SRCAE.⁴⁰

In the context of these SRCAEs, each region must elaborate, in collaboration with RTE and distribution networks, a **Regional Framework on Interconnection to the Network of Renewable Energy (Schéma régional de raccordement au réseau des énergies renouvelables** or S3REnR).⁴¹ Each S3REnR articulates the need for additional investments in electricity distribution grids in the region.

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

Answer:

Article L111-91 French Energy Code provides that operators of public transmission and distribution systems guarantee to self-consumption operations a right to access these systems.

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

Answer:

See above

⁴⁰ Following the 2015 territorial reform, the new French regions have the obligation to produce a Regional Framework on Planning, Sustainable Development and Territorial Equality ('Schéma régional d'aménagement, de développement durable et d'égalité des territoires' or SRADDET). Each SRADDET will merge several sectorial frameworks, including SRCAEs. Commentators have questioned how SRADDETs will incorporate self-consumption.

⁴¹ Grenelle Law II.

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

Answer:

Generally, the CRE establishes the **Tariff to use the public electricity networks** (*Tarif d'utilisation des réseaux publics d'électricité* or TURPE). This fixed charge represents the costs of connecting to the network.

TURPE is applicable to all users of the grid (both producers and consumers) and must respect specific rules:

- 1) Producers injecting electricity onto the grid and consumers using electricity from the grid pay a tariff that does not take into account the distance travelled by the electricity.
- 2) The tariff is proportional to the voltage of the inter-connection.
- 3) The tariff is proportional to the electricity consumption or injection.

Prosumers must pay the TURPE. However, the Self-Consumption Ordinance created a specific 'self-consumption TURPE' for prosumers whose facilities have an installed capacity less than 100 kW (**Article L315-3 French Energy Code**).

A 2014 report by IEA-RETD provides that retail electricity rates include non-volumetric charges which are based on the size of the connection to the grid (e.g. 6.50€/month for a 6kVA connection).⁴² According to IEA-RETD, non-volumetric charges (or fixed charges) are assessed independent of the amount of electricity purchased and can include various types of charges, such as those based on the size of the connection to the grid, like in France. While volumetric charges are advantageous for prosumers since each kWh produced will generate savings equal to the full retail rate, non-volumetric charges are generally not reduced by PV output.⁴³ However, they are advantageous to utilities and grid operators because they reduce exposure to the risk of fluctuations in electricity sales.⁴⁴

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

General

France provides for feed-in tariffs paid through power purchase agreements (**Article L314-4 French Energy Code**). However, since 2016, facilities must have a capacity of less than 12 MW. The system is financed through a tax called 'Participation to the electricity public service' (*Contribution au service public de l'électricité* or CSPE). The CSPE is paid by electricity consumers as part of their energy bills. Orders (*arrêtés*) set the tariff for each renewable energy source.⁴⁵ Feed-in tariffs have stimulated demand for most renewable energy technologies, especially the high tariff granted to PV.⁴⁶ For instance, see the feed-in tariffs for PV systems from 1st October 2016 to 31st December 2016.⁴⁷

⁴² IEA-RETD, 2014, p. 24.

⁴³ IEA-RETD, 2014, p. 24.

⁴⁴ IEA-RETD, 2014, p. 24-25.

⁴⁵ See CRE, 2016, *Obligations d'achat*, viewed 8 February 2017 <http://www.cre.fr/operateurs/producteurs/obligations-d-achat>. See also RES Legal, 2016, *Feed-in tariff (Tarif d'achat)*, viewed 8 February 2017 <http://www.res-legal.eu/search-by-country/france/single/s/res-e/t/promotion/aid/feed-in-tariff-tarif-dachat/lastp/131/>

⁴⁶ IEA, 2010, *Energy Policies of IEA countries – France 2009 Review*, p. 97, viewed 8 February 2017 <https://www.iea.org/publications/freepublications/publication/france2009.pdf>

⁴⁷ Eco Infos Energies Renouvelables, 2016, *Tarif rachat électricité photovoltaïque du 1 octobre 2016 au 31 décembre 2016*, viewed 8 February 2017 <http://www.les-energies-renouvelables.eu/conseils/photovoltaïque/tarif-rachat-electricite-photovoltaïque/>

Type of integration bonus	Capacity (kWp)	Feed-in tariffs (€-¢/kWh)
Full integration	0-9	23.93
Simplified integration	0-36	12.47
	36-100	11.89
Non-integrated	< 12000	5.51

Private individuals used to be able to enjoy tax credit schemes for the installation of solar PV or domestic wind turbines. However, as of 1 January 2016, these schemes do not exist anymore.⁴⁸ Nonetheless, tax credits and reduced VAT schemes exist for the installation of technology relevant to self-consumption, such as home energy monitoring systems.⁴⁹

In order to comply with the European Commission's Guidelines on State aid for environmental protection and energy 2014-2020, the 2015 Energy Transition Law created an additional remuneration mechanism (or feed-in premium) (*complément de rémunération*).⁵⁰ Pursuant to Article L314-18 of the French Energy Code, provided that the functioning of networks is preserved, EDF is under the obligation to conclude, where producers request it, a contract offering an additional remuneration for facilities, including those producing renewable energy, meeting specific regulatory requirements. PV installations with an installed peak power of 100 kW or less are therefore eligible for an additional remuneration. In general, contracts on additional remuneration can last up to 20 years. Furthermore, facilities can benefit from such a contract only once, although facilities producing renewable energy may conclude more than one contract on additional remuneration if they meet specific requirements.⁵¹ Generally, the calculation of additional remuneration depends on the renewable energy sector and the type of facilities and is done either through regulatory orders or public bids.

However, some of rules applicable to the additional remuneration mechanism and guarantee of origins may constitute obstacles to the development of prosumers and energy cooperatives. Pursuant to **Article R314-32 French Energy Code**, in order to benefit from feed-in premium, a producer of renewable energy must waive his right to obtain the issuing of a guarantee of origin for the electricity produced by his facility during the duration of the contract. Even once the contract is terminated, the producer cannot ask, transfer, obtain or use guarantees of origin for the production of his facility. Various actors, including the CRE, energy cooperatives, and national deputies, have opposed this provision.⁵² For instance, the CRE challenged its conformity with Directive 2009/28/EC on the promotion of the use of energy from renewable sources.⁵³ It also held that this provision limits the opportunities to promote renewable energy on the market in the

⁴⁸ Eco Infos Energies Renouvelables, 2016, *De quelles aides financières pouvez-vous bénéficier pour un équipement d'autoconsommation énergétique ?*, viewed 8 February 2017 <http://www.les-energies-renouvelables.eu/conseils/autoconsommation/aides-financieres-equipement-autoconsommation-energetique/>

⁴⁹ See RES Legal, 2016, *Promotion in France*, viewed 8 February 2017 <http://www.res-legal.eu/search-by-country/france/tools-list/c/france/s/res-e/t/promotion/sum/132/lpid/131/>

⁵⁰ See Articles L314-18 to L314-27; Articles D314-23 to D314-25; Articles R314-26 to R314-52 French Energy Code and Order No 2016-682 of 27 May 2016 pertaining to purchase obligation and additional remuneration. See also Article L314-1 French Energy Code.

⁵¹ Article L314-21 French Energy Code.

⁵² Délibération de la Commission de régulation de l'énergie du 9 décembre 2015 portant avis sur le projet de décret relatif au complément de rémunération mentionné à l'article L. 314-18 du code de l'énergie; Assemblée Nationale, November 2016, *Rapport ratifiant les ordonnances n° 2016-1019 du 27 juillet 2016 relative à l'autoconsommation d'électricité et n° 2016-1059 du 3 août 2016 relative à la production d'électricité à partir d'énergies renouvelables et visant à adapter certaines dispositions relatives aux réseaux d'électricité et de gaz et aux énergies renouvelables (n° 4122)*.

⁵³ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.

context of ‘green offers’.⁵⁴

Both national⁵⁵ and regional⁵⁶ authorities are using bids (or call for tenders) for self-consumption projects. For instance, the CRE has issued various bids for self-consumption projects.⁵⁷ This bid was open to all natural and legal persons (**Article L311-10 French Energy Code**). However, these bids were opened to facilities with an installed capacity between 100 and 500 kW. Therefore, small PV installations were excluded. Furthermore, specific requirements must be met: the producer must consume at least 50% of his production annually; specific sources of renewable energy are allowed (PV system on building); etc.

Article L314-28 French Energy Code provides for participatory investment (*investissement participatif*) in renewable energy production projects. Specific joint-stock companies and cooperative societies may offer part of their capital to natural persons residing on the same territory than the site of production and local public authorities.

According to a 2014 IEA-RETD report, there is no tax on electricity self-consumption in France.⁵⁸

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:

As was discussed above, France provides for feed-in tariffs through power purchase agreements and feed-in premium mechanisms.

French law foresees the application of specific rules to prosumers whose facilities have an installed capacity less than 100 kW (**Article 2 Energy Transition Law**). For instance, **Article L315-3 French Energy Code** provides that the CRE ‘establishes specific tariffs for the use of public networks of electricity distribution for consumers participating in self-consumption operations where the installed capacity of the production facility supplying them is less than 100 kW.’

In its Opinion of 13 July 2016 on the Project of Ordinance pertaining to Self-Consumption of Electricity,⁵⁹ the CRE opposed the creation of specific categories of tariffs, ‘which could freeze the structure of tariffs for the use of the public electricity networks in the long run.’⁶⁰

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?

⁵⁴ Délibération de la Commission de régulation de l’énergie du 9 décembre 2015 portant avis sur le projet de décret relatif au complément de rémunération mentionné à l’article L. 314-18 du code de l’énergie, p. 10-11.

⁵⁵ Such as the CRE or the ADEME.

⁵⁶ Such as Aquitaine Region (see question below).

⁵⁷ CRE, 2016, *Appel d’offres portant sur la réalisation et l’exploitation d’Installations de production d’électricité à partir d’énergies renouvelables en autoconsommation*, viewed 8 February 2017 <http://www.cre.fr/documents/appels-d-offres/appel-d-offres-portant-sur-la-realisation-et-l-exploitation-d-installations-de-production-d-electricite-a-partir-d-energies-renouvelables-en-autoconsommation>

⁵⁸ IEA-RETD, 2014, p. 104.

⁵⁹ Délibération de la Commission de régulation de l’énergie du 13 juillet 2016 portant avis sur le projet d’ordonnance relative à l’autoconsommation d’électricité.

⁶⁰ [Author’s translation] The original version provides : ‘La CRE n’est toutefois pas favorable à la création de catégories tarifaires spécifiques qui pourraient à terme figer la structure des tarifs d’utilisation des réseaux publics d’électricité’.

According to the French Customs Code, electricity consumers and self-consumers are liable to pay the CSPE (see Question 6).⁶¹ However, self-producers whose annual production does not exceed 240 GW are exempted from this tax. Nonetheless, tax services have interpreted this exception restrictively in practice. To date, they have considered that this exception only applies to self-producers consuming all their production.⁶² In 2017, French Parliamentarians held that this interpretation was an obstacle to the development of self-consumption. The current Bill on self-consumption aims to create a specific exception to the payment of the CSPE for all situations of self-consumption when the installed production capacity is less than 1,000 kW.⁶³

Article L315-5 French Energy Code provides that electricity injected into the public distribution network in the context of an operation of self-consumption from an electricity production facility, whose maximum installed capacity is set up by decree, and which exceeds the consumption associated with that operation of self-consumption, is donated (*cédées à titre gratuit*) to the operator of the public distribution network to which the production facility is interconnected, when this electricity is not sold to a third party. Those injections compensate for the technical losses of the network.

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

General

The legal classification of operations of collective self-consumption as suppliers of electricity may pose an obstacle to the development of residential prosumers.

Article L315-2 French Energy Code defines the operation of collective self-consumption in the context of a ‘supply’ of electricity as opposed to a ‘sale’ of electricity. As a result, **Article L333-1 and seq. French Energy Code**, which govern the supply of electricity, also apply to operations of collective self-consumption. Therefore, these operations are subject to the same constraints than electricity suppliers. However, commentators have pointed out that these obligations are likely to be burdensome for operations of collective self-consumption.⁶⁴

In its Opinion of 13 July 2016 on the Project of Ordinance pertaining to Self-Consumption of Electricity,⁶⁵ the CRE listed a number of obligations which seemed unsuitable to operations of collective self-consumption:

- Obtain a licence (**Article L333-1 and seq. French Energy Code**);
- Inform the final consumers on the origin of the supplied electricity (**Article R333-10 French Energy Code**);
- Guarantee the ability for the curtailment of electricity for consumption and production (**Article L335-1 and seq. French Energy Code**);
- Establish special social tariffs (‘tarifs de première nécessité’) (**Articles L121-5 and L337-3 French Energy Code**);
- Provide specific information and respect specific contractual obligations in the field of

⁶¹ Article 266 *quinquies* C French Customs Code.

⁶² Rapport n° 285, 2017, p. 25.

⁶³ Commission Mixte Paritaire, 2017, Annexe au Rapport, Projet de Loi ratifiant les ordonnances n° 2016-1019 du 27 juillet 2016 relative à l’autoconsommation d’électricité et n° 2016-1059 du 3 août 2016 relative à la production d’électricité à partir d’énergies renouvelables et visant à adapter certaines dispositions relatives aux réseaux d’électricité et de gaz et aux énergies renouvelables.

⁶⁴ Poirier, A-C, 2016, ‘[Avis d’expert] Que dit l’ordonnance autoconsommation ?’, GreenUnivers, viewed 8 February 2017 <http://www.greenunivers.com/2016/07/avis-dexpert-que-dit-lordonnance-autoconsommation-149157/>; Délibération de la Commission de régulation de l’énergie du 13 juillet 2016 portant avis sur le projet d’ordonnance relative à l’autoconsommation d’électricité.

⁶⁵ Délibération de la Commission de régulation de l’énergie du 13 juillet 2016 portant avis sur le projet d’ordonnance relative à l’autoconsommation d’électricité.

consumer law (**Articles L224-1 to L224-16 French Consumer Code**).

Ultimately, the Energy Regulation Commission recommended that **Article L315-2 French Energy Code** excludes expressly operations of collective self-consumption from the scope of the general legal regime applying to electricity suppliers. However, the French government did not follow this recommendation.

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?

In France, distribution network operators are responsible for meter reading.

Since 2016, French law provides for the general protection of prosumers with regard to metering systems. Pursuant to **Article L315-6 French Energy Code**, operators of public electricity distribution networks shall implement the necessary technical and contractual arrangements, in particular with regard to electricity metering, in order to enable self-consumption operations to be carried out under transparent and non-discriminatory conditions.

From 1 January 2017, Enedis will install a smart metering system (Linky) too all new operations of self-consumption (consumption and production).⁶⁶

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

In France, electricity consumption is assessed through meter reading by the distribution network operator or through an estimate based on consumption habits done by electricity suppliers.

According to **Article L315-4(2) French Energy Code**, when a consumer participating in an operation of collective self-consumption seeks to complement its electricity supply through a supplier, the relevant distribution network operator must take into account the distribution of self-consumed production mentioned at **Article L315-4(1) French Energy Code** when it establishes the electricity consumption indexes pertaining to this supplier.

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?

In 2015, the Ministry of Environment selected 212 ‘territories’ (local and regional authorities, such as municipalities, agglomerations of municipalities, departments, regions) to receive the label ‘Positive energy territory for green growth’ (*Territoire à énergie positive pour la croissance verte*⁶⁷ or **TEPCV**). Those territories will receive financial and technical support from the French State to implement environmental and energy transition projects (reduction of energy consumption; development of local renewable energy; reduction of GHG). Regional and local authorities should involve as much as possible local communities in the development of these projects.⁶⁸

In 2015, ADEME published a guide to encourage regional and local authorities to support local production of renewable energy locally through the use of photovoltaic panels.⁶⁹

Over the last decade, some Regions have encouraged the development of self-consumption

⁶⁶ ERDF, 2016, ‘Communiqué de presse. Dès 2017, grâce à Linky, une économie de 600 euros en moyenne sur le raccordement des nouveaux clients qui consomment et produisent sur le réseau d’électricité’, viewed 8 February 2017 http://www.enedis.fr/sites/default/files/CP_ERDF_autoconsommation.pdf

⁶⁷ Article 1 Energy Transition Law. See also the topic of TEPOS at <http://www.territoires-energie-positive.fr/>

⁶⁸ <http://www.developpement-durable.gouv.fr/La-transition-energetique-en.html>

⁶⁹ ADEME, 2014, *Photovoltaïque et collectivités territoriales : Guide pour une approche de proximité*, viewed 8 February 2017 <http://multimedia.ademe.fr/catalogues/GuidePhotovoltaïque/>

projects through calls for tenders. For instance, since 2011, the **Aquitaine Region**⁷⁰ has funded self-consumption projects using photovoltaic panels from various types of prosumers (individuals; local authorities; companies; social housing owners), excluding farms and ground-based facilities.⁷¹ In the 2016 bid, projects had to meet specific requirements: systems between 10 and 500 kWp; 85% of the annual PV production must be self-consumed for projects above 100 kWp and 70% for projects under 100 kWp; the facility must be interconnected to the grid; the sale of electricity is not allowed for projects above 100 kWp.⁷²

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?

The concept of energy cooperatives started to emerge in France only recently. Although it has grown over the last years, the number of energy cooperatives remains limited in practice.⁷³ In 2015, ADEME estimated that there were 165 projects of renewable energy community.⁷⁴ One of the most important energy cooperatives is Enercoop. It sells renewable energy produced by individuals, SMEs and local authorities.⁷⁵ 19% of their energy production comes from solar PV. Some of their producers consume their own energy and sell their surplus to Enercoop.

According to ADEME, communities producing renewable energy tend to favour two types of legal structure: 1) the simplified joint stock company (*société par actions simplifiées* or SAS) because the SAS statute provides flexibility for the entity's functioning; and 2) the cooperative society of collective interest (*société coopérative d'intérêt collectif* or SCIC) which promotes principles based on social economy and solidarity and allows the participation of local public bodies.⁷⁶

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

There are no specific procedures/provisions for establishing cooperatives for prosumers. Law No 47-1775 of 10 September 1947⁷⁷ is the legal framework governing the creation and functioning of cooperatives.⁷⁸ Various types of cooperatives can be created, which gather various types of actors (employees, customers, suppliers, etc.) and contributors (NGOs, companies, local authorities) to produce public interest goods and services for the benefit of a territory or a sector.

French law facilitates the funding of renewable energy projects by cooperative societies. For instance, Article L314-28(II) French Energy Code provides that cooperative societies, which aim to produce renewable energy, may propose part of their capital to natural persons, including persons whose residence is physically close to the project site, to local public authorities and their

⁷⁰ It should be noted that France adopted a reform of the territorial organisation of regions in 2015. As a result, since 1 January 2016, the Aquitaine Region is now part of a new Region called Nouvelle-Aquitaine, which gathers the former Regions of Aquitaine, Limousin and Poitou-Charentes. See Loi n° 2015-991 du 7 août 2015 portant nouvelle organisation territoriale de la République.

⁷¹ Fabrégat, S., “ Nous voulions créer, en Aquitaine, un laboratoire de l'autoconsommation ”, *ActuEnvironnement.com*, viewed 8 February 2017 <http://www.actu-environnement.com/ae/news/autoconsommation-photovoltaïque-experimentation-aquitaine-22398.php4>

⁷² Région Nouvelle-Aquitaine, 2016, *Photovoltaïque en autoconsommation*, viewed 8 February 2017 <http://les-aides.laregion-alpc.fr/fiche/photovoltaïque-autoconsommation/>

⁷³ Sibille, H., 2013, ‘Pour des Coopératives d'énergie’, *La Croix*, viewed 8 February 2017 <http://economie-alternative.blogs.la-croix.com/pour-des-cooperatives-denergie-inactifs-aujourd'hui-radioactifs-demain/2013/11/19/>

⁷⁴ Devisse, JS and others, 2016, *Quelle intégration territoriale des énergies renouvelables participatives ? Etat des lieux et analyse des projets français*, ADEME, p. 11.

⁷⁵ Enercoop, 2016, viewed 8 February 2017 <http://www.enercoop.fr/>

⁷⁶ Devisse, 2016, pp. 25-26.

⁷⁷ Loi n° 47-1775 du 10 septembre 1947 portant statut de la coopération.

⁷⁸ Law No 47-1775 was modified by LOI n° 2014-856 du 31 juillet 2014 relative à l'économie sociale et solidaire.

‘groupements’ (i.e. *groupements d’intérêt public* which are public legal persons). Cooperative societies can also offer these persons to participate in the funding of the renewable energy production project.

Energy cooperatives are, the facto, excluded from the definition of collective self-consumption. Article L315-2 French Energy Code defines collective self-consumption as situations where producers and consumers are located on the same low-voltage antenna (such as in the case of a collective building or a mall). The current draft Bill on self-consumption aims to extend the scope of collective self-consumption to downstream draw-off and injection points on the same distribution network. However, energy cooperatives remain excluded from this scope.

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?

In France, the National Energy Ombudsman (*Médiateur national de l’énergie*) is an alternative dispute resolution mechanism in the field of energy law. According to **Article L122-1 French Energy Code**, the National Energy Ombudsman is responsible for examining and recommending solutions to solve disputes between legal and natural persons, and companies of the energy sector, and for taking part in campaigns to inform consumers about their rights.⁷⁹ **Title V of Book I of the French Consumer Code** also applies to the National Energy Ombudsman.

The role of the National Energy Ombudsman appears limited in disputes in relation to self-consumption for two main reasons. First, only contracts concluded between non-professional or micro-enterprise consumers and energy companies can be examined for instance. Second, the National Energy Ombudsman is not competent to hear disputes regarding the production of electricity, including through solar PV or wind power.⁸⁰

Judicial proceedings in relation to self-consumption are likely to take place in front of administrative courts (permits) or of civil courts (energy contracts) depending on the subject-matter of the dispute.

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

No specific redress procedures available only to residential prosumers were identified.

Until recently, France did not have a collective redress mechanism or provided for representative actions in relation to specific types of harm. However, in 2014, France enacted a new law on consumption, which introduced a group action in the field of consumer law.⁸¹ Article L623-1 French Consumer Code provides that, under specific circumstances, a consumer protection association, representative at national level, may be entitled to bring a group action before a civil court to obtain compensation for individual losses sustained by a group of consumers ‘placed in a similar or identical situation and having for common cause the failure by one or several similar professionals of their legal or contractual obligations.’⁸² Such a group action is possible in 2 situations: 1) when the failure occurred during the sale of goods or the supply of services; and 2) when the losses results from anti-competitive practices. Thus, prosumers may be able to bring a collective claim as consumers (not as producers though) to challenge a failure occurring during the supply of electricity.

⁷⁹ Articles L122-1 to L122-5 French Energy Code.

⁸⁰ Le Médiateur National de l’Energie, *Litiges recevables*, viewed 8 February 2017 http://www.energie-mediateur.fr/le_mediateur/litiges_recevables.html

⁸¹ Loi n° 2014-344 du 17 mars 2014 relative à la consommation.

⁸² (Author’s translation).

In November 2016, France enacted a Law to modernize justice in the 21st century (Justice Modernization Law).⁸³ In response to the 2013 European Commission Recommendation on collective redress mechanisms,⁸⁴ the Justice Modernization Law created a general regime on collective redress in selected fields of law (discrimination; labour; environment; health; data and information). Similarly, only specific associations will be entitled to bring a collective redress. However, it is unclear whether this new regime of collective redress may be used by prosumers since it does not cover areas that are relevant in the context of self-consumption operations.

⁸³ Loi n° 2016-1547 du 18 novembre 2016 de modernisation de la justice du XXI^e siècle (1).

⁸⁴ Commission Recommendation of 11 June 2013 on common principles for injunctive and compensatory collective redress mechanisms in the Member States concerning violations of rights granted under Union Law.

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 development of residential prosumers has been slow in France. Residential prosumers produce mainly solar energy (solar PV) and, to an extent which could not be identified in this mapping, wind power. French law provides a specific legal regime, especially regarding tariffs, for individual facilities with an installed capacity less than 100 kW. • Various actors (both at national and regional levels) share competences with regard to renewable energy development and prosumers. Regional and local authorities play an important role for setting local objectives of renewable energy production and for issuing the relevant land-planning permits and authorisations. However, the institutional framework governing prosumers is complex and regular changes in the legislation and the sharing of competences with regard to energy issues may create a lack of transparency and a risk of legal uncertainty, which can threaten the development of prosumers. • Over the last five years, France has been very active in adopting legislation, regulations, and policies relevant in the fields of renewable energy and self-consumption. However, too many recent changes in the legal and policy framework create a risk of legal uncertainty, which can threaten the development of prosumers. • French law provides a definition of general self-consumption, which is broad and, therefore, inclusive of all types of prosumers operation. However, its definition of collective self-consumption excludes energy cooperatives.	Medium Medium Medium Medium
Specific Questions on the regulatory framework for residential prosumers	
What are the permitting requirements for each type of residential prosumer? • Solar PV on roof: prior declaration required. • Solar PV on ground (peak power less than 3 kW and less than 1.80M): no prior authorisation, no building permit (Article R421-1 French Land Planning Code). • Wind turbine on ground (less than 12m): no prior authorisation, no building permit required. A forest clearing authorization may be needed (Article R421-1 French Land Planning Code). • Wind turbine on ground (between 12m and 50m): building permit required (mayor is competent when self-consumption; prefect is competent when energy sale). Wind turbines above 12m are considered establishments classified for environmental protection (ICPE) and are subject to a specific legal regime. Therefore, the energy producer must declare as an ICPE any wind turbines between 12m and 50m with an installed capacity under 20 MW and obtain an authorization for an ICPE any wind turbines between 12m and 50m with an installed capacity above 20 MW. A forest clearing authorization may be needed. • Article L111-16 French Land Planning Code provides that various land planning permits cannot oppose the use of materials that allow the production of renewable energy for the domestic consumption of the occupants of the building.	Medium High High Low High
What are the rules applicable to the access to the grid? • In general, producers and consumers of electricity must have an equal and non-	

discriminatory access to the grid. The CRE controls the equal and non-discriminatory access to the grid. - French law guarantees to self-consumption operations a right to access public transmission and distribution systems these systems (Article L111-91 French Energy Code). - There are 2 types of inter-connection contracts for self-consumption operations: Inter-connection, access and exploitation contract when the facility injects electricity into the grid and a self-consumption contract: when the facility consumes all its production. - Regions have an important role in determining the inter-connection configuration through the Regional Framework on Interconnection to the Network of Renewable Energy. - Prosumers must pay the Tariff to use the public electricity networks (TURPE). However, there is a specific 'self-consumption TURPE' for prosumers whose facilities have an installed capacity less than 100 kW.	High High Medium Medium Medium
What are the incentives (e.g taxes and tariffs) for each type of residential prosumers? - Feed-in tariffs are paid through power purchase agreements (Article L314-4 French Energy Code). - As of 1 January 2016, tax credits for renewable energy do not exist anymore. - National and regional authorities use bids (or call for tenders) to encourage the development of self-consumption. - Existence of power purchase agreements for renewable energy producers. However, the application of this measure has been recently restricted to small-scale facilities producing a limited type of renewable energy sources. - Recent creation of an additional remuneration mechanism (or feed-in premium). However, producers of renewable energy must waive their right to obtain the issuing of a guarantee of origin for the electricity produced by their facility during the duration of the contract. This is particularly problematic for energy cooperatives which cannot market electricity bought from prosumers as green electricity. - Existence of participatory investment mechanisms in renewable energy production projects. - No tax on electricity self-consumption in France. - Although small self-producers are exempted from paying CSPE, the French tax administration <i>de facto</i> excludes self-producers which consume part of their production from the scope of this exemption.	Medium Low High Medium Medium High High Medium
What are the conditions encouraging or acting as barriers for residential prosumers? - Operations of collective self-consumption are subject to the same constraints than electricity suppliers. However, these obligations are likely to be burdensome for operations of collective self-consumption. - The technical and contractual arrangements with regard to electricity metering must enable self-consumption operations to be carried out under transparent and non-discriminatory conditions. - From 1 January 2017, Enedis will install a smart metering system too all new operations of self-consumption. - When a consumer participating in an operation of collective self-consumption seeks to complement its electricity supply through a supplier, the relevant distribution network operator must take into account the distribution of self-consumed production when it establishes the electricity consumption indexes pertaining to this supplier. - Existence of the label "Positive energy territory for green growth" where local	Low Medium High Medium

authorities receive financial and technical support from the French State to implement environmental and energy transition projects at local level. • Calls for tender for self-consumption at regional level (e.g. Aquitaine). • Article L314-28(II) French Energy Code facilitates the funding of renewable energy projects by cooperative societies. • There are no specific procedures/provisions for establishing cooperatives for prosumers.	Medium High High Low
Other questions on the regulatory framework • It is unclear whether residential prosumers can have access to the National Energy Ombudsman. • Judicial proceedings in relation to self-consumption are likely to take place in front of administrative courts (permits) or civil courts (energy contracts). • No specific redress procedures available only to residential prosumers were identified. • France recently created a collective redress mechanism in the field of consumer law, which may be available to prosumers in their quality of consumers. In November 2016, France extended the creation of a collective redress mechanism to other fields of law, such as the environment. However, it is unclear whether prosumers may be able to use this mechanism.	Low Medium Low Medium

Executive Summary

The development of residential prosumers has been slow in France. However, this is likely to change, as France is increasingly encouraging the small-scale production of renewable energy. In 2016, France adopted a legal framework regulating self-consumption (both individual and collective).

Various incentives exist for self-consumption activities. French law guarantees to self-consumption operations the **right to access public transmission and distribution systems**. Specific inter-connection contracts exist for self-consumption operations that take into account whether the installation injects part of its electricity into the grid or consumes all of its production. Furthermore, self-consumption facilities with an installed capacity of less than 100 kW pay a **lower tariff to use the public electricity networks**. In addition, France has a feed-in-tariff system to stimulate generation of energy from renewable sources which is applicable to PV systems and is more profitable to small capacity plants. **Permitting requirements** applying to small self-consumption facilities are advantageous. Furthermore, land planning permits cannot oppose the installations for the production of renewable energy in buildings for domestic consumption of the occupants.

At the same time, a number of obstacles may limit the development of residential prosumers and of energy cooperatives. For instance, the tax administration continues to hold small-scale self-producers liable for the payment of a **contribution to the electricity public service**, even though they are exempted under the law. Furthermore, self-producers must waive their right to obtain a guarantee of origin when they enjoy **feed-in premiums**, thus limiting their possibility to sell their electricity through energy cooperatives for instance. Finally, it is unclear whether residential prosumers may have an easy access to remedy.