

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

Czech Republic



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 EAH/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: Czech Republic

General

On 18 May 2015 the government of the Czech Republic approved the updated version of the State Energy Policy for the following 25 years¹ which replaced the previous, 2004 policy. The State Energy Policy (SEP) 2015 is the document by which the government defines the political, legislative and administrative framework for reliable, affordable and long-term sustainable energy. In relation to renewable energy, the SEP proposed amendments to the Act on Supported Energy Sources No. 165/2012 Collated (hereinafter Coll.), which is the main act establishing the legislative framework for the renewable energy sources (RES)². The proposed amendments with the implementation deadline of December 2015 concerned the establishment of a mechanism to secure funding to cover the costs of supporting RES other than the price of electricity, support for new RES through auctions or tenders for new capacities and the introduction of a correction mechanism to check the reasonableness of public aid provided in compliance with a European Union decision within the framework of the notification process³.

The Czech Republic is on track to achieve its national 2020 RES target of 13% by 2020 and was above its 2011/2012 interim trajectory⁴. The targets on renewable energy for 2020, as well as the policies and measures taken in order to meet them, were initially laid out in the National Renewable Energy Action Plan (NREAP) 2011-20, which was first published in 2010 and revised in 2012 and again in 2015⁵. The 2015 update, which was approved by the Czech government in January 2016, proposes achieving a 15.3% share of energy from RES in gross final energy consumption and a 10% share of energy from RES in gross final consumption in transport by 2020.

The estimated 2015 total energy production in 2015 was 27.08 Million tonnes of Oil Equivalent (hereinafter Mtoe) and was based largely on fossil fuels, notably coal and nuclear (coal 59.5%, nuclear 25.2%, biofuels and waste 12.5%, oil 0.8%, solar 0.8%, natural gas 0.7%, hydro 0.2%, wind 0.2%, heat 0.1%). The country's share of solar power used for electricity at estimated 2.7% in 2015 is the seventh-highest, according to the International Energy Agency Czech Republic 2016 Review⁶.

Hydropower remains the largest contributor to renewable power capacity; however, there is limited potential for further development. Solar power has experienced robust growth since 2004, with capacity increasing to 2 068 MW from negligible levels. Wind advanced at 32.2% per year from insignificant levels in 2004 to 278 MW in 2014. Both of these increases are the result of generous levels of feed-in tariffs (FITs)⁷, which have been abolished since⁸.

¹ State Energy policy of the Czech Republic (SEP), Prague, December 2014, <http://www.mpo.cz/assets/dokumenty/52841/60946/636123/priloha001.pdf>.

² In the Czech Republic, supported energy sources are understood to include renewable energy sources (i.e. energy of biomass and biogas, solar energy, wind energy, hydro energy etc.), secondary energy sources, high-efficiency combined heat and power generation, biomethane and decentralized electricity generation.

³ SEP, see n 1.

⁴ The renewable energy share has reached 11.2% in 2012, mainly due to solar and hydro contributions (8%) while the interim goal for 2012 was 10.1% of overall RES (source - http://www.ebb-eu.org/legis/ActionPlanDirective2009_28/national_renewable_energy_action_plan_czechrepublic_en.pdf).

⁵ SEP, see n 1.

⁶ IEA, Energy Policies of IEA Countries, Czech Republic, 2016 Review https://www.iea.org/publications/freepublications/publication/Energy_Policies_of_IEA_Countries_Czech_Republic_2016_Review.pdf.

⁷ In 2014, the state support for RES amounted to 11,7 billion euro.

⁸ IEA, See n 6.

In 2013, the Czech Republic has introduced amendments to their incentive scheme for renewables in the Act on Supported energy sources. The support for all new installations except small hydro plants ceased at the end of that year. Thus, as of 1 January 2014, public support for new RES generators being provided through feed-in-tariffs (FITs) and feed-in-premiums or also called green bonuses (FIPs) ended. FITs are payments for energy fed into the grid and FIPs are payments for all generated energy. Prosumers from small installations up to 10 kW were typically supported by FIPs as the support was provided for all generated energy. As explained, FIPs and FITs are now only payable to the small hydro plants up to 10 MW and to wind, geothermal, biomass and hydropower if a building permit was secured before the entry into force of the legislation and in operation by 31 December 2015.

The abolishment of the support scheme has slowed down the development of the sector which had increased rapidly in the previous period⁹. After this date, support has been channelled towards indirect support for small systems in the form of simplified administration procedures and access to the grid¹⁰.

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:

In the Czech Republic, the classification of prosumers is based on whether the surplus energy is fed and sold back to the grid rather than type of the RES source. In January 2016, the Energy Regulatory Office (ERO) issued a new Ordinance No. 16/2016 Coll. which defined the micro source in energy and its conditions for connecting to the grid in addition to already existing small sources with the possibility to feed the surplus energy back to the distribution system.

There are 3 types of small sources relevant for residential prosumers depending on whether the surplus generated electricity is fed and/or sold back into the grid or not, i.e. whether the prosumer operates with or without licence:

Micro source up to 10 kW with zero input into the grid (not classified as entrepreneurship in energy § 2 (e) of the Ordinance 16/2016 Coll.).	Small source up to 10 kW which feeds surplus energy to the grid, not classified as entrepreneurship in energy (so called standard “small source”).	A source with a possibility to exceed generation capacity of 10kW which can feed and sell surplus energy into the grid (classified as “entrepreneurship in energy”).
No need for license from Energy Regulatory Office. Only for self- consumption (no overflow into distribution system). Simplified grid connection procedure.	- No need for license from Energy Regulatory Office. - Production for own consumption with possible overflow. - Standard process of connection to the grid. - Not possible to receive payment for feeding surplus energy.	- Licence from Energy Regulatory Office required. - Payments for the supply of over-flows to the network possible (a contract with the merchant is needed). - Standard process of connection to the grid.

⁹ See n 4 http://ec.europa.eu/energy/sites/ener/files/documents/2014_energy_market_en_0.pdf.

¹⁰ IEA, see n 6.

The Ordinance No. 16/2016 Coll. sets up conditions for connecting both the small sources and micro sources into the grid. The important aspect is that, unlike other sources when the producer is classified as an entrepreneur and can sell all produced electricity to the distribution company based on his/her licence, the small sources and micro sources do not need licence for their operation (§ 3 (3) of the Energy Act). Thus, in both cases, as the licence is not needed, the administrative burden is significantly reduced. In addition, there is also no need to contact the Building Office and obtain a building permit or to register the installation with the OTE¹¹, the Czech electricity and gas market operator which is the case for all other installations classified as entrepreneurship in energy. For all other sources the licence is needed enabling the prosumer to sell the surplus energy.

In case of micro sources, the producer only needs an agreement between the applicant and the transmission system operator (§ 3(2) (f) of the Ordinance No.16/2016). In this case, also simplified procedure for connecting the micro source to the grid applies (§ 16 of the Ordinance). The essential condition here is that zero input into the grid must be ensured at all times (§ 16 (1) and (2) of the Ordinance).

For other small sources up to 10 kW which do not satisfy the zero input conditions, standard rules for connecting to the grid apply (§ 16(3) and 3(1) of the Ordinance).

In the Czech Republic the micro sources are typically small solar power plants that do not primarily make money on the sale of electricity, but are installed to save the energy at home, reduce consumption of electricity from the grid and thus contribute to the independence of customers from the central system. Connecting without a license also means minimal contact with the distributor which means only a small administrative burden during the actual operation.

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

Answer:

- The Ministry of Industry and Trade (**MIT**) is the lead ministry for the development and implementation of energy policy. The Ministry of Industry and Trade is responsible for the development and implementation of renewable energy policy in the Czech Republic.
- **OTE**, the market operator, is responsible for paying the support in the form of FITS and FIPs for electricity produced from RES.
- The energy sector regulator, **ERO**, is the administrative authority responsible for oversight and economic regulation of the energy sector. It sets the amounts of support, FITs and FIPs for electricity produced from RES in its price decisions¹². The amendment to the Energy Act markedly reinforced the ERO's powers, in particular those of supervision, oversight penalisation and remedial measures in cases of violations of legal regulations and in the enforcement of sanctions.
- The State Energy Inspection (**SEI**) is an administrative authority subordinated to the MIT. The SEI oversees compliance with the Energy Act, the Energy Management Act and the Act on Prices.
 - The **Office for the Protection of Competition**¹³ is the central authority responsible for creating conditions that favour and protect competition, supervision over public

¹¹ Operátor trhu s elektřinou, OTE, website http://www.ote-cr.cz/?set_language=en .

¹² Energy Regulatory office, <https://www.ery.cz/en/poze> .

¹³ Úřad pro ochranu hospodářské soutěže, ÚOHS, website: <https://www.uohs.cz/cs/uvodni-stranka.html>.

procurement and consultation, and monitoring the provision of state aid.

The Energy Act lays down the rights and obligations of the ERO and provides for co-operation among ERO and MIT, SEI and ÚOHS.

Specific Questions on the regulatory framework for residential prosumers

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

General

The RES in the Czech Republic are primarily governed by the following legislation:

- a) Act No. 165/2012 Coll. on Supported energy sources and amending certain acts, as amended;
- b) Act No. 458/2000 Coll. on business conditions and public administration in the energy sectors and amending certain laws (Energy Act), as amended, hereinafter referred to as the Energy Act
- c) ERO Decree No. 296/2015 Coll. on technical and economic parameters for determining the purchase prices for electricity and green bonuses for heating and on establishment of lifetime of power plants and heat plants using renewable energy sources (Decree on technical and economic parameters);
- d) ERO Decree No. 408/2015 Coll. on Electricity Market Rules;
- e) ERO Decree No. 9/2016 Coll. On the registration procedures with the market operator and implementing certain other provisions of the Act on Supported energy sources (Registration Decree);
- f) ERO Decree 16/2016 Coll. on conditions for connection to the electricity grid;
- g) MIT Decree. No. 145/2016 Coll. On the reporting of electricity and heat produced from supported energy sources and on the implementation of certain other provisions of the Act on Supported energy sources (Decree on reporting of energy from Supported sources);
- h) MIT Decree. No. 477/2012 Coll., on determining the types and parameters of the supported RES, methods of use of RES for electricity, heat or biomethane and storing documents concerning the fuel used, the biodegradable fraction of municipal waste, requirements for quality of biomethane and sustainability criteria for bioliquids;
- i) MIT Decree. No. 37/2016 Coll., On electricity produced from high-efficiency combined heat and power generation and electricity from secondary sources;
- j) MIT Decree. No. 441/2012 Coll. on establishing the minimum efficiency of energy utilization in the production of electricity or thermal energy;
- k) MIT Decree. No. 82/2011 Coll., On electricity metering and method of calculation of damages due to unauthorized consumption from the grid, unauthorized input to the grid, unauthorized transmission or unauthorized distribution of electricity, as amended;

In addition, price decisions of the ERO determining the amount of FITs and FIPs for the RES are available on the ERO website.¹⁴

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

Answer:

In the Czech Republic, the use of RES is primarily governed by the Act on the Supported energy sources and the Energy Act.

¹⁴ <http://www.eru.cz/cs/poze/cenova-rozhodnuti>.

The supported energy sources are understood to include renewable energy sources (i.e. energy of biomass and biogas, solar energy, wind energy, hydro energy etc.), secondary energy sources, high-efficiency combined heat and power generation, biomethane and distributed electricity generation.

The main purpose of the Act on Supported energy sources is to promote the use of the above energy sources with a view to protecting climate and the environment and increasing the share of renewable energy sources in the consumption of primary energy sources to achieve the set targets. Under this Act, the Energy Regulatory Office sets out the scope and level of support in its price decisions. This Act also details the form of support for the electricity produced from RES in § 8 (1). FITs and FIPs are the two key support measures for incentivising electricity generation from RES.

The Energy Act regulates the conditions for production, transmission and distribution of electricity and gas and trading with these commodities, as well as conditions for the production and distribution of heat. The trading in energy is according to the Energy Act subject to a license issued by the Energy Regulatory Office. The Act also defines the conditions in the electricity and gas markets and the rights and obligations of its participants – manufacturers, operators of transmission and distribution networks and customers. Similarly, the rights and obligations of producers and consumers of heat are regulated.

The 2015 State Energy Policy (SEP) is a key strategic document for both energy and climate policy. The State Environmental Policy of the Czech Republic 2012-2020, which was adopted by the government in 2013, is mostly focused on meeting European Union (EU) climate and energy targets by 2020. For 2020, the Czech Republic has a binding national target for renewable energy to equal 13% of gross final consumption of energy. In addition to this overall target, the Czech Republic has a separate binding national target for renewable energy to cover 10% of transport fuel demand in 2020.

Its targets on renewable energy for 2020 and the policies and measures to meet them were initially laid out in the National Renewable Energy Action Plan 2011-20 (NREAP), which was first published in 2010 and revised in 2012 and again in 2015¹⁵. The most recent updated version of the plan was approved by the Government on 25 January 2016 to take into account changes to domestic policy and the latest revisions of EU rules on the restriction of the use of first-generation biofuels. In 2015, RES accounted for 9.4% of total primary energy supply and this share is unlikely to increase in the medium term following the abolition of support mechanisms for renewable electricity. The Czech Republic is on track to achieve its 2020 RES target¹⁶.

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

Answer:

The NREAP does not define specific objectives for the small RES sources or micro sources. It refers to the amendment of the Act on Supported energy sources which came into force during 2013 (end of all operational support in the form of FITs and FIPs for RES installation as of 1 January 2014).

The NREAP is part of the Act on Supported energy sources and it also performs regulatory functions in relation to the amount of electricity and heat that can claim operational support. The relevant provisions in the Act are set so that in case of exceeding the values set out in the NREAP,

¹⁵ Národní akční plán České republiky pro energii z obnovitelných zdrojů, Ministerstvo průmyslu a obchodu, Prosinec 2015, <http://www.mpo.cz/assets/dokumenty/54909/62718/649151/priloha001.pdf>.

¹⁶ IEA, see n 6.

in the following period there will be no support for the RES and thus the inability to claim operational support for the newly introduced electricity generating plants or production of heat¹⁷.

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?

Answer:

There is no definition of residential prosumer in the Czech Republic.

In January 2016, the ERO issued a new Ordinance No 16/2016 Coll. which defined 'micro source' as a power supply designed for electricity production and parallel operation with the distribution system of low voltage. (current up to 16 A per phase) and has a maximum total installed capacity up to 10 kW (§ 2 e).

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

General

1. For micro source with zero input into the grid (regulated by the §16 of the Ordinance No. 16/2016 Coll.):
 - a) The applicant performs at its own cost the measurement of impedance according to technical norm CSN 33 15 00.

The impedance value limits are:

- Resources for up to 16 A per phase 0.47 ohm.
- Resources for up to 10 A per phase 0.75 ohm.

b) Submission of simplified application.

c) Agreement between the producer and the distribution company.

2. For small source up to 10kW with input into the grid (to which the standard procedure on the § 3 (1) of the Ordinance No. 16/2016 Coll. applies).

a. Submission of application.

b. Verification of compliance with conditions for connection according to §25 (10) (a) of the Energy Act (capacity of the installation, reliable and safe operation of the distribution system).

c. Agreement between the producer and the distribution company.

Neither micro sources nor small sources with the generation capacity up to 10 kW require contacting the building office in the municipality to obtain a building permit, registration in the OTE system or a licence. The administrative burden for these two types is therefore significantly reduced and the whole procedure simplified and faster.

All other sources where prosumers are classified as entrepreneurs follow standard connection procedure and require a licence from ERO for their operation and also registration with OTE.

¹⁷ See n 11.

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?

1. Requirements

The requirements applicable to prosumers producing energy from both micro sources and small sources are set out in the Ordinance No. 16/2016 Coll., more specifically § 3 concerning the conditions for standard connection to the grid of small sources and § 16 concerning the simplified connection procedure for micro sources.

2. Application fees

There are no application fees when submitting requests or application within the Programme *Nova Zelena Usporám* (described in section 6 below).

3. One-off costs

Prosumers generating energy sources connected to the grid are obliged to pay one-off payment in order to connect to the distribution system. According to the Ordinance No. 16/2016 Coll., the distribution system operator has a right to request payment in relation to the cost of connecting depending on the amount of requested reserved capacity (§ 13). The prices for connection are specified in Annex VIII of the Ordinance. Connecting to low voltage distribution system costs in the range of 200-500 CZK (7,50 to 18 EUR, approx.). This Annex also states that if the supply point is already connected and the connection method remains the same, the applicant does not pay anything. Failure to pay can lead to the loss of right of connection of the installation to the distribution system under the agreement concluded.

Prosumers generating energy from micro source do not need to pay for accessing the grid as one of the conditions for this type of installation is zero reserved capacity on the grid, thus zero (or, at least, negligible) input into the low voltage distribution system.

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?

For micro source it is not possible to feed or sell as the obligation is to limit the input to the grid to zero (§ 16 of the Ordinance No. 16/2016 Coll.)

As for small source up to 10kW, from 1 May 2016 the income from overflows of electricity from installations operating without a license is not considered a business income. This could greatly facilitate the sale of excess energy based on the contract with the electricity trader for selling the surplus electricity at market price. However, these provisions are in practice not used and contracts do not include provisions for selling electricity by residential prosumers¹⁸. Since it is not possible to make profit, i.e. sell surplus energy from small RES installations without the licence, in practice it is not beneficial for the prosumers with generation capacity up to 10 kW to operate without licence.

¹⁸ Information obtained through discussions on 26 January with a representative from the Energy Regulatory Office.

The situation was created due to the amendment of the Income Tax Act No. 568/2012 Coll. in 2016 which allows to make profit from the RES also for non-entrepreneurs. If the revenues do not exceed in conjunction with other income according to § 10 (1) (a) of the Income Tax Act the amount of CZK 30 000 per year, they will also be exempt from the income tax¹⁹.

As of 1 January 2014, the producers of electricity from RES are not granted any state support in the form of FITs or FIPs with the exception of small hydro up to 10MW.

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

There are two ways for prosumers to connect to the grid: through a **standard procedure** or through a **simplified regime**. Whereas the first allows the prosumer to feed certain amount of energy to the grid and in case of licence also to be paid for overflows into the electricity grid, the former is applicable only to sources which do not allow the sale of overflows.

Standard procedure

For connecting to the grid only a simple application/request is needed followed by an agreement concerning the connection with the distribution system operator. In practice, also the so-called “connectivity study” is required. These conditions are laid down in § 3(1) of the Ordinance No.16/2016 Coll.

The distribution system operator has also right to request payment in relation to the cost of connecting depending on the amount of requested reserved capacity (§ 13 of the Ordinance 16/2016 Coll.). The prices for connection are specified in Annex VIII of the Ordinance.²⁰ This Annex also states that if the supply point is already connected and the connection method remains the same, the applicant does not pay anything. Failure to pay can lead to the loss of right of connection of the installation to the distribution system under the agreement concluded.

Simplified regime of connection applicable to sources with zero grid input only

The Ordinance in § 16 specifies the conditions for connecting micro source in the simplified regime.

- Production from the micro source is intended for parallel operation with the distribution system of low voltage.
- AC current does not exceed 16 Amps per phase.
- Total installed power capacity does not exceed 10 kW

The contract between the prosumer and the distribution system operator is signed for zero overflows thus the prosumer is not obliged to pay the price for the connection to the grid.

In addition, the Act on Supported energy sources provides for preferential access to grid for all RES (§ 7 (1) of the 165/2012 Coll.:

The transmission system operator or distribution system operator is obliged to preferentially connect to the transmission system or the distribution system the electricity generating installation from a supported source for the purpose of electricity transmission or distribution of electricity, if a manufacturer so requests and meets the connection conditions stipulated by specific legislation (e.i. Ordinance 16/2016 Coll.) except in cases of demonstrable lack of capacity in the grid or threats to the safe and reliable operation of the electricity system.

¹⁹ <http://www.fbadvokati.cz/novinky/energetika/pripojeni-fotovoltacke-elektrarny-do-site>.

²⁰ For details on the prices, see 4.1. above.

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

For micro-sources, there is no inter-connection configuration as the agreement between the prosumer and the distribution system operator is signed for zero overflows into the grid.

For small sources, based on the agreement with the operator, verification of compliance with conditions for connection according to §25 (10) (a) of the Energy Act (capacity of the installation, reliable and safe operation of the distribution system) has to be provided for and the prosumer can feed the surplus energy into the grid.

For any other prosumers with the possibility to sell the surplus energy to the grid, the inter-connection is based on the conditions of the licence agreement.

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

The competence to determine the inter-connection configuration lies at State level.

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

For the rules to ensure that prosumers see section 5 above.

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

RES installation operators are entitled to priority connection to the grid as stated in (§ 7 (1) of the Act on Supported energy sources 165/2012 Coll.²¹

The International Energy Agency report²² stated in some cases, the grid connection procedure presented a barrier to the development of RES in the Czech Republic. In 2010 the national TSO²³ declared a temporary connection moratorium for variable renewable electricity (RES-E) plants despite priority connection to the grid. The TSO argued that the grid capacity was not sufficient for additional RES capacity and demanded several amendments of the legal framework, including the introduction of advance payments for grid connection to solve the problem of speculative applications and the abolition of the priority access for electricity from variable RES. However, this issue concerned mainly larger RES producers as oppose to smaller residential prosumers.

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

The connection charges for a RES installation are calculated in accordance with the deep-connection cost methodology. This means that the RES producer has to ensure the connection of their installation to the transmission or to the distribution grid at their own expense. According to the Ordinance 16/2016 Coll., the distribution system operator has right to request payment in relation to the cost of connecting depending on the amount of requested reserved capacity (§ 13).

²¹ For details, see answer to question 5 above.

²² IEA, see n 6.

²³ Česká energetická přenosová soustava, ČEPS, website: <https://www.ceps.cz/ENG/Pages/default.aspx>.

As referred to under 4.1. above, under Annex VIII of the Ordinance, connecting to low voltage distribution system costs in the range of 200-500 CZK/Amps (7,50 to 18 EUR approx.). This Annex also states that if the supply point is already connected and the connection method remains the same, the applicant does not pay anything. Failure to pay can lead to the loss of right of connection of the installation to the distribution system under the agreement concluded.

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

1. Small sources up to 10 kW which feed surplus energy back to the grid

- After 1.1.2014, once the FiT system was abolished, prosumers receive a payment for selling the surplus renewable energy to the distribution company on the basis of the contract. From 1.05.2016 the income from overflows of electricity from installations operating without a license is not considered a business income. However, based on the discussions with the representative from the Energy Regulatory Office, these provisions are in practice not used and contracts do not include provisions for selling electricity by residential prosumers.²⁴
- **No building permit** - The Building Authority is not required to be contacted for small sources installation. Moreover, under the amendment to the Building Act effective from 1 January 2013, installations with the capacity up to 20kW do not require notification or a building permit.
- **No registration with OTE** – registration is only required for those installations which operate with a licence thus for small sources up to 10kW they are not required
- **No licence required** – § 3 (3) of the Energy Act

2. For micro sources with zero input in the grid

- **Simplified connection procedure** - § 16 of the Ordinance No. 16/2016 Coll.
- **No building permit**
- **No registration with OTE**
- **No licence**

For both micro source and small sources up to 10 kW there is a financial support available under the Programme ‘Nova Zelena Usporám’²⁵, so called investment support. It is a programme within the competence of the Ministry of Environment administered by the State Environmental Fund of the Czech Republic. The objective is to support energy saving reconstruction of houses and apartment buildings, replacement of unsuitable sources of heating and promotion of renewable energy. Financial support can be provided for, inter alia, installation of solar and photovoltaic systems for up to 50% of all installation costs. The Programme will run until 2021 and there has been a significant public interest in the support.

3. All other sources with a possibility to exceed 10 kW capacity feeding and selling surplus energy into the grid

- FIP and FIT support available– only until 1.1.2014(please refer to the General section above.
- Support in the form of FIT and FIP only to small hydro power installations after this date.

²⁴ For details, see 4.2. above.

²⁵ Nova Zelena Usporám, <http://www.novazelenausporam.cz/> .

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:

In case the prosumer feeds the surplus electricity into the grid, the distribution company will agree with him/her on an amount which he/she can take from the grid in case of need free of charge alternatively agree in the contract on an annual discount based on his/her contribution to the grid. However, this is done on an individual basis when the agreement between the prosumer and the company is concluded and there is no legislation providing for specific unified rules²⁶.

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?

Prosumers are not subject to a special tax in the Czech Republic whether they simply feed surplus energy back to the grid (i.e. do not sell energy and operate without licence) or they operate with licence and sell the surplus energy to the grid (to see details about the types of residential prosumers see section 1 above). Both of them pay one-off fee to connect to the grid as explained in section 5.1.

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

The incentives to residential prosumers are described under section 6 above.

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

There is no support in the form of green bonuses or feed-in-tariffs as of 1.1.2014 for small sources; except for small hydro power installations up to 10MW generation capacity. In addition, there is always a possibility of not connecting or refusing to connect to the grid. - The IEA report stated in some cases, the grid connection procedure presented a barrier to the development of RES in the Czech Republic Please refer to section 5.4 above for more details concerning this issue.

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 the Czech Republic the net metering system is not used, there is no legislative basis for it. Instead, standard meters are installed, which measure the various parameters of the energy generation.

²⁶ <https://www.finance.cz/477630-vykup-fotovoltacke-elektriny/>

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

There are no special billing conditions for either type of prosumer in the Czech Republic. The electricity bought by prosumer from the grid is sold for standard price as for any other consumer. In case of feeding surplus energy back to the grid, there can be, based on an individual agreement between the prosumer and the distribution company, discounted price or annual discount for the electricity taken from the grid.

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?

Since 2007, there has been a gradual increase in development of biogas plants at the local municipal level. Czech biogas stations use mainly processed agricultural products and biowaste and biogas is used for operation of cogeneration units for the production of both electricity and heat. They also serve as an energy source to the community either covering full or partial needs of the inhabitants. They became one of the building blocks of modern decentralized energy, improving energy independence at local levels and decreasing greenhouse gas emissions²⁷.

The first biogas station in the country is operational since 2011 in the municipality of Třeboň which supplies both heat and electricity and was co-funded from European regional development Fund²⁸. Since then, many other biogas stations were built across the country (map with all biogas plants is available at the website of the Czech Biogas Association²⁹).

For example, Kněžice is the first energy-independent community in the production of heat and electricity in the Czech Republic. The waste materials are converted to biogas and combined with the direct combustion of phytomass then create a closed circle of energy, which generates electricity for sale to the public, as well as the heat for local inhabitants³⁰.

The Czech Biogas Association (CzBA) was founded in January 2007 with the mission to become a national technology platform for the production and use of biogas. CzBA now brings together more than 60 members including leading scientific research institutions, suppliers and technology vendors, operators of biogas and other experts from the Czech Republic and beyond³¹.

Since its inception, CzBA has been actively involved in initiating research projects concerning biogas and biomethane. It participates in the activities of a number of expert groups, in the creation of legislative measures and as well as in international projects. In the years 2009 - 2011 CzBA developed in a wide professional discussion two key documents - the so-called Strategic Research Agenda and Implementation Action Plan whose ambitions are sustainable development of the biogas industry on a national and stimulation of cooperation between the business and scientific community by setting a common framework, measures and activities.

²⁷ <http://www.scmagazine.cz/casopis/02-16/odpadni-voda-z-biopllynove-stance-vyhriva-domy?locale=cs> .

²⁸ <http://www.ceskatelevize.cz/ct24/regiony/1254994-biopllynova-stance-v-treboni-dodava-elektrinu-i-teplo> .

²⁹ <http://www.czba.cz/mapa-biopllynovych-stance/>.

³⁰ The municipality was visited by five delegations from South Korea, where the treatment of organic waste is in high demand and which took great interest in this community project. Milan Kazda, the mayor of Kněžice then spoke about biogas and its use in their municipality in the European Parliament, source: http://zpravy.idnes.cz/knezice-energeticky-sobestacna-obec-milan-kazda-biopllynka-odpad-teplo-elektrina-gf1-/domaci.aspx?c=A160304_103506_domaci_fer .

³¹ Czech Biogas Association, <http://www.czba.cz/o-nas/> .

- 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?

Currently, development of biogas plants at the local municipal level is the only energy cooperative/community scheme in the Czech Republic (there are, for instance, no such schemes concerning wind energy).

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

The procedures for establishing cooperatives are governed by the applicable legislative and policy framework they are not specifically targeted at prosumers at community levels.

8. Other questions on the regulatory framework

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

The Energy Regulatory office oversees the compliance with the provisions of the Act on Supported energy sources (§ 48). Administrative offences according to this Act are, in the first instance, dealt within the ERO. In § 52 the Act states that ERO resolves disputes concerning the support of electricity from renewable sources, electricity from secondary sources or electricity from high-efficiency combined heat and power generation and heat support.

ERO also decides other disputes concerning financial obligations imposed by the Act on Supported energy sources or obligations to return unauthorized support under § 51 of this Act.

In cases of complaints from prosumers taking advantage of the state funding *Nova Zelena Usporám*, there are designated administrative employees with The State Environmental Fund of the of the Czech Republic³² which deal with all issues related to this state funding.

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

There are no special procedures applicable to prosumers only. Each case is governed by the rules of Administrative Code No. 500/2004 Coll.

³² State Environmental Fund of the Czech Republic, <http://en.sfzp.cz/sekcce/585/sef/> .

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 Types of residential prosumers In the Czech Republic, the classification of prosumers is based on whether the surplus energy is fed and sold back to the grid rather than type of the RES source. There are therefore 3 types of small sources relevant for residential prosumers depending on whether the surplus generated electricity is fed and/or sold back into the grid or not, i.e. whether the prosumer operates with or without licence (micro source and small source up to 10 kW classified as non-entrepreneurs in energy and any other source possibly exceeding 10 kW classifies as entrepreneur in energy).	High
Institutional framework The Ministry of Industry and Trade (MIT) is the lead ministry for the development and implementation of energy policy. OTE³³, the Czech electricity market operator, is responsible for paying the support in the form of Feed-in-Tariffs (FITs) and feed-in premiums (FIPs) - green bonuses) for electricity produced from RES. The energy sector regulator, Energy Regulatory Office (ERO), is the administrative authority responsible for oversight and economic regulation of the energy sector. It sets the amounts of support, FITs and FIPs for electricity produced from RES in its price decisions. The State Energy Inspection (SEI) is an administrative authority subordinated to the MIT. The SEI oversees compliance with the Energy Act, the Energy Management Act and the Act on Prices. The Office for the Protection of Competition (ÚOHS) is the central authority responsible for creating conditions that favour and protect competition, supervision over public procurement and consultation, and monitoring the provision of state aid.	High
Applicable legislation, plans and objectives The applicable legislation is: Act No. 165/2012 Coll. on Supported energy sources and amending certain acts, as amended; Act No. 458/2000 Coll. on business conditions and public administration in the energy sectors and amending certain laws (Energy Act), as amended, hereinafter referred to as the Energy Act and ERO Decree 16/2016 Coll. on conditions for connection to the electricity grid. The 2015 State Energy Policy (SEP) applies, as well as the Renewables National Action Plan (NREAP) 2011-2020.	High

³³ Operátor trhu s elektřinou, OTE, website : http://www.ote-cr.cz/?set_language=en .

Definition of residential prosumers There is no definition of residential prosumer in the Czech Republic. In January 2016, the ERO issued a new Ordinance No 16/2016 Coll. which defined the micro source as a power supply designed for electricity production and parallel operation with the distribution system of low voltage with phase Rated AC current up to 16 A per phase including a maximum total installed capacity up to 10 kW inclusive (§ 2 (f)).	Medium		
Specific Questions on the regulatory framework for residential prosumers			
Permitting requirements for each type of residential prosumer <table border="1" data-bbox="204 629 1118 819"> <tr> <td data-bbox="204 629 715 819">Micro source (zero input into the grid) - simplified application (§ 16 of the ERO Decree 16/2016 Coll.)</td><td data-bbox="715 629 1118 819">Small source (up to 10kW with input into the grid) - Standard procedure (§ 3(1) of the ERO Decree 16/2016 Coll.)</td></tr> </table> Neither micro sources nor small sources with the generation capacity up to 10 kW require contacting the building office in the municipality to obtain a building permit, registration in the OTE system or a licence. The administrative burden for these two types is therefore significantly reduced and the whole procedure simplified and faster. All other sources where prosumers are classified as entrepreneurs follow standard connection procedure and require a licence from ERO for their operation and also registration with OTE.	Micro source (zero input into the grid) - simplified application (§ 16 of the ERO Decree 16/2016 Coll.)	Small source (up to 10kW with input into the grid) - Standard procedure (§ 3(1) of the ERO Decree 16/2016 Coll.)	Medium
Micro source (zero input into the grid) - simplified application (§ 16 of the ERO Decree 16/2016 Coll.)	Small source (up to 10kW with input into the grid) - Standard procedure (§ 3(1) of the ERO Decree 16/2016 Coll.)		
Rules applicable to the access to the grid Standard procedure, which allows the prosumer to feed or in case of licence also to be paid for overflows into the electricity grid. For connecting to the grid only a simple application/request is needed followed by an agreement concerning the connection with the distribution system operator. The distribution system operator has also right to request payment in relation to the cost of connecting depending on the amount of requested reserved capacity (§ 13 of the Ordinance 16/2016 Coll.). The prices for connection are specified in Annex VIII of the Ordinance. The simplified regime applicable only to sources which does not allow the sale of overflows. The Ordinance in §16 specifies the conditions for connecting micro source in the simplified regime. The contract between the prosumer and the distribution system operator is signed for zero overflows thus the prosumer is not obliged to pay the price for the connection to the grid.	High		
Incentives (e.g. taxes and tariffs) for each type of residential prosumers Small sources up to 10 kW which feed energy back to the grid: - No Building permit; - No registration with OTE; - No licence.	Medium		

2. For micro sources with zero input in the grid: - Simplified connection procedure - § 16 of the Ordinance No. 16/2016 Coll.; - No Building permit; - No registration with OTE; - No licence. For both micro source and small sources there is a financial support available under the Programme ‘Nova Zelena Usporám’, so called investment support. It is a programme within the competence of the Ministry of Environment administered by the State Environmental Fund of the Czech Republic. 3. All other sources with a possibility to exceed 10 kW capacity feeding and selling surplus energy into the grid: - Green bonus (FIP) and FIT – ONLY until 1.1. 2014; - Support only to small hydro power installations after this date.	
Conditions encouraging residential prosumers Advantageous conditions are: 1. For the small sources up to 10 kW which feed energy back to the grid • No Building permit required • No registration with OTE • No licence from ERO required 2. For micro sources with zero input in the grid • Simplified connection procedure - § 16 of the Ordinance No. 16/2016 Coll. • No Building permit required • No registration with OTE • No licence from ERO required For both micro source and small sources there is a financial support available under the Programme ‘Nova Zelena Usporám’, so called investment support. It is a programme within the competence of the Ministry of Environment administered by the State Environmental Fund of the Czech Republic.	Medium
Conditions acting as barriers for residential prosumers - No support in the form of green bonuses or feed-in-tariffs as of 1.1.2014 for small sources - Possibility of not connecting – refusing to connect to the grid	Low
Metering systems for each type of residential prosumer In the Czech Republic the net metering system is not used. Instead standard meters are installed measuring various parameters of the energy generation.	Medium
Billing conditions for each type of residential prosumer	Medium

There are no special billing conditions for either type of prosumer in the Czech Republic. The electricity bought by prosumer from the grid is sold for standard price as for any other consumer. In case the prosumer feeds the surplus electricity into the grid, the distribution company will agree with him on an amount which he can take from the grid in case of need free of charge on an individual basis based on the contract between the two parties.	
Measures to encourage the creation of energy communities at municipal level Since 2007, there has been a gradual increase in development of biogas plants at the local municipal level. Czech biogas stations use mainly processed agricultural products and biowaste and biogas is used for operation of cogeneration units for the production of both electricity and heat. They also serve as an energy source to the community either covering full or partial needs of the inhabitants. Czech Biogas Association (CzBA) was founded in January 2007 with the mission to become a national technology platform for the production and use of biogas Since its inception, CzBA has been actively involved in initiating research projects concerning biogas and biomethane. It participates in the activities of a number of expert groups, in the creation of legislative measures and as well as in international projects. In the years 2009 - 2011 CzBA developed in a wide professional discussion two key documents - the so-called Strategic Research Agenda and Implementation Action Plan, whose ambitions are sustainable development of the biogas industry on a national and stimulation of cooperation between the business and scientific community by setting a common framework, measures and activities.	High
Rules facilitating the creation of energy cooperatives? Are they more simple/less costly than those for other schemes? Are cooperatives the most common legal status for energy communities Currently, development of biogas plants at the local municipal level is the only energy cooperative/community scheme in the Czech Republic (there are for instance no such schemes concerning wind energy). The development is supported via national or EU funding.	NA
Other questions on the regulatory framework Complaint handling procedures for residential prosumer The Energy Regulatory office oversees the compliance with the provisions of the Act on Supported energy sources (§ 48 of this Act). Administrative offences according to this Act are, in the first instance, dealt within the ERO. In § 52 the Act states that ERO resolves disputes concerning the support of electricity from renewable sources, electricity from secondary sources or electricity from high-efficiency combined heat and power generation and heat support.	High
Redress procedures available only to residential prosumers There are no special procedures applicable to prosumers only. Each case is governed by the rules of Administrative Code No. 500/2004 Coll.	Medium

Executive summary

In 2013, the Czech Republic has introduced amendments to their incentive scheme for renewables in the Act on Supported energy sources. The support for all new renewable energy sources (RES) installations except small hydro plants ceased at the end of that year. Thus, as of 1 January 2014, public support for new RES generators being provided through feed-in-tariffs (FITs) and feed-in-premiums or also called green bonuses (FIPs) ended. The **abolishment of the support scheme** has slowed down the development of the sector which had increased rapidly in the previous period. After this date, support has been channelled towards indirect support for small systems in the form of **simplified administration procedures and access to the grid**.

There is **no definition of residential prosumer** in the Czech Republic. There are 3 types of structures for small installations that relevant for residential prosumers determining whether the surplus generated electricity can be fed and/or sold back into the grid or not: micro source and small source/installation up to 10 kW classified as non-entrepreneurs in energy and operating without licence (do not sell electricity into the grid) and any other source/installation which can exceed 10 kW and are classified as entrepreneur in energy needing a licence for its operation and able to feed and sell the surplus electricity into the grid.

For both micro source and small sources there is **a financial support available** under the Programme 'Nova Zelena Usporám', so called investment support. It is a programme within the competence of the Ministry of Environment administered by the State Environmental Fund of the Czech Republic. Another incentive is that **neither of these two sources require to obtain a building permit, licence or to be registered** with the OTE, the Czech electricity and gas market operator in order to be connected to the grid and operate. On the other hand, there is no financial or administrative incentive concerning all the other sources.