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# Prosumer Rights: Options for an EU legal framework post-2020

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## Executive Summary

The European Commission is developing legislative proposals to pave the way towards an EU Energy Union. In developing their strategy, the Commission explicitly acknowledged that "citizens should be at its core, where they take ownership of the energy transition, benefit from new technologies to reduce their bills, participate actively in the market, and where vulnerable consumers are protected."<sup>1</sup>

There are many ways for citizens, small businesses and communities to contribute to the energy transition, actively participating in different aspects of the energy market to become true 'energy citizens'. Citizens are no longer resigned to the role of passive consumers, but have the potential to be energy producers, or 'prosumers',<sup>2</sup> particularly through self-generation of renewable energy, storage, energy conservation and participation in demand response.

Through their active participation in the energy market, energy citizens can help the EU to reach its climate and energy objectives. They can also save money on their energy bills, help to keep the electricity grid in balance, boost local economic growth and innovation, and drive local enthusiasm for the energy transition. However, to allow consumers, particularly households and small businesses, to participate fully in the energy system an appropriate framework is needed.<sup>3</sup>

The aim of this report is to:

1. Assess the need for a dedicated prosumer rights framework to promote active participation by consumers in the internal energy market (IEM);
2. Recommend a legal definition for the term 'prosumer', which encompasses consumers' capacity to be active both individually and collectively (i.e. through community initiatives);
3. Identify legal options for new and reinforced prosumer rights to ensure and support their active participation in the IEM;
4. Identify legal options for how the EU legal framework can support active participation by low- to medium-income consumers and consumers that live in multi-unit buildings; and
5. Identify the legal and institutional arrangements necessary to ensure proper oversight and enforcement of prosumer rights.

### Lack of a dedicated legal framework for prosumers

As a specific type of market actor, prosumers face a number of unique barriers to fully participate in the energy market. While many of these problems must be dealt with at national level, the EU also has a clear role to play. These issues impact on the well-being of energy consumers across the EU and on market integration, which are shared competences between the EU and Member States. However, there is currently no dedicated space in the EU legal framework to guarantee, or even support, citizen participation in the energy system.

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<sup>1</sup> European Commission, A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy, COM(2015)080 final.

<sup>2</sup> For the purposes of this report, we refer to energy citizenship, active consumers, and prosumers interchangeably.

<sup>3</sup> Agency for Cooperation of Energy Regulators (ACER) (2014). *Energy Regulation: A Bridge to 2025 Conclusions Paper*, Recommendation of the Agency on the regulatory response to the future challenges emerging from developments in the internal energy market, p 19.

The lack of a dedicated legal framework for prosumers means that:

- citizens can participate in the energy markets of some Member States, but not others;
- prosumers risk losing consumer protections;
- prosumers are required to comply with the same rules as established energy companies, placing them at a distinct competitive disadvantage;
- prosumers are exposed to the same investment risks and uncertainties as traditional commercial actors and investors, even though they are more vulnerable to such risks;
- prosumers do not have sufficient information or technical knowhow to overcome administrative hurdles to becoming active in the energy market.

### The starting point for supporting prosumers

The term 'prosumer' has yet to be sufficiently defined at EU level. Therefore, **a supportive EU framework should elaborate a legal definition for prosumers** capable of identifying who makes up this category of energy market actors.

Prosumers remain – by and large – energy consumers. A legal definition must ensure that prosumers maintain this status and that they are distinguished from other traditional market actors, such as established energy companies. As such, **prosumers should be legally defined as 'active customers'** under a reformed IEM Directive on Electricity.<sup>4</sup> The definition must be inclusive, covering at least the following activities:

- generation, storage and/or supply of renewable energy; and
- demand-side response.

**A legal definition of the term 'prosumer' should cover energy market participation by individual consumers and collective – or 'community energy' – initiatives**, which represent a subset of prosumers. Given that community energy projects assume various legal forms, a reformed IEM Directive on Electricity should also provide for a legal definition of the term 'community energy'. This definition should acknowledge the unique characteristics, namely governance arrangements, which separate community energy initiatives from other commercial market actors. To ensure inclusiveness as new forms of community energy emerge, and flexibility in different national contexts, the definition should cover at least the following types of entities:

- cooperatives;
- housing associations;
- district heating;
- foundations; and
- charities.

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<sup>4</sup> Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (IEM Directive on Electricity), OJ L 211, 14.8.2009, p 55.

## Recommendations for establishing a legal framework for prosumer rights

EU law protects the rights of energy consumers, including rules for 'empowerment' (e.g. the right to choose and switch suppliers and the right to receive information and advice). While these rights should be strengthened, specific prosumer rights should also be developed, as existing rules are not aimed to facilitate active participation in the energy market.

The guaranteed right to be a prosumer must provide a foundation for active participation of all household and small business consumers across the EU. Specifically, **a reformed IEM Directive on Electricity should directly confer a right on all household customers and small enterprises to become a prosumer – that is, the right to be active in the energy market.**

Under the umbrella of a right to become a prosumer, specific provisions are needed to protect different types of prosumers and activities. **A set of specific rights should also be conferred to guarantee that:**

1. **Prosumers continue to be protected by any rights they would otherwise receive as passive consumers under EU law;**
2. Prosumers have **a right to fair access to relevant markets**. To ensure fair market access for prosumers, Member States, or their National Regulatory Authorities (NRAs), as appropriate, should be required to:
  - guarantee access and priority connection for renewable energy production installations to distribution grid infrastructure in accordance with system-reflective pricing that encourages smart use and supply of resources by the prosumer to the grid;
  - guarantee full participation of demand-side response in relevant markets;
  - simplify and streamline administrative barriers, including planning and permitting authorisation, certification and licensing, and grid connections, for renewable energy production installations; and
  - simplify licensing and registration requirements, and barriers to contracting with or becoming a balancing responsible party (BRP) for new market entrants such as community suppliers, aggregators and energy service companies (ESCo's);
3. Prosumers have **a right to freely exercise a voluntary choice to participate in the market individually and/or through an agent acting on the prosumer's behalf;**
4. Member States set in place **a standardised and transparent system of establishing network tariffs/rate design at national level** that ensures non-discriminatory distribution of costs and benefits, and does not result in disproportionate or dissuasive costs for participation in self-generation, while ensuring fairness to consumers as a whole. In doing so, Member States, or their NRAs, should be required to ensure prosumers providing supply and services to the grid are remunerated fairly in accordance with the value provided to the system. System operators should be properly incentivised, through reforms to revenue-setting regulation based on EU principles and guidance, to develop and manage the grid in

alignment with achieving EU energy policy goals.

5. **A stable regulatory framework which supports investor confidence of prosumers and ensures respect for their reasonable investment expectations**, including:

- ensuring equitable access to available support schemes, including for community energy initiatives that produce renewable energy; and
- a prohibition of retroactive changes (i.e. those that change the legal consequences of past transactions) and, as appropriate, retrospective changes (i.e. those that alter future legal consequences of past transactions), to support schemes.

6. Prosumers have **a right to access transparent and understandable information**, including:

- clear and comparable contractual information from third parties that wish to facilitate the prosumer's active participation in the market;
- information that allows the prosumer to understand the risks and opportunities of investing in renewable energy production and/or switching to variable tariffs;
- information on their rights as prosumers through a one-stop-shop or existing single point of contact, including conditions and requirements for exercising their rights.

## Making renewables accessible to citizens in energy poverty and in multi-dwelling buildings

By participating in conservation, energy efficiency and renewable energy production, low- to medium-income households can benefit from reduced energy bills. However, these households face substantial financial barriers in adopting such measures. Furthermore, many households or small businesses cannot self-generate renewable energy because they reside in or operate in a multi-unit building, or because the building is otherwise ill-equipped to generate renewable energy.

The EU legal framework should facilitate wider access to the benefits of renewable energy production. There is scope for a revised Renewable Energy Directive<sup>5</sup> to recognise self-generation and participation in community projects as ways to address fuel poverty and help consumers reduce their energy bill. Specifically, **Member States should be required to conduct transparent assessments of the potential of participation in renewable energy production along with energy efficiency to combat fuel poverty.**

Based on their assessment, **Member States should be required to put in place appropriate incentives and programmes at national level** to, among other things:

- encourage renewable energy project developers to open up ownership to eligible households that qualify as fuel poor; and

<sup>5</sup> Directive 2009/72/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (Renewable Energy Directive), OJ L 140, 5.6.2009, p16.

- encourage households that qualify as fuel poor to participate in community energy projects.

Furthermore, under a revised Renewable Energy Directive, **Member States should be required to transparently evaluate and then take appropriate measures to ensure that split incentives and other relevant issues do not prevent the uptake of renewables in multi-unit buildings.**

## Proper oversight and enforcement

**The EU legal framework should ensure that the roles and duties of NRAs empower them to:**

- oversee and enforce the implementation of specific prosumer rights under EU legislation at national level;
- ensure that new market actors are not discriminated against; and
- cooperate at EU level to better understand the impacts of prosumers on the energy system, and the opportunities for strengthening their position in the energy market.

**Ombudsman and consumer bodies should be empowered to deal with prosumer rights issues**, particularly with regard to handling complaints. Furthermore, **the IEM legal framework should reaffirm the right of prosumers to directly challenge infringements of their rights through the judicial process.** Ombudsman and consumer bodies should also develop a better understanding of the issues prosumers face at national and EU levels.

In the context of delivering the 2030 climate and energy targets, **the Commission must ensure that National Energy and Climate Plans (NECPs) are developed in an open, participatory process that is rooted in legislation.** In their NECPs, **Member States should be required to elaborate how they will promote participation of prosumers in the achievement of renewable energy objectives.** This would include specific policies and measures to support people in becoming energy citizens, including ensuring fair access to the market, targeted measures for low-income communities, encouraging appropriate business models, and simplification of administrative barriers for prosumers.

# Chapter 1: Why do we need prosumer rights?

## 1 The benefits of prosumers to Europe's energy transition

Citizens have an essential role to play in helping the EU achieve its Energy Union objectives. By engaging as active consumers (i.e. prosumers) in the energy market, they can help to drive development of smart distribution networks (including district heating) and help cost-effectively keep the grid in balance through smarter production and use of energy. Consumer participation can also facilitate public enthusiasm for the energy transition, leverage private capital in low carbon technologies, and unlock opportunities for local economic growth. Indeed, prosumers are already contributing toward the achievement of 2020 national and EU targets for renewable energy and energy savings and thereby reducing greenhouse gas emissions.<sup>6</sup>

Consumers can also benefit from becoming prosumers through cutting household energy costs. For instance, according to BEUC, the European Consumer Organisation, 80% of households are located in regions where electricity produced through rooftop solar photovoltaic (PV) is cheaper per kilowatt-hour than the average national retail energy price provided through a traditional supplier.<sup>7</sup> Ultimately, prosumer involvement in the energy sector can help enhance competition and create a more sustainable, equitable and democratic interconnected European energy market. Furthermore, it can help deliver 2030 – and more importantly 2050 – EU climate and energy objectives.

## 2 Prosumers as a discrete class of market actor

This report is based on the following definition, or characterisation, of prosumers provided by Greenpeace:

*"Prosumers are active energy consumers such as individual households, non-commercial organisations, public entities and small enterprises that participate in the energy market by producing renewable energy, either individually or through collective organisations, such as cooperatives or associations.*

*Participation in the market may also consist of contributing to energy efficiency and/or energy system management and grid integration of fluctuating renewable energy sources through demand-side response."*

At the outset, it is important to acknowledge that **prosumers, regardless of whether they act individually or collectively, are not like other market actors.** Individual households, for example, do not enter the energy market as experts or professional investors. These and other

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<sup>6</sup> See European Economic and Social Committee (EESC) (2015). *The Role of Civil Society in the Implementation of the EU Renewable Energy Directive: An impact study across six Member States*. Available at <http://www.eesc.europa.eu/?i=portal.en.sdo-observatory-red>.

<sup>7</sup> Muhlenhoff, J (2016). *A Welcome Culture for Consumers' Solar Self-generation* (BEUC: Brussels), p 3.

small consumers (e.g. small enterprises) are also often unable to directly participate in markets for demand-side response (e.g. balancing, wholesale markets) due to entry barriers, such as costs and minimum bid sizes. Instead, these actors are only able to access demand response markets through aggregators. The same is true for consumers that cannot self-generate renewable electricity, either because they have lower incomes, reside in/operate a multi-unit building, or because the building is otherwise ill-equipped to generate renewable energy.

Collective community energy projects that produce renewable energy also differ from other market actors. As a subset of prosumers, community energy projects bring together individual prosumers and operate under unique governance arrangements, usually with community (environmental or social/economic) objectives, local participation/ownership, and with less experience in project development. One advantage of community energy, however, is that it provides consumers an opportunity to directly own a part of or benefit from a local renewable energy project, regardless of whether they rent or own their home, live in a multi-unit building or have a property that is suitable for on-site renewable energy production.

Unfortunately, despite these benefits, community renewable energy projects face a number of distinct challenges not experienced by traditional commercial developers, as acknowledged by Ofgem, the UK NRA, and others. Specifically, community projects:

- Are unlikely to have significant finance available for early stages of project development;
- Are less likely to have expertise in grid connections; and
- Usually take longer to develop and may therefore find it difficult to respond as quickly as commercial developers when distribution grid capacity becomes available.<sup>8</sup>

Individual and collectively-owned prosumer installations also tend to be small- to medium- sized, meaning that their impacts on, and use of the system, are different than other actors. Unlike other commercial developers, they are also unable to spread investment risk across a number of different projects.

Regardless of these different characteristics, prosumers still leverage significant private capital, which will be needed for the EU to meet its binding 2030 renewable energy target. By doing so, prosumers take on considerable financial risks. However, they do not have the ability to protect their interests in the same way as organised market players, and they are particularly vulnerable to governmental policy changes or abuse from other market actors.

### 3 The main regulatory barriers to energy market participation by prosumers

Enabling national frameworks in several Member States,<sup>9</sup> along with some support from the Renewable Energy Directive, have facilitated considerable energy market participation by prosumers. For its part, the Renewable Energy Directive supports informing and promoting public awareness of consumers and citizens, recognises a leading role for local/regional authorities in uptake of renewables, and aims to eliminate non-economic barriers.

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<sup>8</sup> Ofgem (2014). Community Energy Grid Connections Working Group report to the Secretary of State (July 2014), p. 4. While this was merely a take on the community energy sector in the UK, it is broadly applicable to the characteristics of community projects in other Member States.

<sup>9</sup> See Roberts, J *et al* (2014). *Community Power: Model legal frameworks for citizen-owned renewable energy* (ClientEarth: London). Available at <http://www.clientearth.org/reports/community-power-report-250614.pdf>.

However, the Renewable Energy Directive only implicitly refers to prosumers, and no IEM legislation refers to or supports community energy. As such, the current EU legal framework neither sufficiently recognises citizen participation in the energy system, nor does it ensure support for their equal/fair treatment as distinct market actors or protection as consumers.

The lack of a dedicated EU legal framework for prosumers has resulted in several problems:

- 1. Disparity in the ability to become a prosumer across the EU.** While some Member States have developed supportive frameworks for prosumers, there is uneven citizen participation across Member States. For example, in Germany almost half of renewables is under citizen ownership (e.g. individual and collective prosumers).<sup>10</sup> However, in Poland, at the end of 2015 there were only about 4,700 micro-installations that produce electricity from renewable energy (with installed capacity at about 35 MW).<sup>11</sup> The divide is even greater with regard to demand-side response: in many Member States it either has limited or no access to relevant markets, or consumer loads cannot be aggregated. Second, there is no supportive EU legislative or policy framework to promote access to benefits of becoming a prosumer to those that cannot install renewables to their own household (e.g. tenants in multi-dwelling buildings and medium- to low-income households).
- 2. The lack of a 'safe' space for prosumers to participate in the IEM.** Due to the lack of a dedicated legal framework for prosumers, they are required to comply with the same rules as other well-established market incumbents, placing them at an inherent competitive disadvantage. Under the current legal framework, it is difficult for Member states or their NRAs to acknowledge the unique characteristics of community projects or to promote a level playing field for new actors, as doing so could be seen as – without necessarily amounting to – discrimination. For instance, requests by the community energy sector in the UK to Ofgem for revised rules on obtaining a grid connection (e.g. priority connection) were met with claims that to do so would violate IEM legislation. Furthermore the Commission's agenda to integrate renewables into the IEM has resulted in the restriction of national support for community projects (e.g. elimination of feed-in tariffs, or FiTs, and mandates to introduce tendering/auctions) under the *Guidelines on State Aid for Environmental Protection and Energy* (State aid guidelines).<sup>12</sup> The State aid guidelines have already resulted in the withdrawal of FiT support schemes in Germany, the UK and Poland, among others.
- 3. Lack of investment certainty for prosumers.** There is also an increasing lack of legal and investment certainty for prosumers in many Member States due to unstable support frameworks for small- and medium-scale renewables at the national level. This includes, among other things:
  - the introduction of retroactive and retrospective changes to support schemes;
  - the introduction of penalising or dissuasive grid fees and taxes; and
  - the inability to receive fair remuneration for excess electricity that is exported to the grid.

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<sup>10</sup> Agentur für Erneuerbare Energien (AEE) (2013). *Ownership of Renewables in 2012*.

<sup>11</sup> GRAMwZIELONE.pl (Partial zielonej energii). Available at <http://gramwzielone.pl/trendy/20265/do-sieci-najwiekszych-osd-przylaczono-juz-ok-47-tys-mikroinstalacji>.

<sup>12</sup> European Commission, Guidelines on State aid for environmental protection and energy 2014-2020 (State aid guidelines), OJ C 200, 28.6.2014, p 1-55.

Some of these issues have been experienced by all actors in the EU renewables sector. Nevertheless, because prosumers are not sophisticated investors they are particularly vulnerable to such investment risks.

#### A case of bad practice: Spain's solar tax

Nowhere is the current risk to prosumers better illustrated than in Spain. In late 2015, the Spanish government adopted Royal Decree 900/2015,<sup>13</sup> a solar tax on all residential and small- and medium-sized solar power and storage systems. The so-called 'sun tax' consists of a capacity- and consumption-based tax and requires that the system owner must also be the consumer, rendering the installation of self-production and self-consumption systems on communal buildings or industrial areas illegal. In addition, administrative fees associated with increasing connection capacity has made self-consumption uneconomical. These provisions are likely to increase the payback period of residential solar projects from around 13 to 16 years and will likely almost double the payback period for covered projects. Maximum fines of up to €60 million (twice the penalty for causing a leak of radioactive materials in Spain) for failure to register as a self-consumer or for noncompliance with the rules further aggravate the situation. To make matters worse, Spain's new law applies retrospectively and therefore undermines expectations for existing projects, further damaging investor confidence in renewables. Due to its retrospective nature, even before it was approved it halted investment in solar PV in Spain, with only 22 MW of new PV being installed in 2014, compared to the UK and Germany, which installed 2,270 and 1,900 MW, respectively.<sup>14</sup>

- 4. The lack of guidance or access to information on relevant laws and regulations at local level.** Despite obligations to streamline and expedite administrative procedures under the Renewable Energy Directive, multiple permits and licenses are often required in some Member States before small- and medium-size projects can be realised. Information on the exact requirements and how to meet them is also often not readily accessible. For inexperienced and non-expert prosumers, navigating the administrative hurdles to complete an installation is often too time consuming, complex or cost-prohibitive.

Some of these issues must be addressed at national level. Nevertheless, the EU also has a clear role to play, particularly regarding issues that impact on the well-being of energy consumers across the EU and upon market integration, both of which are shared competences between the EU and Member States. Furthermore, if citizens are truly at the core of the Energy Union, the EU and Member States together must ensure that they are empowered to play their role in the energy transition.

<sup>13</sup> Real Decreto 900/2015, de 9 de octubre, por el que se regulan las condiciones administrativas, técnicas y económicas de las modalidades de suministro de energía eléctrica con autoconsumo y de producción con autoconsumo (Decree on Self-consumption).

<sup>14</sup> Europa Press (8 April 2015). Available at <http://www.europapress.es/economia/energia-00341/noticia-fotovoltaica- apenas-suma-22-mw-nuevos-2014-mayoria-autoconsumo-20150408140839.html>.

# Chapter 2: Defining the prosumer

The starting point for supporting prosumers under EU legislation must be to legally define 'the prosumer' as it has yet to be sufficiently defined at EU level. The Council on European Energy Regulators (CEER) has defined the prosumer as "a consumer who is equipped with self-generation and/or batteries (i.e. producer + consumer = prosumer)."<sup>15</sup> The Commission, for its part, has referred to prosumers as "producers and consumers of renewable energy."<sup>16</sup>

To ensure that a set of fundamental rights applies to all prosumers, we recommend providing an umbrella legal definition of the prosumer in EU legislation. In order to support specific subsets of prosumer, we also recommend defining actors such as community energy undertakings. The following sections proceed from this basis. First, however, we address how to overcome several challenges in trying to legally define the prosumer.

## 1 Challenges in defining the prosumer

There are a number of challenges in trying to define the prosumer. These include:

- ensuring that prosumers maintain their status as consumers and their rights as such;
- ensuring that a definition of prosumers is sufficiently clear, yet flexible enough to encompass different activities and actors, particularly as the market develops; and
- understanding the implications of prosumers as undertakings for the purpose of competition, and the State aid guidelines in particular.

We will cover each of these challenges below.

### 1.1 Ensuring prosumers maintain their consumer protections

It is fundamentally important that prosumers maintain their eligibility to be covered by consumer protection rules under EU law. In order to ensure this, the prosumer must be legally defined as a special class of 'active' consumer' that still benefits from these safeguards.

The question of how to define the prosumer is important because it could have implications on their ability to rely on consumer protection rules.<sup>17</sup> The Court of Justice of the EU (CJEU) has held that the definition of consumer, for purposes of eligibility to benefit from protection, should be narrowly construed.<sup>18</sup> Nevertheless, the CJEU has also held that if the business purpose of a

<sup>15</sup> CEER (2015). *Position paper on well-functioning retail energy markets*, C15-SC-36-03, 14 October 2015.

<sup>16</sup> European Commission, Staff Working Document, *Best Practices on Renewable Energy Self-consumption*, COM(2015) 339 final.

<sup>17</sup> Butenko, A and Cseres, K (2015). *The Regulatory Consumer: prosumer-driven local energy production initiatives*, Amsterdam Centre for European law and Governance, p 19.

<sup>18</sup> See e.g. *Di Pinto Judgment* (Case C-361/89) [1991] ECR I-01189.

transaction is negligible in the overall context of supply, a person could rely on consumer protection rules.<sup>19</sup> This would imply the need to acknowledge the status of 'mixed transactions', whereby a consumer who acts primarily in a non-professional capacity in the energy market is still afforded special consumer protections. As prosumers are not full-time energy market participants, they should be able to maintain consumer protections even though they are engaging in what could be seen as a professional activity.

Beyond general consumer rights,<sup>20</sup> consumers in the energy sector benefit from a number of protections.<sup>21</sup> If consumers decide to engage in the energy market, it is important that they maintain these protections. As such, the prosumer should be legally defined in a way that maintains their primary status as consumers.

## 1.2 Providing a definition that is sufficiently clear yet inclusive

The definition of 'the prosumer' that has been provided as the basis for this report is meant to include various actors (individual household and small business consumers, and community initiatives) and legal forms. As seen from above, prosumers also engage in a number of different activities. As such, a definition should be sufficiently inclusive in order to ensure relevant actors are not excluded from the framework. However, in order to provide legal certainty and avoid abuse (e.g. by governments and market actors) that could cause market distortions, the prosumer must also be clearly defined.

There are several options for defining the prosumer under EU legislation. Under one approach, the prosumer could be defined broadly so as to cover all actors and activities within its scope. Alternatively, EU legislation could refrain from defining the prosumer, instead defining each individual actor and/or activity.

A third option exists between these two which, in our view, is preferable. First, we recommend an umbrella definition for prosumers. Under this approach a "core set of rights," as a general set of principles, would apply to all consumers that want to actively participate in the market. Second, we would recommend creating distinct definitions for individual actors and/or activities to account for specific situations. We have chosen this approach, because, as demonstrated further below in Chapter 3, while there are common challenges that all prosumers face, there are subtle differences between certain sets of actors that should be addressed individually.

Depending on the scope of activities covered by the definition of the prosumer, there is a question of where the definition should sit in EU legislation. Ideally, the definition of the prosumer should be rooted in the IEM Directive on Electricity, with specific provisions embedded in other sector-specific legislation as appropriate. This would recognise the potential of prosumers to engage in the market through a range of activities – not just renewable energy.

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<sup>19</sup> *Johann Gruber v Bay Wa AG* (Case C-464/01) [2005] ECR I-00439.

<sup>20</sup> Basic consumer rights have been laid out in EU legislation such as the Consumer Rights Directive (Directive 2011/83/EU), the Consumer Protection Cooperation Regulation (Regulation No 2006/2004), the Unfair Contract Terms Directive (Council Directive 93/13/EEC), and Unfair Commercial Practices Directive (Directive 2005/29/EC), and the Directive on the protection of individuals with regard to the processing of personal data and on the free movement of such data (Directive 95/46/EC).

<sup>21</sup> For specific energy consumer rights, see Chapter 3, section 1.

### 1.3 Prosumers as undertakings under competition law and State aid

It should be noted that, whatever legal definition is chosen for the prosumer, it will have no bearing on the status of prosumers with regard to competition and State aid law. The relationship between prosumers and State aid law is defined by the concept of 'undertaking'. The definition of undertaking has been provided by the CJEU as "every entity engaged in an economic activity, regardless of the legal status of the entity and the way in which it is financed,"<sup>22</sup> the decisive factor being the 'economic activity'. If an entity fulfills the criteria of this definition, an advantage granted to it by a Member State might fall within the definition of State aid, in which case it can only be granted after approval from the European Commission.

It is not the purpose of this report to deal with the specifics of State aid law and prosumers with regard to all activities. Nevertheless, the evolution of the 'consumer' to 'prosumer' has the potential to make State aid laws applicable to a large group of new market participants. Considering that the successful integration of prosumers into the energy market will probably also depend on Member State policies to incentivise them, it is likely that some of these policies will entail subsidies or other financial advantages. Given that the core of the prosumer concept is that they participate in the market and thus engage in an economic activity, they will most certainly be considered as an undertaking and all subsidies and financial advantages they receive will be scrutinised under State aid law.

With regard to aid in the energy sector, or 'environmental aid', the Commission's approval depends on whether the conditions of the State aid guidelines are met. This means that not just any amount of aid can be granted; that aid might have to be granted through a bidding procedure, in a specific form, etc. Accordingly, prosumers could be faced with higher administrative burdens, more uncertainties, and lower aid amounts.

## 2 A recommended legal definition of the prosumer

To sum up, regardless of the scope or form, a prosumer is a consumer who participates actively in the energy market, either individually or collectively through a third party entity (i.e. community energy initiative). This may include participation in demand response (e.g. through an aggregator), storage, self-generation for own-use or export to the grid, and supply of electricity or heating and cooling. Furthermore, as opposed to other market actors whose principal aim is to participate professionally in the market, prosumers remain – by and large – consumers.

While the word 'consumer' is used throughout IEM legislation, it is never defined. Instead, the IEM Directive on Electricity uses the word '**customer**', which is defined to mean "a wholesale or final customer of electricity." The Directive then defines different types of customers, including:

- '**final customer**', which means "a customer purchasing electricity for his own use;"
- '**household customer**', which is defined to mean "a customer purchasing electricity for his own household consumption, excluding commercial or professional activities;" and
- '**non-household customer**', which is defined to mean "natural or legal persons purchasing electricity which is not for their own household use and includes producers and wholesale customers."

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<sup>22</sup> *Klaus Hofner and Fritz Elser v Macrotron GmbH* (Case C-41/90), [1991] ECR, I-01979, para 21.

While non-household customers can also be active participants, they are not afforded the same rights as final/household consumers. Otherwise, the definition of final and household customer implies that they are passive. Traditional market participants, at least in the power sector, are defined as an **'electricity undertaking'** which means:

*"any natural or legal person carrying out at least one of the following functions: generation, transmission, distribution, supply, or purchase of electricity, which is responsible for the commercial, technical or maintenance tasks related to those functions, but does not include final customers."*

As mentioned previously, where consumers engage actively in the market they: 1) are likely to be considered undertakings; yet 2) they also remain consumers. The IEM Directive on Electricity will need to recognise these two key points. First, the definition of electricity undertaking should be amended so that it includes prosumers, as follows:

**'Electricity undertaking'** means "any natural or legal person carrying out at least one of the following functions: generation, transmission, distribution, supply, or purchase of electricity, which is responsible for the commercial, technical or maintenance tasks related to those functions, *but does not include final customers that are not active in the market.*"

Second, the legal definition of prosumers should maintain their status as 'customers' and distinguish them from other undertakings, the main difference being the extent to which they participate professionally in the market. As such, the prosumer should be legally defined as an **'active customer'**, as follows:

**'Active customer'** means "a customer who performs any of the functions of generation, storage and/or supply of energy from renewable sources, or energy efficiency/demand-side management, either individually or through a community energy undertaking over which they exercise control jointly with other active customers, provided that for household customers they are, on an annual average, net consumers, and provided that for non-household customers the activity is insignificant in proportion to the customer's primary economic activities."

The definition provided above would also acknowledge two key features of the prosumer:

- community energy is a subset of prosumer, taking into account the possibility for customers to exercise joint control together to facilitate their active involvement; and
- the definition should also be broad enough to cover all possible prosumer activities.

Given the latter of these two points, the prosumer should be defined explicitly within the IEM Directive on Electricity, although it should also be incorporated into other legal instruments (e.g. the Renewable Energy Directive and the Energy Efficiency Directive<sup>23</sup>) as appropriate.

### 3 A recommended definition for community energy

Community energy is essentially a vehicle that allows prosumers to act collectively. Encompassing renewable energy production, supply of electricity and heating/cooling, demand response aggregation, and the provision of other services such as energy savings (e.g. through energy service companies, or ESCo's), community ownership and participation takes many different forms across Europe.<sup>24</sup>

- **Germany:** while cooperatives have become the popular choice of form of legal ownership for communities, there are still more traditional ownership models such as limited partnerships with a private limited company (GmbH & Co. KG).
- **The UK:** there is more than one type of cooperative, and indeed company law allows for the establishment of private companies with a community interest (CICs), and trading subsidiaries of charities are eligible to participate in community energy projects.
- **Denmark:** there are a number of different ownership models and renewable energy production installations can be owned by ownership guilds, community foundations or housing associations, while local district heating companies are often owned by the customers themselves.

The above list is non-exhaustive, given the diversity of company law between Member States.<sup>25</sup> In order to ensure inclusion and equitable distribution of benefits locally, an EU-level definition of community energy should provide scope for a wide range of models for collective citizen ownership and participation in the energy sector. On the other hand, in order to prevent market distortions or abuse by government/market actors, community energy should be clearly defined.

In particular, there are a number of different ways to define community energy. These include:

- governance characteristics of the legal entity through which the project is organised.
- by size/threshold; and/or
- local (geography-based) participation.

We would recommend defining community energy based on the characteristics that separate it from other commercial market participants, namely its governance arrangements. This includes:

- inclusiveness and democratic decision making;

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<sup>23</sup> Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (Energy Efficiency Directive), OJ 31, 14.11.2012, p 1.

<sup>24</sup> See Roberts, J *et al* (2014) *supra* note 9 at pp-14-31.

<sup>25</sup> Indeed, without doing an exhaustive study of all legal forms for community energy across the EU, there are many similarities between community energy projects and 'social enterprises' generally, which have been mapped throughout the EU. See ICF Consulting Services (2014). *A map of social enterprises and their eco-systems in Europe*, a report for the European Commission (Employment, Social Affairs and Inclusion). Available at <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=2149>. Also, a number of unique third party ownership models exist in the USA, which provide a number of different opportunities for consumers to own and/or receive benefits from local distributed production of electricity from renewable energy. See e.g., US Department of Energy, National Renewable Energy Lab (2010). *A Guide to Community Solar: Utility, Private, and Non-profit Project Development*. Available at <http://www.nrel.gov/docs/fy11osti/49930.pdf>.

- economic participation of members, with equitably shared profit expectations; and
- explicit aims to further community benefits at local level (e.g. social, environmental).<sup>26</sup>

The legal definition of community energy should also cover any activities that prosumers could undertake collectively. Given the above, we would recommend defining community energy as a **'community energy undertaking'**, as follows:

**'Community energy undertaking'** means "a legal person who performs any of the functions of generation, storage and/or supply of energy from renewable sources, or energy efficiency/demand-side management services, on behalf of final customers who exercise control jointly together, provided that the undertaking's governing statutes aim to benefit the local community where the undertaking's activities take place, and provide for open participation and shared decision making rights to all members of the undertaking."

We would recommend against using size as a sole characteristic upon which to define community energy. With regard to renewable energy production installations, for example, the existing State aid guidelines already make a distinction between small renewable energy projects under a certain threshold. However, this standard places artificial limitations on the size of projects, regardless of the project's ownership or objectives. It also ignores the local value that community energy projects can provide, and it could lead to artificially small projects. If size limitation must be a defining element of community energy, it should be connected, along with other considerations, to specific supportive policies, such as access to support schemes or the reduction of administrative barriers. Such thresholds should also be high enough to support wide participation by communities, and should be capable of incentivising local value creation.

We would also recommend against defining community energy at EU level in relation to geography. This could have an arbitrary limiting effect on who gets to participate in a project. For instance, in Denmark, there is currently a 2km limitation for participation in solar PV cooperatives, which is making it hard for projects to get enough participants. This is not to say that geography does not have an important role in supportive policies for community energy, but it should not be a 'defining' characteristic of community energy.

## 4 Recommended definitions for aggregators and demand response

Aggregators are already defined under EU legislation, specifically the Energy Efficiency Directive. Article 2(45) defines **'aggregators'** as "a demand service provider that combines multiple short-duration consumer loads for sale or auction in organized energy markets." Furthermore, under the Draft Network Code on Demand Connection, **'demand aggregation'** is defined as "a set of demand facilities or closed distribution systems which can operate as a single facility or closed distribution system for the purposes of offering one or more demand response services."<sup>27</sup>

<sup>26</sup> See also REScoop.eu (2013). *Charter of REScoop.EU*, signed and adopted on 26 August 2013.

<sup>27</sup> See European Commission – Draft Network Code on Demand Connection, Version 16.10.2015. Article 2(19). Available at [https://ec.europa.eu/energy/sites/ener/files/documents/DCC\\_161015\\_Final\\_Provisional\\_Voted.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/DCC_161015_Final_Provisional_Voted.pdf).

Nevertheless, there is a lack of clarity as to what "demand service provider" under the Energy Efficiency Directive means, allowing for potential inconsistent interpretation between different Member States of what constitutes an aggregator. At the very least, this should be clarified, ensuring consistency between EU legislation and the EU Network Codes.

It would also be useful to clarify the meaning of '**demand response**' under EU legislation, as it helps determine 'what' can be aggregated, (e.g. only shifts in demand versus flexibility and ancillary services from behind the meter generation). A definition is not provided for under the Energy Efficiency Directive, but is provided for in Draft Network Code on Demand Connection. Under Recital 44 of the Energy Efficiency Directive, demand response is described as a mechanism to "reduce or shift consumption." Nevertheless, demand response could in theory incorporate both "supply and consumer loads," which is indeed mentioned in Recital 45 of the Energy Efficiency Directive. '**Demand-side management**' is also defined along with energy efficiency under the IEM Directive on Electricity, but this refers only to an "approach aimed at influencing the amount and timing of electricity 'consumption' in order to reduce primary energy consumption and peak loads by giving precedence to investments in energy efficiency measures, or other measures, such as interruptible supply contracts..." Furthermore, the Draft Network Code on Demand Connection only covers modulation of demand, and does not cover storage devices (with some exceptions for pump storage) or generating facilities.

To provide the greatest opportunity for prosumers, there is a need to clarify the above definitions to ensure they incorporate aspects of self-generation (behind the meter) and/or increasing demand upon request – in essence, the customer's flexibility, or demand-side resources. For legal clarity, there is also a need to ensure that the definitions in the directives and the EU Network Codes properly align the scope of demand response.

# Chapter 3: A framework for prosumer rights

To promote and protect citizens' role as prosumers across the EU, the post-2020 EU legislative framework must contain at least basic provisions that guarantee a number of fundamental prosumer rights at national level.

EU energy law already provides certain protections for consumers, which includes rules for 'empowering' consumers (e.g. the right to choose and switch suppliers and the right to receive information and advice). While there is scope to strengthen these rights, targeted prosumer rights also need to be developed, as the existing rules aim at facilitating informed consumer choice in the market place – not active participation.

Below, we propose a number of rights in order to protect consumers that want to actively participate in the energy market. First, we identify a 'core' framework of protection measures that should apply to all prosumers. We then identify provisions that are needed to protect particular forms of participation (i.e. different actors and/or activities).

## The foundational 'core' of a prosumer rights framework

While prosumers can participate in a number of activities individually or collectively, there is a common set of issues that all prosumers face in the energy market. Therefore, a guaranteed right, providing a foundation for active participation in the energy market by prosumers, must be provided. Specifically, a reformed IEM Directive on Electricity should directly confer a right on all household customers and small enterprises to become a prosumer – that is, a right to be active in the energy market.

Under the umbrella of a right to become a prosumer, or active customer, a number of core rights should apply to all prosumers regardless of how they actively engage. In addition, specific protections are needed for different types of prosumers and activities. This set of rights, and its applicability to different actors and activities, is summarised below:

### **Suggested framework for the consumer's right to act as a prosumer in the energy market**

Member States shall ensure that all household customers and small enterprises enjoy the right to become a prosumer, that is the right to be active in the market.

Where a customer wishes to become a prosumer, they shall have a right to:

1. Continue to be protected by any rights they would otherwise receive as non-participating final customers under EU law, including a right to universal service, a right to choose and freely switch suppliers, and a right to own and control their data;

2. Fair access to relevant markets, in particular through requirements on the Member States, or their NRAs to:
  - guarantee access and priority connection for renewable energy production installations to distribution grid infrastructure in accordance with system-reflective pricing that encourages smart use and supply of resources by the prosumer to the grid;
  - guarantee full participation of demand-side response in relevant markets on a level playing field with other resources;
  - simplify and streamline administrative barriers, including planning and permitting authorisation, certification and licensing, and grid connections, for renewable energy production installations; and
  - for new market entrants such as community suppliers, aggregators and ESCo's, simplify licensing and registration requirements, and barriers to contracting with or becoming a BRP;
3. Freely exercise a voluntary choice to participate in the market individually and/or through an agent acting on the prosumer's behalf;
4. A guarantee that their national government will set up a standardised and transparent system of establishing network tariffs/rate design that ensures non-discriminatory distribution of costs and benefits, and does not result in disproportionate or dissuasive costs for participation in self-generation, while ensuring fairness to consumers as a whole. In doing so, Member States or their NRAs shall ensure prosumers providing supply and services to the grid are remunerated fairly in accordance with the value provided to the system.
5. A stable regulatory framework to support investor confidence of prosumers that ensures respect for their reasonable investment expectations, including:
  - ensuring equitable access to available revenue support schemes, including for community undertakings that produce renewable energy; and
  - a prohibition of retroactive changes and, as appropriate, retrospective changes, to revenue support schemes.
6. Access transparent and understandable information, including:
  - clear and comparable contractual information from third party undertakings that wish to facilitate the prosumer's active participation in the market;
  - information that allows the prosumer to understand the risks and opportunities of investing in renewable energy production or switching to variable tariffs;
  - information on their prosumer rights, including conditions and requirements for effectively exercising their rights, through a one-stop-shop or existing single point of contact.

We recommend that this basic set of rights be elaborated in the IEM Directive on Electricity. The need for such rights should be acknowledged in the recitals to the Directive, while dedicated legislative provisions elaborate these rights explicitly. Nevertheless, these rights will need to be embedded in other areas of the EU legal framework (e.g. the Renewable Energy Directive, the

Energy Efficiency Directive and potentially the Energy Performance of Buildings Directive<sup>28</sup>) to ensure appropriate protection for various actors and activities, and to ensure application to the heating and cooling sectors. The following sections proceed along this basis.

## 1 Guarantees that prosumers maintain their traditional consumer rights

Consumers in the energy sector benefit from a range of protections, including:

- a right to an electricity connection (universal service);
- a right to a choose, and rapidly switch, electricity suppliers;
- a right to clear contractual information and withdrawal;
- a right to accurate information on consumption and billing based upon it;
- special protections for vulnerable consumers;
- easy resolution of complaints and disputes;
- a right to information on how to use energy more efficiently and on the benefits of using energy from renewable sources; and
- a single point of contact for obtaining all necessary information regarding your rights.

Prosumers must have a right to maintain traditional energy consumer protections when actively participating in the market. There must be an affirmative obligation on Member States, and NRAs in particular, to guarantee that consumers do not forfeit these protections simply because they become prosumers.

While this should be elaborated in legislation as applicable to all consumer protection rights, we would also recommend explicitly enumerating certain rights in order to ensure clarity (e.g. the right to universal service, the right to choose and switch suppliers and the right of the consumer to own and control their data). In particular, it should be explicit that consumers will not lose their fundamental right to access and control their data, including correct, erase or delete information by becoming active. Furthermore, existing rights (e.g. regarding contractual practices and complaint handling) must be adapted to ensure they apply between consumers and third party entities they engage with in order to participate in the market, such as community energy undertakings and independent aggregators.

## 2 Guaranteeing a right to access the energy market

Prosumers need certain guarantees that excess energy they produce can access the grid in line with adequate incentives based on system reflective pricing (e.g. wholesale prices and network charges), or that energy efficiency gains and flexibility services they provide can participate in wholesale, balancing, ancillary services, or capacity markets. Furthermore administrative rules and procedures for gaining approval to construct installations and access the system need to be simple and straightforward for prosumers. Below, we assess how the EU energy legal framework can guarantee that prosumers can enter and participate in the market, both in the

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<sup>28</sup> Directive 2010/31/EU on the energy performance of buildings, OJ L 153, 18.6.2010, p 13.

production of renewable energy the provision of demand-side response by individual consumers and community undertakings.

## 2.1 Guaranteeing grid access for individual consumer and community renewable energy production

Prosumers, particularly individuals, need to have reasonable certainty that they can connect to and access the grid to be able to feed excess electricity from behind the meter, or feed into a district heating or cooling system. Furthermore, variable market prices need to incentivise flexible loads (e.g. from storage or demand response) that can be called upon when needed to ensure cost-effective balancing and system security.

The Renewable Energy Directive currently requires guaranteed or priority access for renewable energy installations, which would necessarily include installations owned and/or operated by prosumers.<sup>29</sup> Provisions on guaranteed and priority access should continue post-2020, particularly for prosumer-owned and/or operated renewable energy production installations. In particular, Member States should be required, or alternatively be provided with discretion, to prioritise dispatch of local prosumer-owned installations (both individual and community).

Guaranteed access could be combined with implementation of system-reflective pricing, rules for which Member States may be required to develop and implement through reforms to the IEM Directive on Electricity, via the market design initiative. Design reforms could help the market to indicate where community installations should be sited, and send consumers price signals when to store, consume and/or supply the grid with self-produced renewable energy.

There should also be a requirement to remunerate local renewable energy production installations for ramping down/curtailing production. Although outside the scope of this paper, the above measures should go hand in hand with enhanced energy system flexibility planning for Member States, and forecasting and infrastructure planning obligations on distribution system operators in cooperation with transmission system operators (TSOs).

Guaranteed/priority access and dispatch could be subjected to a provision in the Renewable Energy Directive or the IEM Directive on Electricity requiring the Commission to transparently assess the effectiveness of market design reforms, in particular pricing, development of short-term markets, in better integrating renewables into the market, and internalisation of externalities for fossil-energy sources. Upon reporting the results of the assessment to the Council and Parliament, the Commission could be required to make proposals, as appropriate, including the option to maintain the current system until market reforms create a more level playing field. To ensure transparency, this assessment could be a part of the Energy Union governance process.

## 2.2 Guaranteed market access for demand-side response

At present, short-term markets are not fully developed, and specifically, demand response is not recognised as a resource in relevant markets in all Member States (e.g. capacity, forward, day ahead, intraday and balancing markets). Article 15(8) of the Energy Efficiency Directive already requires Member States to ensure demand response participates along supply in wholesale and retail markets, and specifically to promote access to and participation of demand response in

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<sup>29</sup> Renewable Energy Directive, Article 16.

balancing, reserve and other system service markets, among other things by requiring NRAs, TSOs and distribution system operators (DSOs) – in close cooperation with demand service providers and consumers – to define technical modalities for participation in these markets. However, as pointed out by the Smart Energy Demand Coalition (SEDC), as of 2015 a number of markets in Member States remained closed (illegally) or only partially open to demand response participation.<sup>30</sup>

Even in Member States where demand-side response is eligible to participate in the market, aggregated loads (bringing together smaller individual loads to provide one larger bid) are not always allowed, or they face a number of regulatory barriers that make it hard for them to enter the market. For instance, unnecessarily high minimum participation and/or licensing requirements are often imposed on aggregators as a way to protect traditional generators and vertically integrated utilities.

There is a need to improve implementation of current legal provisions within the Energy Efficiency Directive in opening up relevant markets to demand response – including storage. However, there is also a need to strengthen the language of the directive, in particular Article 15, to require Member States to ensure that demand response and aggregated loads are able to participate in relevant markets on a level playing field. Specifically:

- instead of being required to encourage participation of demand-side response, NRAs should have a legal duty to ensure its participation;
- instead of being required to promote access to and participation in balancing, reserve and other system services markets, Member States should be required to ensure access of demand-side response on a level playing field, including aggregated loads; and
- additional provisions should explicitly recognise the role of storage in providing demand-side resources.

Furthermore, revised rules in the IEM Directive on Electricity must guarantee that individual consumers and community undertakings (e.g. through dispatchable renewable energy sources, district heating, storage) can participate in day-ahead, intraday, balancing and retail markets. Also, in the revised Renewable Energy Directive, local renewable energy sources should be guaranteed voluntary access to appropriate markets for relevant ancillary services, in particular voltage support at distribution level.<sup>31</sup>

### 2.3 Removal and simplification of administrative barriers for individual consumers and community undertakings to produce renewables

The Renewable Energy Directive requires Member States to "take appropriate steps" to ensure that simplified and less burdensome authorisation procedures are established for smaller projects and for decentralised devices.<sup>32</sup> This is supplemented through reporting provisions,

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<sup>30</sup> SEDC (2015). Mapping Demand Response in Europe Today 2015, p 9.

<sup>31</sup> See 3E, EPIA, IWES (2013). *Ancillary Services by Solar PV – Capabilities and Costs of Provision*. Developed for the REserviceS project under Intelligent Energy Europe (IEE), which highlights that voltage support may be offered by rather small PV systems, even without aggregation, although this provides the added value of additional coordination. Available at <http://www.reservices-project.eu/wp-content/uploads/REserviceS-D4-1-Final.pdf>.

<sup>32</sup> Renewable Energy Directive, Article 13(1)(f). See also IEM Directive on Electricity, Article 7(3), which requires Member States to ensure that specific authorisation procedures exist for decentralised and/or distributed generation, which take into account their limited size and potential impact.

which request Member States to indicate whether they intend to provide for automatic approval of planning and permitting applications for certain installations.<sup>33</sup>

As the Commission's *2015 Renewable Energy Progress Report* acknowledges, the implementation of these provisions across Member States overall has been slow.<sup>34</sup> Furthermore, Member States still maintain a high degree of discretion, limiting the effectiveness of such provisions. As it currently stands, therefore, a significant disparity in administrative barriers for renewables exists between Member States.

The rules contained in Article 13 of the Renewable Energy Directive should be enhanced to guarantee simplification for prosumers. First, provisions on approval of smaller installations should be strengthened to guarantee that installations by household and small enterprise customers, as well as community-owned installations, are subjected to simplified planning and licensing procedures, rather than just "taking appropriate steps." Language could be added to supplement existing Article 13 of the Renewable Energy Directive or be drafted as a distinct article/subsection in a chapter on prosumers. In particular, installations under a certain installed capacity on the roofs of prosumers, should, in general, be subject to automatic approval. It may also be helpful to define certain small- or medium-sized installations to indicate thresholds to which these provisions apply, particularly for community installations.

Second, a revised Renewable Energy Directive should require simplification of grid connection processes so they are more understandable for prosumers. Specifically, Member States should be required to ensure consumers have access to understandable information on obtaining a grid connection. This would add to existing transparency requirements for DSOs in Article 16 of the Renewable Energy Directive. It would also expand such requirements to ensure that DSOs engage proactively and transparently in promoting grid connection and access to local community projects. Member States should also be required to establish priority – or alternatively, separate – grid connection procedures for community projects. At the very least, a Revised Renewable Energy Directive should provide Member States with discretion to provide more certainty to community projects by establishing separate and/or simplified connection procedures for local community projects.

## 2.4 Market access by community suppliers and energy service providers

As already mentioned, there are a growing number of suppliers entering the market that are owned and controlled by consumers. Some of these entities started by generating renewable energy (e.g. Ecopower in Belgium), while others are established with the aim to supply locally-sourced renewable energy or provide energy services (i.e. ESCo's) on a non-profit basis to help their members save energy, the profits of which go towards the local energy system or economy.<sup>35</sup>

There is currently little competition in the retail energy market. Entry barriers to become a supplier are very uneven across the EU, and in many cases they are over-burdensome for new market entrants. For instance, according to a report commissioned by Nordic Energy Regulators (NordREG), in Denmark, Finland and Sweden suppliers do not need licenses to enter the

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<sup>33</sup> Renewable Energy Directive, Article 22(3)(b).

<sup>34</sup> European Commission, Renewable Energy Progress Report, p 11. COM(2015) 293 final.

<sup>35</sup> Joint Research Centre (2014). *ESCO Market Report 2013*, p 6.

market, where as in the UK license agreements are extremely detailed and burdening.<sup>36</sup> This is confirmed by the fact that 'license-lite' legislation was adopted in the UK in 2010 to simplify obligations on small entrants, yet no successful supplier licenses have been issued under the framework, despite high interest from community energy groups in becoming suppliers.<sup>37</sup>

Furthermore, most new entrants, including ESCo's and aggregators, need to take on balancing obligations or enter into an agreement with an existing BRP to take on these duties for them. According to the NordReg report, it is considered too complicated and risky by new entrants to become a BRP. Incumbent BRPs, however, may be opposed to ESCo's or aggregators and may be hesitant to enter into an agreement to take on balancing responsibilities.<sup>38</sup> Again, this is validated through experience with license lite in the UK, as it requires small entrants to enter into an agreement with a fully licensed supplier to assume balancing duties.

Currently, under the IEM Electricity Directive, Member States "shall take all measures necessary to ensure that administrative procedures do not discriminate against supply undertakings already registered in another Member State." However, it says nothing about ensuring a level playing field for new market entrants. Furthermore, while NRAs have a general objective to remove "barriers that could prevent access for new market entrants,"<sup>39</sup> they do not have specific duties or powers to ensure that, in general, new actors can access and participate in the market on a level playing field with market incumbents.

Energy Services are also regulated by the Energy Efficiency Directive, but Member State obligations are very weak, only requiring Member States to take, if necessary, measures to remove the regulatory and non-regulatory barriers that impede the uptake of energy performance contracting and other energy efficiency service models, and to enable independent market intermediaries.<sup>40</sup> It also states that Member States must ensure that market actors refrain from any activities that impede the market for energy services or other energy efficiency improvement measures, without specifying what this means.<sup>41</sup>

The EU legal framework must specify stronger requirements for Member States to ensure new actors can enter the retail energy market. Specifically, Article 36 of the IEM Directive on Electricity, which lays out the duties and responsibilities of NRAs, should provide for a duty to simplify licensing and registration requirements to promote market entry by innovative new market actors, such as suppliers. Furthermore, Member States should be required to ensure that regulatory barriers to becoming a BRP is not over-burdensome for new market entrants, or that they are guaranteed the ability to enter into a contract with an existing BRP under fair terms. The latter could be achieved by requiring Member States to develop guidance and/or standards for BRP agreements, which NRAs would have a duty to oversee.

To promote better understanding of the benefits and opportunities of innovative new market actors, the Agency for Cooperation of Energy Regulators (ACER), in cooperation with NRAs,

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<sup>36</sup> Lewis P (2014). *Market Entrant Processes, Hurdles, and Ideas for Change in the Nordic Energy Market - the View of the Market*, a report commissioned by NordREG, p 33. See also CEER (2016). *CEER Benchmarking report on removing barriers to entry for energy suppliers in EU retail energy markets*, Ref: C15-RMF-70-03 (1 April 2016), p 17, which acknowledges that licensing and registration processes constitute a significant barrier to entry for new market participants.

<sup>37</sup> See Hall, S and Roelich, K (2015). *Local Electricity Supply: Opportunities, archetypes and outcomes*, report produced for the UK Department for Energy and Climate Change (DECC), Local Supply Working Group (University of Leeds: UK), p 11. Available at [https://research.ncl.ac.uk/ibuild/outputs/local\\_electricity\\_supply\\_report\\_WEB.pdf](https://research.ncl.ac.uk/ibuild/outputs/local_electricity_supply_report_WEB.pdf).

<sup>38</sup> Lewis P (2014), *supra* note 38 at pp 35-38.

<sup>39</sup> IEM Directive on Electricity, Article 36(e).

<sup>40</sup> Energy Efficiency Directive, Article 18(2)(b) and (d).

<sup>41</sup> Energy Efficiency Directive, Article 18(3).

should be required to monitor and promote learning of these new market actors, in order to ensure they can enter the market and compete on a level playing field while protecting consumers and the security of the energy system. To support NRAs, the Commission should be required, with assistance from ACER, to develop best practice on removing regulatory barriers for new market entrants, such as suppliers, independent aggregators and ESCo's, particularly community undertakings, in an open and participatory process with relevant stakeholders.

### **3 The right to participate individually and/or collectively through an agent acting on the consumer's behalf**

Not all individual consumers are able to participate independently in the market. Nevertheless, it is still possible to become a prosumer with the help of third party entities, for instance community energy initiatives and independent aggregators. Consumers must have guaranteed voluntary access to these entities and, likewise, these entities should not be prevented from accessing the market and consumers.

The right of the consumer to choose and switch suppliers under the IEM Directive on Electricity<sup>42</sup> provides an important legal basis for ensuring consumers are free to enter into a contract with another supplier, aggregator or service provider. However, other actors often impose barriers that prevent the consumer from exercising their right to choose. The IEM legal framework, therefore, should reinforce this right. Furthermore, as a subset of prosumers, the active participation of community energy initiatives in the market needs to be guaranteed.

#### **3.1 Having guaranteed access to an aggregator**

As a facilitator of household and small business consumer participation in the market, the IEM legal framework needs to better acknowledge the vital role aggregators play in allowing consumers to exercise their voluntary choice of participate in the market. Furthermore, market access for independent aggregators (i.e. separate from suppliers or DSOs) must be guaranteed, as long as they meet minimum competency requirements.

Currently, existing suppliers are often able to prevent customers from contracting with third parties either by applying onerous contractual penalties or simply withholding permission. To prevent this type of behavior, the IEM Directive on Electricity should provide customers a right to contract freely with an independent demand response provider without having to ask prior permission from their utility or the respective BRP.

Currently, the EU legal framework says little about ensuring equal and non-discriminatory access by aggregators to customers. The IEM Directive on Electricity merely states that "nothing in [the] Directive shall prevent Member States from strengthening the market position of the household ... by promoting the possibilities of voluntary aggregation of representation for that class of consumers." This language should be amended, stating that consumers have a right to be represented in wholesale, retail and other markets through voluntary choice of (i.e. contract with) an independent aggregator without interference from other market actors.

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<sup>42</sup> Specifically, this right is guaranteed under Article 3(5) of the IEM Directive on Electricity.

A standardised framework should also clarify the roles and responsibilities of utilities/BRPs and independent aggregators vis-à-vis the customer to create a level playing field.<sup>43</sup> In a number of Member States, aggregators must first reach an agreement with the supplier before entering into a contract with the customer, for which processes differ between Member States. In other cases, the customer may be penalised by losing out on certain consumer protections or other penalties.

Either the Energy Efficiency Directive or the IEM Directive on Electricity should contain general rules governing the relationship between the aggregator, the customer and supplier/BRP:

- the right of the customer to contract with an independent demand response provider, without interference from the supplier/BRP should be acknowledged;
- Member States should be required to ensure standardisation of agreements between independent aggregators and suppliers/BRPs, for instance on volume and financial settlements between the different market actors in a way that does not discriminate against the aggregator or the consumer; and
- provisions must ensure the customer does not waive any of their consumer protection rights by contracting to engage in demand response activities outside their supplier.

### 3.2 The ability to participate in community energy initiatives

It is not always possible for household or small business consumers to install solar panels on their roofs. Furthermore, many consumers do not have the disposable income to invest in on-site or off-site generation of renewables, particularly those that are facing energy poverty.

There should be a general acknowledgement in the EU legal framework that, as a subset of prosumers, active participation in the market by community energy initiatives should be guaranteed. This should result in a requirement in the Renewable Energy Directive for Member States to ensure that regulatory barriers for the establishment of community energy initiatives are minimised. Specifically, Member States should be required to ensure that:

- without prejudice to existing national company laws, there are available legal ownership models at national level to allow the formation of community energy undertakings, particularly for the purpose of producing renewable energy; and
- in line with recommendations from section 2, regulatory and administrative barriers for the establishment of community energy undertakings in the retail market are simplified.

There should also be a general obligation on Member states to promote the establishment of programmes to make such projects more widely available to all consumers, including vulnerable and low-income customers. This is addressed more fully in the next chapter.

## 4 An open and transparent system ensuring fair allocation of energy system costs and benefits to prosumers

Retail prices, which include the energy component of consumers' energy bills, grid tariffs, levies and other taxes, are central towards enabling or disincentivising consumers to become active in

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<sup>43</sup> SEDC (2015), *supra* note 30 at p 29.

the market. It is generally acknowledged that prosumers should act as responsible market actors and contribute appropriately towards maintaining vital energy infrastructure, which is a public good. However, such contributions must be proportionate and reflect the true cost to the system. On the one hand, there should be a prohibition on imposing penalising and/or dissuasive fees or taxes on prosumers' energy bills, while on the other hand, prosumers should have a right to be fairly remunerated for the system benefits that result from resources they supply to the grid.

#### 4.1 Ensuring a fair and objective process for the calculation of allowed revenues for network operators and grid tariffs for prosumers

Currently, there is no standardised European methodology to objectively calculate the costs and benefits of the resources that prosumers, particularly those with solar PV, provide to the energy system.<sup>44</sup> The lack of an objective methodology, study assumptions and key parameters for calculating costs and benefits has led to different valuations of technologies and a wide variety of bad practice in rate design, particularly through increased grid fees and taxes, for prosumers across Member States.<sup>45</sup> This encourages grid defection by existing prosumers and dissuades other consumers from adopting smarter energy use practices.

In general, the Member State or NRA is responsible for setting rules or methodologies for charges and grid tariffs, and the DSO determines these accordingly. In such instances, approval of final charges must be approved by the NRA, although in some instances this is not required. In more centralised markets, the NRA establishes both connection charges and the structure of individual tariffs.<sup>46</sup>

There is a need for the IEM legal framework to adopt some general principles to ensure that prosumers are not discriminated against in the design of grid tariffs. General principles and comprehensive guidance are also needed to ensure revenue-setting models properly incentivise system operators to develop and manage the network in alignment with EU energy policy objectives. Regulatory models must incentivise system operators to deliver efficient investment, optimising capital and operating expenditure through active management of the system using smart grid technologies and cost-effective services provided by distributed energy resources. Well-designed grid tariff adjustment mechanisms and processes must be in place to ensure system operators can collect their allowed revenues in a timely manner.

##### 4.1.1 A prohibition on dissuasive or penalising grid tariffs, connection fees and taxes

While Article 16(8) of the Renewable Energy Directive requires Member States to ensure that tariffs charged for distribution of electricity from renewables reflects "realisable cost benefits resulting from the plant's connection to the network," this has not prevented an increasing number of Member States from imposing disproportionate grid fees or taxes on prosumers.<sup>47</sup> Under Annex XI of the Energy Efficiency Directive, network regulation and tariffs are already prohibited from preventing network operators or energy retailers from making available system services for demand response measures, demand management and distributed generation on

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<sup>44</sup> In the United States, several meta-studies exist for assessing the costs and benefits of solar. See Solar Energy Industry Association (SEIA). Available at <http://www.seia.org/policy/distributed-solar/solar-cost-benefit-studies>.

<sup>45</sup> See e.g. the case study on Spain in Chapter 1, section 3.

<sup>46</sup> For an overview of responsibilities for development and approval of rate design in different Member States, see Eurelectric (2013). *Network tariff structure for a smart energy system*.

<sup>47</sup> See examples from Spain, Austria, Belgium, Norway, and Portugal.

organised markets. However, Annex XI does not require that such services be made available – it merely prohibits the provision of such services from being prevented.

The legal framework for network regulation and tariffs should be strengthened to provide a positive obligation on Member States to ensure that NRAs, network operators, and utilities promote services for demand response measures, demand management and distributed generation. Such a provision should not be confined to Annex XI of the Energy Efficiency Directive, but instead streamlined within an article in the IEM Directive on Electricity. There should be a requirement for relevant actors, in the fixing or approving of transmission or distribution tariffs or their methodologies, to ensure they promote active consumer participation.

In order to ensure fairness to prosumers, a number of general principles should apply to the methodologies NRAs use for the establishment of network tariffs and grid charges. Specifically, when fixing or approving distribution tariffs or their methodologies, NRAs must ensure that they do not result in disproportionate or dissuasive costs for participation in self-generation, while ensuring fairness to consumers as a whole. Furthermore, the following principles should apply:

- In line with universal service requirements, customers must be charged no more for a grid connection than the actual costs of establishing the physical connect to the grid;
- Customers should pay for the use of the power system and its services in proportion to how much and when they use it, consistent with time variation;
- Fixed charges or standing charges are limited to the incremental cost imposed by the additional customer;
- To the extent there is a shift towards capacity tariffs away from volumetric tariffs, capacity-based charges or demand charges are limited to the share of the cost of the final line transformer, in order to prevent the imposition of excessive network charges to prosumers.

NRAs should have a legal duty under Article 36 of the IEM Directive to ensure that the general principles enumerated above are respected with regard to determining charges, tariff rates and taxes that are assessed to prosumers.

#### **4.1.2 A right to participate in the development of a harmonised methodology**

While it is generally left to national level to fix and approve grid tariffs and their methodologies, there is still scope for the EU to ensure that grid tariffs or their methodologies promote EU objectives, including effective functioning of the market, open access to the market, choice for consumers, non-discrimination and sustainability.

To ensure principles respecting prosumer rights above are respected and to guarantee objectivity, there should be a common EU-wide methodology for assessing the costs and benefits of distributed energy resources (e.g. solar PV, storage, demand response) on the grid. A common methodology would allow for different circumstances in different Member States to be taken into account, yet would provide for consistent and objective study assumptions and key parameters for calculating costs and benefits. While the methodology would not replace national level responsibilities to fix and approve grid tariffs or their methodologies, it would ensure objectivity and respect for prosumer rights in the valuation of distributed energy resources in overall calculations.

Specifically, the Commission, or alternatively ACER, should be required to develop and oversee a standardised costs-benefit methodology for distributed energy resources.<sup>48</sup> The Commission could follow up its Staff Working Document on best practices for self-generation with clearer guidance on what factors should be taken into consideration when determining energy tariffs or their methodology, for instance what it considers dissuasive or penalising. This guidance would be directed towards the Member States, the NRAs and DSOs. ACER could also be responsible for promoting best practices between NRAs and Member States. To promote transparency and trust between DSOs, NRAs and customers, the process should be transparent, and inclusive all relevant stakeholders, including prosumers. In addition, results should be required to be reasonably explained to the public.

## 4.2 A right to fair remuneration for providing supply and services to the grid

As with the calculation of grid tariffs, there are no general EU legal principles that require the remuneration of prosumers to be fair. This has resulted in situations such as the one in Poland, where there is no guaranteed return of investment (ROI) for micro-installations. At the end of 2015, when the Polish government was still considering the adoption of a FiT scheme for the smallest micro-installations (up to 10 kW), prosumers were only able to sell surplus electricity at 80% of the actual market price. Before the government decided to scrap the scheme, Poland officially admitted to the Commission that the FiT rates for wind micro-installations would not cover levelised cost of energy (LCOE). As such, Poland's support scheme would not have granted any real benefits for consumers, and could have actually led to financial losses for households.

A general principle should apply that Member States must ensure that prosumers providing supply and services to the grid are remunerated in accordance with the value provided to the system. This is because, as a general rule, individual household and small business prosumers will not self-consume all of the energy they produce, nor should they be compelled to limit the capacity of their installation to match only their own consumption if they have the capacity to produce more. To ensure objective study assumptions and key parameters are used, the calculation of value should be subject to the same standardised costs-benefit methodology for energy tariffs, described above. This legal principle should apply regardless of the remuneration scheme used by the Member States, whether it is through a type of net-metering or other on-bill incentives, FiTs, or direct incentives from participating in relevant grid service markets.

## 4.3 The right to voluntary choice of a tariff that incentivises participation in demand-side response

Annex XI to the Energy Efficiency Directive already provides that "network or retail tariffs 'may' support dynamic pricing for demand response measures by final customers."<sup>49</sup> Furthermore, Annex XI prohibits network regulation and tariffs from preventing network operators or energy retailers from making available system services for demand response measures, demand management and distributed generation on organised markets. However, this language is stated

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<sup>48</sup> There is already experience in developing guidelines for measuring costs and benefits of distributed energy resources, for example, in the USA. See e.g. Interstate Renewable Energy Council (2013). *A Regulator's Guidebook: Calculating the benefits and costs of distributed solar generation* (October, 2013). Available at <http://www.irecusa.org/publications/a-regulators-guidebook-calculating-the-benefits-and-costs-of-distributed-solar-generation/>.

<sup>49</sup> This includes time-of-use tariffs, critical peak pricing, real time pricing and peak time rebates.

in permissive and vague terms, failing to establish a requirement to ensure retail consumers have voluntary access to fair rates which incentivise participation in demand response.

There is a need to strengthen the above language to ensure that consumers can voluntarily participate in demand response. Specifically, consumers should have a right to be offered a tariff by their supplier and/or DSO that allows them to engage in demand response, for instance through fixed or dynamic time-of-use, largely based on usage, and redistributed network usage charges.<sup>50</sup> The IEM Directive on Electricity should require NRAs to ensure that distribution tariff or their methodologies include voluntary options for final customers to choose a time-variable rate that allows them to participate in demand-side flexibility services. In particular, NRAs should be required to reflect this principle when setting or approving rates or methodologies. Furthermore, NRAs should have a duty to ensure that suppliers provide a variable rate on a voluntary basis to their customers, expressed as part of the energy component of their billing arrangement.

#### 4.4 Equitable grid connection costs for community renewables production

A number of challenges experienced by the sector in obtaining grid connections are exacerbated for community energy production installations. This is because community projects have limited options in choosing where to connect, and because complicated connection procedures are often difficult to navigate for community projects that often rely on non-technical staff or volunteers. While community projects are sufficiently different from traditional commercial renewable energy projects to justify unique treatment under EU legislation, new rules are needed to require the introduction of measures that reduce the cost of connecting to the grid and create more certainty for community projects.<sup>51</sup>

In a revised Renewable Energy Directive, Member States should be required to ensure that DSOs provide enhanced financial and procedural certainty for community projects trying to obtain a connection. For instance, Member States, and NRAs in particular, should be required to ensure shallow connection charging methods apply to community projects. DSOs should also be required to provide more clarity in providing timelines for connections, with binding deadlines and penalties for non-compliance. Furthermore, Member States should be required to ensure that community projects are allowed to challenge cost calculations of grid connections by DSOs.

To provide flexibility to Member States, the above list of options could be presented as a non-exhaustive list of options to ensure community projects have equitable access to local distribution infrastructure. Such schemes would be available only to renewable energy projects that are eligible under the definition of community energy provided. Article 16 of the current Renewable Energy Directive already requires Member States to recognise the disadvantageous position of some producers, including islands and regions of low population density, interestingly where many community projects may be found, such as in Scotland.<sup>52</sup> In particular, under Article 16(7), Member States are required to ensure that transmission and distribution tariffs do not discriminate against "renewable energy produced in peripheral regions, such as island regions, and in regions of low population density." This provision should be expanded to incorporate a

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<sup>50</sup> Energy Union Choices (2016). *Priorities for the Market Design Initiative: What's Missing? What's Most Important?* Authored by Regulatory Assistance Project (RAP), p 3. Available at [file:///C:/Users/Josh/Downloads/RAP\\_EUChoices\\_PrioritiesMDI\\_2016\\_Mar\\_16.pdf](file:///C:/Users/Josh/Downloads/RAP_EUChoices_PrioritiesMDI_2016_Mar_16.pdf).

<sup>51</sup> Under applicable case law, the CJEU has held that discrimination between similar users can only be justified on the basis of possible exemptions provided for in existing directives or regulations. *VEMW and Others* (Case C-17/03) [2005] ECR I-4983, paras 59-62, 66 and 71; and *Citiworks AG* (Case C-439/06) [2008] ECR I-3913, para 55.

<sup>52</sup> There are indeed many community projects in remote areas and islands in Scotland. Due to lack of capacity in transmission infrastructure, these projects are relying more on innovative methods of maximising use of local distribution infrastructure.

general rule for Member States to ensure that grid access fees do not place community undertakings at a disadvantage vis-à-vis larger well-established actors.

## 5 Maintaining investor certainty and ensuring respect for reasonable investment expectations

As non-traditional economic actors, prosumers are likely to make substantial upfront investments to become active. Although investment risk can never be eliminated, because they are more vulnerable than larger and sophisticated investors that can spread risk across a portfolio of diverse projects, prosumers need special protections for their investment expectations. The EU legislative framework can provide this additional investor certainty by 1) ensuring prosumers are able to access appropriate renewable energy support schemes post-2020; and 2) by defining a set of basic principles to protect prosumers from retroactive and retrospective changes to support schemes.

### 5.1 Maintaining access to available support schemes for prosumers

Continued access to appropriate national support schemes is essential to providing investment certainty for prosumers – and community generation projects in particular – at least through 2030.

In Member States where community energy is not well understood, access to private finance can be very hard to obtain and in particular it can be difficult to convince private lenders that community projects are a safe investment. Nevertheless, with FiTs, for example in Germany and Denmark, private financial institutions have found investing in community energy safe. However, due to market integration and the State aid guidelines in particular, communities face an end to non-premium based FiTs, which are being replaced by auction and tendering procedures. This is creating more financial risk for continued investment in community projects and there is a danger they will be driven out of the market unless certain protections are in place.

There is a need for a Renewable Energy Directive to ensure that community energy projects have equitable access to available support schemes. As such, a general principle should be inserted into a revised Renewable Energy Directive regarding Member State support schemes for renewables. Specifically, there should be a general rule that Member States should ensure local and smaller actors (e.g. cooperatives and other community-owned projects) can continue to have access to effective and appropriate support. At the very least, Member States should be required to ensure that support schemes do not prevent community projects or individual consumers from participating in the market. As such, Member States should be able to exclude local community projects from tendering or auction procedures. Otherwise, Member States should be required to include safeguards in support schemes to ensure that rules or procedures contained in tendering or auction procedures that form a prerequisite for participation do not unfairly burden smaller, non-traditional actors from participating. Preferably, Member States should be required to establish separate procedures for the participation of community projects. Another alternative could be for Member States to promote and incentivise right-to-purchase schemes for commercial renewables projects.

To provide flexibility to Member States, the above list of options could be presented as non-exhaustive to ensure community projects have equitable access to available support schemes at national – and even regional – level. Such schemes would be available to renewable energy

projects that are eligible under the definition provided. In order to limit market distortion and/or abuse by market actors or Member States, such a general principle could also be accompanied with a requirement to open up access to support schemes on a regional level. Otherwise, installed capacity thresholds could be provided.

With regard to scope, support schemes should be as broad as possible, for instance beyond what the current State aid guidelines impose (e.g. technology neutrality and tender/auction procedures for all but the smallest projects). Support schemes should be allowed to be designed without obligations imposed on Member States with regard to technology neutrality and choice of State aid measure. It is worth noting in this regard that the State aid guidelines will be due for review in 2017 and will be changed as of 2020. Moving forward, the revised Renewable Energy Directive should serve as the guiding policy for the post-2020 State aid guidelines, which the State aid guidelines should then clarify. This would indeed be consistent with the role of the co-legislator in defining the legislative parameters of support for renewables, while the State aid guidelines should provide additional investor certainty and consistency with the Treaties.

## 5.2 Protecting prosumers' legitimate investment expectations

Legal certainty and legitimate expectations are EU legal principles that afford basic protection to all economic actors across the EU. Together they form a legal and a policy case for heightened regulatory stability for support schemes made available to prosumers.

In general, the principle of legal certainty precludes actual retroactivity (i.e. the laws should not take effect before they are published). However, in some cases Member States are still allowed to apply changes to laws retrospectively. Furthermore, as a legal principle that operates at EU level, the principle of legitimate expectations leaves much discretion to national legal systems. Under the current framework, this has resulted in some Member States (e.g. Spain) imposing retroactive or retrospective changes to supportive legal frameworks, primarily for solar PV.

To protect all active EU energy consumers in the energy market, there is a need to define general principles which balance Member States' need to modify support schemes with the protection of prosumers. In particular, the Renewable Energy Directive should enshrine the prosumer's right to a stable regulatory framework for their participation, explicitly prohibiting retrospective changes to existing support schemes. It should also require Member States to provide for a transparent process ensuring stakeholder engagement and public participation when proposing changes to support schemes. The Commission should also be required to develop guidance on avoiding retrospective changes that would put consumers' investment expectations at risk, and further define appropriate roles and responsibilities for different actors, such as system operators and relevant competent authorities (e.g. NRAs, competition authorities, etc).

## 6 The right to information and advice on exercising prosumer rights: a one-stop shop

The right to information is one of the cornerstones of consumer protection in the energy sector and measures to promote information provision to consumers are relatively developed under EU law. Nevertheless, as consumer-centric business models become more commonplace, there is a need to ensure that consumers have easy access to readily available and understandable

information on their rights as prosumers, including how they can effectively exercise them, and specific risks and opportunities of participating in the market.

## 6.1 Existing provisions on the consumers' right to information

A number of informational rights already exist for consumers. These include:

- a right to receive clear information on their energy contract before signing and specific minimum requirements for information that must be included in the contract;<sup>53</sup>
- a right to accurate information on consumption and billing through metering, as well as a right to information on how to use energy more efficiently, and the provision of information provision to empower consumers to regulate consumption;<sup>54</sup> and
- a right to have available information on support measures for renewable sources of energy, as well as have suitable information, awareness-raising, guidance or training programmes in order to inform citizens of the benefits and practicalities of developing and using energy from renewable energy sources.<sup>55</sup>

## 6.2 What do prosumers need to know?

In addition to ensuring proper enforcement of existing informational rights, prosumers need to have adequate information regarding the scope of their rights. First, consumers will need sufficient information to be able to understand their opportunities to participate in the market, both individually and collectively, and under what conditions and/or requirements.

With regard to self-consumption, prosumers need to be able to assess the payback period for their installation, and associated fees and obligations (e.g. balancing). For demand response, prosumers need clear and comparable information to exercise their right to choose an independent aggregator or energy service provider.<sup>56</sup> As such, it will be necessary to ensure that contractual information requirements also apply to new market actors. Prosumers will need to be able to understand the financial implications of switching to variable (e.g. time-based) tariffs, and rules for opting in and out. This will require enhanced requirements for relevant government authorities and market actors (e.g. suppliers) to provide such information to prosumers in a clear and comparable way.

## 6.3 Information and technical support for prosumers – single points of contact and one-stop-shops

Member States are already required to have a single point of contact for providing consumers with all necessary information regarding their rights.<sup>57</sup> Prosumer rights should also be accessible through this single point of contact. Single points of contact could, however, be complemented by or combined with, potential 'one-stop-shops' under the Renewable Energy Directive.

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<sup>53</sup> See Annex I to the IEM Directive on Electricity

<sup>54</sup> Energy Efficiency Directive, Articles 9-12, and 17.

<sup>55</sup> Renewable Energy Directive, Article 14.

<sup>56</sup> Although it should be noted that under relevant company laws, certain community energy undertakings, in particular installations, already have informational or prospectus laws they must comply with when conducting share offers.

<sup>57</sup> IEM Directive on Electricity, Article 3(12).

In addition to the informational requirements elaborated above, under the current Renewable Energy Directive, Member States are required to take steps to streamline administrative procedures for renewable energy projects at the appropriate level. Moreover, Member States were supposed to report whether they intended to "establish a single administrative body responsible for processing authorisation, certification and licensing applications for renewable energy installations and providing assistance to applicants."

As has been acknowledged by the Commission, progress in these areas has been very uneven across Member States. Nevertheless, where Member States have adopted simplified administrative procedures, active information dissemination and technical assistance programmes, particularly through one-stop-shops and on-line platforms at national and local level, such initiatives have been instrumental in promoting local uptake of renewables and participation in community projects.<sup>58</sup>

In order to promote participation of all local citizens, not just community projects, a revised Renewable Energy Directive should require Member States to establish one-stop-shops at appropriate level to:

- coordinate different administrative approval processes and licenses for community projects; and
- advise local citizens and community groups to help them with technical issues, access to finance and navigate relevant regulations and procedures.

The establishment of one-stop-shops would not require a new entity; coordination responsibilities could be integrated into an existing body, for instance with regional or local authorities, an NGO, consumer body/single point of contact, or a competent ministry. Regardless, the entity charged with assisting the public should be provided with official and visual status so that it is well-known by its target group. Of primary importance, it should contain information on prosumer rights, including information on how to participate in and access available remuneration schemes, and how to obtain grid access. In this way, it could be considered whether to use existing points of contact for information on consumer rights. Furthermore, the body should be assisted by an online tool to provide transparency and easy access to information. It would also need to be guaranteed sufficient financial and technical resources, independence, and political support from relevant levels of government.

If one-stop-shops are combined with existing single points of contact for consumer rights, it may be suitable to build out existing provisions on single points of contact through the IEM Directive on Electricity. If maintained separately from single points of contact, it may be suitable to integrate information, awareness and guidance programmes through one-stop-shops under the equivalent of existing Article 14, in a revised Renewable Energy Directive. Member States could also be given a choice, although if developed separately there would need to be a requirement to ensure sufficient links between one-stop-shops and single points of contact for prosumer/consumer rights.

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<sup>58</sup> For instance, many cities in countries like Germany and the UK have set up on-line platforms providing information for citizens that want to produce renewables, while countries like Denmark have streamlined permitting processes through local authorities and have set up local energy agencies to provide advice to citizens. See Roberts J *et al* (2014) *supra* note 9 at pp 40-41.

# Chapter 4: Making ownership available to all consumers

Low- to medium-income households typically spend a higher percentage of household income on energy relative to other households. Therefore, by participating in conservation, energy efficiency and renewable energy production, these households can benefit through reduced energy bills. However, low- to medium-income households face substantial financial barriers in adopting such measures. Furthermore, many consumers cannot self-generate renewable energy, either because they reside in/operate a multi-unit building, or because the building is otherwise ill-equipped to generate renewable energy.

In promoting consumer participation in the energy transition, it is essential that all households, particularly lower income households and multi-unit dwellings, be enabled to directly benefit from decentralised renewable energy production. Below, we provide recommendations for how the EU legal framework can facilitate wider access to participation in such activities.

## 1 Addressing energy poverty through becoming a prosumer

While there is little practice in Europe in this area to date, prosumers in different Member States, particularly community projects, already use innovation to address fuel poverty. The EU legal framework needs to better support these types of projects, and promote schemes intended to facilitate participation by low- and medium-income households as a way to address fuel poverty.

### Prosumers in the UK and Denmark: leading the way in addressing fuel poverty

In Denmark, the law on social housing provides tenants with the ability to exercise self-governance through 'tenant's democracy'. Under national law, tenants living in social housing estates are members of the association and are in charge of the upkeep of the estate. Possessing characteristics of a legal entity, the housing association can, upon a vote, take out loans and undertake projects, for instance, to install solar on roofs. Such projects can be financed by adjusting the rents of tenants, and by partnering with local district heating companies.

In the UK, a growing number of community energy projects are being set up with the intent to help members realise energy savings. The most successful of these projects is perhaps Repowering London, a non-profit organisation that has successfully installed PV on different council estates around London. For its initial projects, Repowering London concluded agreements with Lambeth Council in Brixton to lease the roofs of the buildings of the estates. Each project is owned by a separate cooperative, so that members from each project were able to qualify for available tax relief. To ensure everyone could invest, residents of the estates where

the projects are sited were allowed to purchase shares of £50. Furthermore, a fund called the Community Energy Savings Programme (CEEF) was established to allocate profits to help local members of the community adopt measures to reduce cold draughts from windows and doors, energy efficiency improvements and education initiatives. This model has been replicated around the UK and has even been adopted by a newly-established cooperative in Edinburgh.

## 1.1 Existing policy tools to promote renewables uptake by low- to moderate-income households in the United States

In the United States, a number of programmes for shared ownership – particularly solar – have been developed into the legislation of different states in order to open up access to both low income households and consumers living in rental or multifamily housing. Some of these programmes are aimed at siting small-scale installations (mostly PV) in areas of economic deprivation, while others promote ownership and participation in local but off-site community-owned installations.

These programmes aim both at incentivising direct participation by low- to medium-income households in community projects, and at incentivising developers to facilitate participation by such households. Depending on the scope of the programme, policies and measures include:<sup>59</sup>

- tax incentives (tax credits against income) to renewable energy project developers that open up subscription at reduced rates to eligible customers;
- linking and/or setting aside incentives to provide a minimum ownership level to low-income households/tenants for local/community installations;
- using different forms of credit assessment for individual investors;
- loan loss reserve mechanisms, which are fixed or renewable accounts that contain funds to cover potential losses incurred by individual lenders over the life of the loan;
- third-party financing and on-bill financing/repayment for investments for individual installations or community projects, and on-bill credits for participants; and
- yearly targets for utilities to purchase energy from eligible local/community projects that have low- to medium-income subscribers, both as a requirement and voluntarily.

In order to protect the consumer base as a whole, some of these programmes contain a requirement for costs to not be borne by other non-participating customers.

## 1.2 A role for the EU legal framework in encouraging renewables uptake as a way to address energy poverty

The EU legal framework already promotes energy efficiency as a way to combat fuel poverty. Article 3(8) of the IEM Directive on Electricity requires Member States to "take appropriate measures" to address energy poverty, where identified, such as "providing for support for energy

<sup>59</sup> See Interstate Renewable Energy Council (2016). *Shared Renewable Energy for Low- to Moderate-Income Consumers: Policy Guidelines and Model Provisions*, available at <http://www.irecusa.org/publications/shared-renewable-energy-for-low-to-moderate-income-consumers-policy-guidelines-and-model-provisions/>.

efficiency improvements." Furthermore, the Energy Efficiency Directive acknowledges that Member States should be allowed to include requirements to pursue a social aim in energy efficiency obligation schemes, "in particular to ensure that vulnerable customers have access to the benefits of higher energy efficiency."<sup>60</sup> Article 7 allows Member States to prioritise obligations schemes towards households that experience energy poverty or are in social housing.

Member States are also encouraged through the recitals to the Energy Efficiency Directive to use revenues under the Emissions Trading Scheme (ETS), and Structural and Cohesion Funds to stimulate investment in fuel poverty reduction.<sup>61</sup> Furthermore, financing facilities should provide resources for research on, and demonstration and acceleration of, uptake of small-scale and micro-technologies to generate energy, and be linked to programmes undertaking action to promote energy efficiency in all dwellings to prevent energy poverty and stimulate landlords letting dwellings to render their property as energy-efficient as possible.<sup>62</sup>

While self-generation is mentioned within the context of energy efficiency as a way to address energy poverty, there is currently no meaningful link between engaging as a prosumer and tackling fuel poverty. Nevertheless, there are a number of ways the EU legal framework can promote this. First, in a revised IEM Directive on Electricity, the Commission should properly define vulnerable customers and/or fuel poverty. Currently, Member States are required to come up with a definition of vulnerable consumers, which may – but is not required to – refer to fuel poverty. This has resulted in disparate action to address fuel poverty across Member States.

Within the scope of providing a stronger framework at EU level to deal with fuel poverty, the Renewable Energy Directive should recognise self-generation and participation in community projects as ways to address fuel poverty and help consumers reduce their energy bills. This should provide the basis for legislative provisions that require – or at least encourage – Member States to conduct transparent assessments of the potential of energy efficiency and engagement in renewable energy production to combat fuel poverty. Based on this assessment, Member States should be required to develop and promote appropriate incentives at national level to, among other things:

- **Encourage project developers to open up ownership to eligible households that qualify as fuel poor.** This could include a non-exhaustive list of potential incentives such as tax relief, guarantees or special loans for developers that open majority ownership of the project to low and medium-income households, or for community renewable energy projects that are sited on social housing and/or use a set level of their profits for addressing energy poverty needs in the community.
- **Encourage households that qualify as fuel poor to participate in community renewable energy projects.** This could include a non-exhaustive list of potential incentives such as third party/on-bill financing, earmarking a portion of money allocated to support schemes to eligible households, on-bill crediting for each individual member's production, setting aside national and EU funds to create a revolving fund that provides soft loans, or other de-risking financial mechanisms.

Ultimately, it will be up to Member States to develop and promote specific incentives programmes. Nevertheless, the EU can play an encouraging and guiding role by focusing

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<sup>60</sup> Energy Efficiency Directive, Recital 20.

<sup>61</sup> Energy Efficiency Directive, Recital 49.

<sup>62</sup> Energy Efficiency Directive, Recital 53.

Member States' attention on such issues and opportunities. Moreover, once incentives have been developed at national level, the Commission can facilitate the sharing of best practices between Member States.

## 2 Promoting participation by tenants in multi-unit dwellings

There are a number of benefits to using multi-unit buildings to integrate renewables through community projects for PV. They represent a widely untapped resource for space in residential and urban areas, and because of their combined energy use they represent larger economies of scale for production. They also improve energy performance and add to property values. However, due to 'split incentives' – meaning when tenants desire the benefits of going solar but the building owner (whether public or private) remains responsible for the costs of the energy system – and other challenges, adoption has remained limited. Furthermore, they may also not be capable of covering the entire building's demand. In some Member States, such as Spain, multi-unit buildings have been prevented from participating in self-consumption.

Split incentives are not only applicable to uptake of renewables – they are also relevant for energy efficiency improvements, as Article 19 of the Energy Efficiency Directive already acknowledges. Specifically, Member States must evaluate and if necessary take appropriate measures to remove regulatory and non-regulatory barriers to energy efficiency, including for the split of incentives between the owner and the tenant of a building or among owners, to ensure they are not deterred from making investments in energy efficiency that would otherwise have been made if not for the split of incentives issue. In doing so, they must respect basic principles of property and tenancy law of the Member States.

The Energy Efficiency Directive provides a good example of how the EU legal framework could begin to address split incentives and other issues with regard to the uptake of PV in multi-unit dwellings. Specifically, a revised Renewable Energy Directive should require Member States to remove barriers for the uptake of renewable energy installations by multi-unit buildings. Furthermore, Member States should be required to transparently evaluate and then take appropriate measures to ensure that split incentives issues do not prevent the uptake of renewables in multi-unit buildings. Such an assessment could be combined with an assessment on how to help ensure that consumers in fuel poverty can participate in the benefits of renewable energy production. Furthermore, the Commission should play a role in promoting best practice.

# Chapter 5: Oversight and enforcement of prosumer rights

Without proper oversight of implementation and – if necessary – enforcement at national level, rights will do little to enable prosumers. NRAs and ombudsman/consumer bodies at national level, along with ACER and the Commission at EU level, all have a role to play in ensuring that prosumer rights are respected by other market actors and relevant government bodies. Furthermore, EU cooperation is needed to better understand the role of prosumers in the energy market as this class of actor continues to develop.

## 1 NRAs

NRAs have an objective to ensure consumer protection, as well as a legal duty to ensure market actors comply with EU consumer protection provisions. The above provide a rationale for properly empowering NRAs to ensure compliance with prosumer rights. However, the regulatory and institutional framework at national level needs to be expanded and clarify roles and duties of NRAs to ensure that prosumer rights are respected by other market actors.

While new duties for NRAs are proposed throughout this report, specific new NRA duties should include:

1. Oversight and enforcement of the implementation of specific prosumer rights under EU legislation at national level, including:
  - Ensure that, together with other relevant authorities, prosumers do not forfeit traditional protections simply because they become active market participants, in particular data protection, universal service, and the right to switch suppliers.
  - Oversight of consumer choice, particularly when it comes to contracting for demand response and other energy services. NRAs are already required to monitor restrictive or unfair contractual practices.<sup>63</sup> This duty should be expanded to ensure NRAs can monitor and enforce obligations of other market actors (e.g. suppliers/BRPs, DSOs) not to impose contractual or other barriers to consumers entering into agreements with independent aggregators or ESCo's.
  - Ensure that transmission or distribution tariffs or their methodologies do not result in disproportionate or dissuasive costs for participation in self-generation, while ensuring

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<sup>63</sup> IEM Directive on Electricity, Article 36(g), and Article 37(1)(k).

- fairness to consumers as a whole, and in particular ensuring that specific general principles are respected.<sup>64</sup>
- Ensure that pricing and participation in relevant markets provides for fair remuneration to the supply and services prosumers provide to the grid.
  - Ensure, including through monitoring, that community generation installations have equitable access to available grid space and support schemes.
  - Monitor informational requirements for prosumers, including one-stop shops.
2. Ensure that new market actors are not discriminated against – either explicitly through direct discrimination or implicitly through regulatory barriers that place them at a competitive disadvantage. This should include:
- Ensuring that Member States simplify licensing and registration requirements to promote market entry by innovative new market actors, such as independent aggregators and other innovative consumer-centric business models; and
  - Overseeing 1) requirements for taking on balancing responsibility to ensure they do not prevent market entry by new actors, and 2) standardised agreements between BRPs and new market actors for the performance of balancing duties to ensure they do not prohibit market access by aggregators and ESCo's.

At EU level, NRAs should be required to cooperate with ACER in monitoring prosumers (e.g. the number of prosumers, and market opening for collective prosumers and innovative business models aimed at facilitating consumer participation) in order to better understand their characteristics, impacts on the energy system, and opportunities to strengthen their position in the energy market. Through the above, NRAs, ACER and CEER should contribute towards monitoring of relevant indicators by the Commission under the Energy Union governance system. Furthermore, ACER should be required to include prosumers in its regular monitoring and annual reporting duties.

## 2 Ombudsman, consumer bodies and self-enforcement

The Third Energy Package established a requirement for a single point of contact for providing consumers with information regarding rights in Member States, in addition to the establishment of an ombudsman or consumer body.<sup>65</sup> These bodies work with regulatory authorities on consumer issues, and settle disputes between customers and energy companies and public bodies. Such bodies can play an important role in ensuring prosumers are protected while engaging in the market, both with third party entities that facilitate their market participation and with other actors in the market. Along with NRAs and other relevant authorities, they can also ensure that prosumers can exercise their rights at national level.

To enable ombudsman and consumer bodies to deal with practical and regulatory issues facing prosumers, including handling individual complaints, the IEM Directive on Electricity should:

- explicitly frame prosumer rights and issues within the competence of ombudsman and consumer bodies, particularly with regard to handling of complaints; and

<sup>64</sup> For specific principles envisioned, see Chapter 3, section 4.

<sup>65</sup> IEM Directive on Electricity, Article 3(12)-(13).

- ensure ombudsman and consumer bodies are included in discussions aimed at developing better understanding of the issues prosumers face at national and EU levels and relevant decision making.

Complaint handling should not replace the ability of prosumers to legally challenge decisions that affect their rights in a court of law, either individually or through consumer bodies.

The ability to seek a review of NRA decisions is provided for in Article 37 of the IEM Directive on Electricity. Specifically, decisions by the NRA must be fully reasoned and justified to allow for judicial review, although Member States are only required to ensure "suitable mechanisms exist" so that "a party affected by a decision of a [NRA] has a right of appeal to a body independent of the parties involved and of any government." Interpretive Guidance by the Commission<sup>66</sup> suggests that "it must be possible to introduce legal actions against the NRA decisions," but the Directive is not explicit in this regard. Therefore, while an NRA's decision to not pursue actions against market actors for non-compliance must be reviewable, it need not be in a court of law.

To ensure prosumers have adequate means to ensure their rights are respected, IEM Directive on Electricity should affirm the right of prosumers to directly challenge infringement of their rights through the judicial process, either by third party market actors or through decisions – or lack of decision – by government bodies, including NRAs.

### 3 The Commission - Energy Union governance

In the next stages of the energy transition, consumers - and indeed all citizens - need to be able to participate to help influence national measures and policies. In the near-term, this is relevant for the development of national energy and climate plans (NECPs) for meeting 2030 climate and energy commitments by the Member States.

The Commission needs to ensure that NECPs are developed in an open, participatory process that is rooted in legislation. In their NECPs, Member States need to be required to elaborate how they will promote participation of prosumers in the achievement of renewable energy objectives (e.g. individual household consumers, community projects, multi-dwelling buildings, etc). This should include specific policies and measures to support prosumers, including ensuring fair access to the market, targeted measures for low-income communities, encouraging appropriate business models (e.g. cooperatives), and simplification of administrative barriers for prosumers.

To ensure the above, NECPs need to be developed according to binding templates that ensure comprehensiveness, comparability, transparency and accountability. Whether standards are developed in a revised Renewable Energy Directive or a streamlined instrument on planning and reporting, essential planning and reporting must ensure transparency and visibility for prosumers and facilitate proper Commission monitoring and enforcement.

The NECPs should also build upon plans that have already been developed by local and regional authorities, in particular under the Covenant of Mayors Initiative (CoM). Some 5000+ Sustainable Energy Action Plans developed in the context of the CoM, which are currently being implemented by cities all over Europe. EU legislation on NECPs should require cooperation between the different actors and in particular between the different levels of governance.

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<sup>66</sup> European Commission, Staff Working Document Interpretive Note on Regulatory Authorities, 22 January 2010.

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