

The Consumer Voice in Europe

BEUC RECOMMENDATIONS ON A NEW RENEWABLE ENERGY DIRECTIVE

BEUC response to the European Commission's public consultation
on a new Renewable Energy Directive for the period after 2020



Contact: Jörg Mühlenhoff – energy@beuc.eu

BUREAU EUROPÉEN DES UNIONS DE CONSOMMATEURS AISBL | DER EUROPÄISCHE VERBRAUCHERVERBAND
Rue d'Arlon 80, B-1040 Brussels • Tel. +32 (0)2 743 15 90 • www.twitter.com/beuc • consumers@beuc.eu • www.beuc.eu
EC register for interest representatives: identification number 9505781573-45



Co-funded by the European Union

Ref: BEUC-X-2016-013 – 11/02/2016

INTRODUCTION

BEUC, the European Consumer Organisation, calls for an ambitious Renewable Energy Directive (RED) that aims at accelerating energy transition in the hands of consumers. With regard to the revision of the RED and a new market design¹, we urge the European Commission to include a dedicated strategy for small-scale renewable self-generation that provides a long-term approach. A future Directive needs a consumer-centric approach. Only with a clear strategy on how to make the benefits of renewables accessible to consumers, they will engage more actively on energy markets.

In its mapping report, BEUC has thoroughly investigated consumer-driven renewable electricity markets in 13 Member States and Norway.² We documented inappropriate implementation of the RED in many Member States. Frequent and even retroactive changes increased. This questioned the predictability of policies. The lack of stability made consumers investments in self-generation unnecessarily risky. In this context, BEUC developed a set of recommendations for a 'welcome culture' for consumers' solar self-generation.³

Those consumers who do not want to use or just cannot access renewable self-generation technologies, have the opportunity to opt for 'green electricity' tariffs in most Member States. But while consumers think that they contribute to investments in new renewable electricity generation capacities, suppliers can continue to produce, trade and sell electricity from fossil fuel-fired power plants. In this respect, BEUC prepared a set of recommendations which we believe need to be addressed in the future RED to ensure consumers can trust in 'green electricity' tariffs.⁴

¹ See BEUC: BEUC recommendations on a new energy market design. Response to the European Commission's public consultation, BEUC-X-2015-102, October 2015; http://www.beuc.eu/publications/beuc-x-2015-102_mst_beuc_response_to_public_consultation_on_a_new_energy_market_design.pdf; and BEUC: Building a consumer-centric Energy Union. BEUC position paper, BEUC-X-2015-068, July 2015; http://www.beuc.eu/publications/beuc-x-2015-068_mst_building_a_consumer-centric_energy_union.pdf.

² BEUC: Current practices in consumer-driven renewable electricity markets. BEUC Mapping report, BEUC-X-2016-003, January 2016.

³ BEUC: A welcome culture for consumers' solar self-generation. Policy recommendations, BEUC-X-2016-001, January 2016.

⁴ BEUC: Trustworthy 'green electricity' tariffs. Policy recommendations for more transparency, better choice and environmental benefits, BEUC-X-2016-002, 6 January 2016.

CONSULTATION QUESTIONS OF THE EUROPEAN COMMISSION

1. General approach

1. Consultation question: To what extent has the RED been successful in helping to achieve the EU energy and climate change objectives?

<i>Very successful</i>	<i>Successful</i>	<i>Not very successful</i>	<i>Not successful</i>	<i>No opinion</i>

BEUC response:

It is important to bear in mind that there are specificities in Member States' policies and measures in place that did not always deliver the expected results with regard to the Renewable Energy Directive's objectives. When responding to this consultation, BEUC is mainly focussing on small-scale self-generation by household consumers and the challenges from their specific perspective.

From this consumer perspective, the RED has increased investments in renewable energy as several Member States launched or reinforced dedicated support schemes for small-scale renewable self-generation under their National Renewable Energy Action Plans. Therefore, the RED indirectly helped to establish frameworks that enable private households to tap the potential of renewable energy sources on their premises.

Successful market launch with targeted support for consumers

Those Member States which implemented the RED with an appropriate and stable support scheme for small-scale self-generation successfully triggered consumers' investment. BEUC's mapping report⁵ shows that consumers' willingness to adopt renewable technologies drove a number of national solar PV markets.

Although costs and benefits of measures that trigger consumers' engagement in renewable self-generation have not yet been quantified at the EU level, BEUC's mapping report revealed certain positive impacts:

Consumers' self-generation creates added value

On the one side, renewable self-generation allows households to cut their energy costs. In the EU, 80% of households live in regions where generating one kilowatt-hour of electricity with a solar PV rooftop system is cheaper than buying a kilowatt-hour at the average national retail electricity price.⁶ This is due to lowered levelised cost of solar PV electricity generation, but also to taxes and levies imposed on retail prices. Consumers' investments in self-generation have also contributed to generating locally added value, employment and increasing fiscal revenues.⁷ In Germany where households own almost half of installed capacity of renewable electricity generation, annual value added by citizens' local renewable energy projects have been estimated at € 3.2 to 5.3 billion in 2012.⁸

⁵ BEUC: Current practices in consumer-driven renewable electricity markets. BEUC Mapping report (BEUC-X-2016-003), January 2016.

⁶ Joint Research Centre (JRC): Cost Maps for Unsubsidised Photovoltaic Electricity 2014, September 2014. Assumptions: 1,400 Euro/kW system price plus national VAT rate, levelised costs of electricity generation (LCOE) with 20 years payback, 5% p.a. interest, 2%/year maintenance. The actual spread between the retail price on the one hand and the LCOE of solar PV electricity may differ because the JRC model applied EU average data and did not take into account any eventual public support granted (e.g. tax exemptions) that could increase or decrease retail prices respectively generation cost.

⁷ IRENA: EconValue - The Socio-economic Benefits of Solar and Wind Energy, May 2014.

⁸ IZES: Nutzeneffekte von Bürgerenergie, August 2015.

Assess distributional impacts and transfer slump in wholesale prices

However, many households will be unable to benefit directly from installing renewable energy sources, and will continue to carry the burden of supporting both large-scale and household-scale renewable installations. Until the costs of renewables have fallen further, such that they no longer require levy-funding to top-up their revenues to cover their fixed costs, consumers will need to be protected against unnecessary or inefficient levy funding programmes. Against this backdrop, BEUC asks the Commission to conduct a distributional analysis on the impact of supporting schemes on different consumer groups. Cost distribution of implementation measures has to be balanced and fair.

Moreover, increases in retail prices caused by levies partially could be compensated if the slump in wholesale prices caused by renewables with low marginal costs would have been transferred to final customers.

2. Consultation question: How should stability, transparency and predictability for investors be ensured with a view to achieving the at least 27% renewable energy target at EU level? Please indicate the importance of the following elements:

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Forward looking strategic planning of RES development is required by EU legislation</i>					
<i>Best practice is derived from the implementation of the existing Renewable Energy Directive</i>					
<i>Regional consultations on renewable energy policy and measures are required</i>					
<i>Member States consult on and adopt renewable energy strategies that serve as the agreed reference for national renewable energy policies and projects</i>					
<i>The Commission provides guidance on national renewable energy strategies</i>					

BEUC response:

Support consumers’ willingness to invest in self-generation

Consumers’ are willing to actively contribute to reaching the 2030 target through engaging in self-generation, either at their own house or as tenants.⁹ Without consumers’ widespread use of local renewable energy sources for heating and cooling and for electricity demand, in particular solar energy, target achievement is questionable.

Welcome culture = right to self-generate + grid access + remuneration

A ‘welcome culture’ for small-scale self-generation is key for investment security. Member States should be obliged to establish dedicated long-term strategies to be clearly defined

⁹ European Commission: Special Eurobarometer 416. Attitudes of European Citizens towards the environment, September 2014; European Commission: Special Eurobarometer 409. Climate Change, March 2014.

in their national plans. The Commission should provide guidance to Member States on how to implement at least the following elements:

1. A right to self-generate and to self-consume, enabling private households to consume and sell the renewable electricity generated at their premises without being charged with undue financial burdens for the self-consumed share. With regard to tenants, this should include new national schemes. Within their national strategies, Member States should be obliged to define action on how to foster models that allow tenants either to participate in renewable energy installations or to purchase renewable energy from the close surroundings of their residence.

2. A priority grid-access for small-scale self-generators. This must include consumers' right to be connected without any caps on grid connection capacity. Grid operators should be obliged to immediately optimise and expand their network in order to guarantee to self-generators the purchase, transmission and distribution of their electricity. Hurdles such as lengthy permit procedures that were identified by the Commission's "Best practices on Renewable Energy Self-consumption" (SWD(2015) 141) as well as in the PV GRID project¹⁰ must be addressed.

3. An appropriate remuneration scheme for excess electricity fed into the grid. Specific support schemes are necessary and justified, given ongoing wholesale market distortions. As stated in SWD(2015) 141, consumers still need to receive value for excess electricity ensuring economic viability of their project. Again, predictability of such schemes is important not only to facilitate consumers' role as producers but also to ensure the renewable energy target is achieved.

Achieving the renewable energy target relies on consumers becoming self-generators

Member States that provided appropriate frameworks for small-scale self-generation were able to trigger considerable investments especially in solar PV capacities. According to industry estimations, more than half of the newly installed PV installations in 2013 were achieved due to measures allowing owners or residents to directly self-consume solar electricity at their premises.¹¹ Statistics from Euroobserver and from industry¹² show that especially those Member States that introduced dedicated support schemes succeeded in incentivising a relevant part of installed capacity in the residential sector (e.g. Germany, Italy, UK). Moreover, the Belgian and the Dutch solar PV markets are largely driven by the residential sector.¹³ These developments show that private households as self-generators matter for achieving future targets.

¹⁰ PV GRID project: Final project report, August 2014.

¹¹ Solar Power Europe (SPE): Global market outlook for solar power 2015 – 2019, June 2015, p. 26.

¹² Euroobserver: Photovoltaic Barometer 2014, May 2015; Solar Power Europe (SPE): Global market outlook for solar power 2015 – 2019, June 2015.

¹³ EPIA: Shares of self-consumption in Europe. PV contribution to the electricity demand in the EU 28 in 2013. Presentation, April 2015.

3. Consultation question: Please rate the importance of the following elements being included in Member States' national energy and climate plans with respect to renewable energy in ensuring that the plans contribute to reaching the objectives of at least 27% in 2030.

	Very important	Important	Not very important	Not important	No opinion
<i>Long term priorities and visions for decarbonisation and renewable energy up to 2050</i>					
<i>In relation to national/regional natural resources, specific technology relevant trajectories for renewable energy up to 2030</i>					
<i>Overview of policies and measures in place and planned new ones</i>					
<i>Overview of renewable energy trajectories and policies to 2050 to ensure that 2030 policies lie on the path to 2050 objectives</i>					
<i>Qualitative analysis</i>					
<i>Trajectories for electricity demand including both installed capacity (GW) and produced energy (TWh)</i>					
<i>Measures to be taken for increasing the flexibility of the energy system with regard to renewable energy production</i>					
<i>Plans for achieving electricity market coupling and integration, regional measures for balancing and reserves and how system adequacy is calculated in the context of renewable energy</i>					

BEUC response:

Include a dedicated long-term strategy for small-scale self-generation

Given the importance of enabling consumers to contribute to target fulfilment, future legislation should include an obligation on Member States to establish dedicated long-term strategies for small-scale self-generation as a mandatory part of national energy and climate plans. Templates for national plans provided by the Commission should assist Member States in developing measures that enable self-generation in the hands of consumers. This could be part of a more general target for 'prosumer' or 'community energy' targets.¹⁴ The term 'prosumers' as used in Commission's publications can cover all consumers who produce and consume renewable electricity and/or heat, either through self-generation on their premises or collectively through cooperatives, social enterprises,

¹⁴ ClientEarth: Promoting citizen participation in the energy transition: recommendations for an EU legal framework to support community energy, April 2015.

small businesses or other aggregations. These actors often are also described as 'community energy' actors or 'citizens' energy' projects.

Given that the Council of European Energy Regulators (CEER) highlights the number of 'prosumers' as an indicator for consumers' involvement in its position paper on well-functioning retail energy markets¹⁵, Member States' reporting obligations should entail key indicators such as the amount of electricity that is generated and self-consumed by household consumers and how much of the installed capacity is owned by them.

The Commission should closely monitor and intervene if Member States policies undermine common goals. This refers especially to retroactive changes.

Key elements of mandatory national strategies are consumers' right to self-generate and to self-consume, priority grid access and an appropriate remuneration scheme for excess electricity as described in BEUC's answer to question no. 2.

BEUC considers a differentiated approach to the specific challenges of renewable self-generation technologies is indispensable. A technology-neutral approach would put mature renewable technologies into a counterproductive competition with other renewable technologies that are not yet at the stage of broad mass market introduction.

BEUC regards provisions for a 'welcome culture' (see answer to question no. 2) as a prerequisite for coming up to the Energy Union strategy's aim to engage consumers in energy markets through self-generation. BEUC expects future legislation to oblige Member States to mitigate the specific risks of distorted markets and existing market design for small-scale self-generators (see also answer to question no. 18).

Better monitoring and reporting on progress in self-generation is indispensable

Considering implementation of national strategies, Member States should be obliged to report regularly on how they address the small-scale self-generation segment and on concrete measures. In view of general target fulfilment, Member States should monitor the installed capacity in the hands of private households, the amount of self-consumed electricity and the number of small-scale self-generators.

4. Consultation question: What should be the geographical scope of support schemes, if and when needed, in order to drive the achievement of the 2030 target in a cost-effective way?

- Harmonised EU-wide level support schemes*
- Regional level support schemes (group of Member States with joint support scheme)*
- National support schemes fully or partially open to renewable energy producers in other Member States*
- Gradual alignment of national support schemes through common EU rules*
- National level support schemes that are only open to national renewable energy producers*

BEUC response:

Member States should target the local potentials

Renewable energy sources as distributed energy sources need to be harvested and used on the local level. Depending on the regional geographical and meteorological conditions, renewable resources may vary a lot. Besides that, Member States' progress in tapping their specific renewable energy potentials differs widely, depending on national policies and the state of energy market liberalisation. Harmonised support schemes could constrain

¹⁵ CEER: Position paper on well-functioning retail energy markets. Ref: C15-SC-36-03, 14 October 2015.

Member States' ability to become forerunners and to achieve ambitious targets and thereby endangering EU-wide development of renewable energy.

Cross-border cooperation has little relevance for consumers' self-generation

EU legislation should respect the diversity of regional renewable resources and Member State's specific approaches to mobilise their potentials in the most effective way. The Commission should therefore continue to monitor and coordinate Member States' regulatory competition of best policies in the run for the 2030 targets. Forerunners in renewables should not be moderated artificially. Regional cross-border cooperation involving renewable energy supply projects and local authorities could improve exchange of best practice and help to reduce administrative barriers. The current relevance of such regionally integrated schemes for consumers' actual problems with their small-scale renewable self-generation investment is, however, relatively limited.

Secure positive effects of renewables on the local level

Social acceptance of support schemes might be questionable in case consumers would have to significantly refinance renewable energy installations in other countries without benefiting from the economic impacts in their region. The distributed character of renewable energy sources allows locally added value, job creation, increase in purchase power and involvement of local communities. Such socio-economic effects on the ground should not be endangered by harmonised EU-wide schemes.

For mobilising renewable energy potentials, EU-wide schemes are questionable

BEUC has doubts if harmonised EU-wide schemes could effectively help consumers who want to launch a self-generation project. While in one Member State high administrative costs could devour an important share of the revenue, other projects in countries with a geographically more advantageous potential could encash windfall-profits. Cost-effectiveness of such a harmonised EU-wide scheme is therefore questionable and should be further analysed.

Given their project's size and design, private households mostly are neither capable nor interested in investments abroad. From the point of view of small-scale self-generators, investments in new generation capacities might in fact be better triggered by national strategies that respond to specific challenges such as national market barriers. We expect that small-scale self-generation projects would not compete in regional level support schemes as administrative efforts risk to rise in a disproportionate way for operators. They could contribute to target fulfilment in a more cost-efficient way under tailor-made and technology specific strategies set up by national governments.

Against this background, BEUC recommends to consider regional cross-border cooperation solely as an additional instrument that functions as an eventual gap filler for reaching the 2030 targets. It would neither be appropriate nor cost-efficient to replace national policies and measures by harmonised EU-wide level or regional level support schemes.

5. Consultation question: If EU-level harmonised /regional support schemes or other types of financial support to renewable energy projects would be introduced:

- *What hinders the introduction at the EU wide and/or regional scale?*
- *How could such mechanism be activated and implemented?*
- *What would be their scope (what type of projects/technologies/support mechanisms could be covered?)*
- *Who would finance them?*
- *How could the costs of such measures be shared in a fair and equitable way?*

BEUC response:

Harmonised support schemes don't solve problems consumers are dealing with

BEUC is not in favour of harmonised EU wide support schemes for renewable energy. We don't consider such approaches as appropriate to address current problems of private households who want to invest in self-generation projects or access to self-consumption as tenants (see answer to question no. 4).

Economic effects of harmonised support schemes need to be further analysed

Like other national deployment support, the distributional impacts of such support schemes need to be analysed with regard to the costs passed onto different consumer groups. Cost distribution has to be balanced and fair through including not only private households but also commercial electricity consumers in an adequate way. Under the future legislation, Member States should take into consideration that consumers who cannot afford or are not willing to invest into self-generation technologies must neither be left behind nor be charged with inadequate costs related to a possible market split into privileged 'prosumers' on the one side and consumers on the other side.

In case of negative distributional effects showing that certain consumer groups contribute with disproportionately high price to a refinancing mechanism, Member States should equalise cost allocation. Member States could also reconsider the refinancing mechanism of their support schemes that follow a consumption-based approach, charging each kilowatt-hour with a levy. An alternative approach could be a support scheme that is partially refinanced from public budget.

6. Consultation question: The current Renewable Energy Directive gives Member States the possibility to enter into various cooperation mechanisms (statistical transfers, joint projects and/or joint support schemes). Please expand on the possible new legislative and non-legislative measures that could be introduced to foster the development of cooperation mechanisms in the period beyond 2020.

BEUC response:

Cross-border cooperation mechanisms don't answer consumers' problems

The relevance of such cooperation mechanism for consumers' small-scale self-generation is very limited. As explained in BEUC's answers to questions no. 4 and 5, cross-border cooperation should mainly be regarded as an additional instrument that functions as an eventual gap filler. BEUC does not consider this approach as key to tackle barriers of small-scale self-generation.

Avoid to undermine targets and transparency

If the Commission further develops new legislative and non-legislative measures in this area, the role of Guarantees of Origin (GOs) needs to be unambiguous. In case GOs would be used to track cross-border transfers statistically, these information carriers must not be confused with other uses of GOs: Under the Renewable Energy Directive 2009/28/EC, deliberations (54) and art. 2(j), GOs are to be used to track the share of renewable energy sources. This is necessary to come up to consumers' right to know where their electricity comes from as stated in the Internal Electricity Market Directive 2009/72/EC, art. 3(9). Therefore, a legally binding fuel mix disclosure of retail electricity tariffs has to be implemented in all Member States.

But imported GOs used to disclose the share of renewable energy sources in a retail electricity tariff's fuel mix must never be allowed to be accountable for the fulfilment of national targets for the renewable share in final electricity consumption of a whole country. In future legislation, the Commission should include provisions that avoid double-counting

of imported GOs in national target compliance and in parallel for fuel mix disclosure of retail electricity tariffs. If these separate areas of GO use are commingled, accuracy of fuel mix disclosure as well as target fulfilment will be undermined.

Imports of Guarantees of Origin are not permissible for national target fulfilment

Future legislation should especially acknowledge the recent decisions of the European Court of Justice (ECJ). The Joined Cases C-204/12 to C-208/12 (Essent Belgium NV vs. VREG) dealt with electricity suppliers' duty to provide a certain minimum quota of renewable electricity that was installed by the legislator to promote national target fulfilment. The Court made clear that electricity suppliers cannot import GOs from another country to comply with this national target.

7. Consultation question: The use of cooperation mechanisms has been limited to date. Which of the below factors do you consider important in explaining the limited recourse by Member States to cooperation mechanisms so far?

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Unclear legal provisions</i>					
<i>Administrative complexities</i>					
<i>Lack of cost-effectiveness / uncertain benefit for individual Member States</i>					
<i>Government driven process, not market driven</i>					
<i>Member States reluctant to see their taxpayers/ consumers' money used for investments outside their country</i>					

BEUC response:

N/A

8. Consultation question: How could renewable electricity producers be fully or partially eligible for support in another Member State? Which elements would you include in a possible concrete framework for cross-border participation in support schemes? Any other consideration? Please explain.

BEUC response:

See answers to questions no. 4 and 5.

9. Consultation question: Please assess what kind of complementary EU measures¹⁶ would be most important to ensure that the EU and its Member States collectively achieve the binding at least 27% EU renewable energy target by 2030:

	Very important	Important	Not very important	Not important	No opinion
<i>EU-level incentives such as EU-level or regional auctioning of renewable energy capacities</i>					
<i>EU-level requirements on market players to include a certain share of renewables in production, supply or consumption</i>					
<i>EU-level financial support (e.g. a guarantee fund in support of renewable projects)</i>					
<i>EU-level support to research, innovation and industrialisation of novel renewable energy technologies</i>					
<i>Enhanced EU level regulatory measures</i>					

BEUC response:

Tailor-made policies and measures for small-scale self-generation are needed

BEUC suggests a dedicated long-term strategy for small-scale self-generation (see answer to question no. 2) on the national as well as on the EU level. As a binding element of national energy and climate plans such strategies would promote policies and measures that are tailor-made to provide investment security to household consumers. National self-generation strategies are key to effectively tap the potential contribution of household consumers to an increase in renewable energy installations.

Cost-effectiveness of auction schemes is questionable

Auctions for investment grants or remuneration schemes bear an important risk of excluding household consumers. We have to recall that consumers enter the renewable electricity market under fundamentally different conditions than commercial project

¹⁶ Without prejudice of the actual funding mechanism, where required, of the complementary EU measures

developers and incumbent suppliers do. Given the financial constraints and the important risks when competing in an auctioning scheme, consumers could only participate under the umbrella of an aggregator. Still, such an approach could cause higher transfer costs compared to simplified support schemes for small-scale self-generators, for instance feed-in tariffs or net metering.

Assess distributional impacts of complementary measures

Complementary EU-level measures should be subject not only to a cost-efficiency assessment but also address the impact on different consumer groups that do not directly use these technologies (see answer to question no. 5).

Make guarantee funds work also for small projects

Concerning guarantee funds, provisions are necessary to avoid exclusion of small-scale self-generators. Due to relatively high administrative costs and project sizes, such funds risk to be mainly accessible to huge projects developed by established stakeholders. Nevertheless, small-scale self-generators such as private households, housing companies, cooperatives and municipalities also could benefit from increased investment security through such funds provided that they target small projects. New, innovative financial solutions could be offered through local governments, banks or energy agencies to help consumers finance investments in self-generation technologies as well as in energy-efficient products and services.

10. Consultation question: The Energy Union Framework Strategy sets the ambition of making the European Union the global "number one in renewables". What legislative and non-legislative measures could be introduced to make/strengthen the EU as the number one in renewables? Has the RED been effective and efficient in improving renewable energy industrial development and EU competitiveness in this sector?

BEUC response:

In terms of newly installed capacity, cumulated capacity or total renewable energy use, the EU easily can be overtaken by other world regions. So the criteria for measuring the leading role have to be viewed in another way, based on a more qualitative ranking.

Be number one in consumers' use of renewables

For BEUC, the penetration level of renewable energy technologies amongst citizens could be a criterion to measure the EU's aim to become "the global "number one in renewables". The installed capacity of new renewable energy technologies per inhabitant offers an indicator to measure up to which degree consumers actually have adopted these technologies. Likewise, the broad consumer market introduction of distributed renewable self-generation technologies such as solar PV is an illustrative benchmark. In both categories, the EU can still excel and claim to be a global leader, today and in the future.

Predictability and a dedicated small-scale approach are the keys for success

However, future legislation needs to better embrace specific needs of consumers and generally improve predictability. This goes hand in hand with the New Deal for energy consumers as a core of the Energy Union strategy. Consumers will only become more active players on energy markets, continue investments in self-generation and contribute to fulfilment of 2030 targets if a "Think Small First" approach prevails, in market design as well as in policies and measures.

In this context, BEUC reiterates the need for a dedicated long-term strategy anchored in all Member States as a part of national climate and energy plans (see answer to question no. 2).

Avoid instability of policy frameworks discouraging consumers' engagement

Looking at the conditions under which consumers can invest in self-generation currently, the ongoing decline in renewable energy investments in the EU in 2014 comes not as a surprise. It was not only caused by the economic crisis. The renewable energy sector was also affected by political incertitude as many Member States frequently revised their policies, especially in the solar PV sector. Without ambitious targets for increasing renewable generation capacities, no new dynamics are initiated amongst consumers.¹⁷

While companies in the renewable energy industry can adapt their business strategy to policy revisions, private households might rather give up their investment plans. Consumers easily lose confidence in the whole technology once governments send contradictory signals.¹⁸ A lack of predictability in renewable energy support schemes and retroactive changes undermine consumers' investments in most of the countries BEUC has analysed in its mapping report.

¹⁷ Euroobserver: The State of Renewable Energy in Europe. Edition 2014, March 2015, p. 4-7; International Energy Agency (IEA): Energy Policies of IEA Countries. European Union 2014 Review. Executive Summary, December 2014, p. 11.

¹⁸ See, for instance, in Belgium the solar PV investment slump and consumers' scepticism expressed in surveys after government action with prohibitive character. Consumers seem to refrain from investments despite the fact that the economic viability of small-scale solar PV self-generation still could be given.

2. Empowering consumers

11. Consultation question: How would you rate the importance of the following barriers for consumers to produce and self-consume their own renewable energy?

	<i>Very important barrier</i>	<i>Important barrier</i>	<i>Not very important barrier</i>	<i>Not important barrier</i>	<i>No opinion</i>
<i>Self-consumption or storage of renewable electricity produced onsite is forbidden</i>					
<i>Surplus electricity that is not self-consumed onsite cannot be sold to the grid</i>					
<i>Surplus electricity that is not self-consumed onsite is not valued fairly</i>					
<i>Appliances or enabler for thermal and electrical storage onsite are too expensive</i>					
<i>Complex and/or lengthy administrative procedures, particularly penalising small self-consumption systems</i>					
<i>Lack of smart grids and smart metering systems at the consumer's premises</i>					
<i>The design of local network tariffs</i>					
<i>The design of electricity tariffs</i>					

BEUC response:

The lack of predictability of national policies is the major barrier

BEUC's mapping report documents many cases of unstable RED implementation such as retroactive changes and stop-go policies. The lack of predictability of national policies and measures discourages consumers. Despite economic feasibility of solar PV rooftop

installations for house-owners, this led to reluctance of consumers in some Member States, as documented in BEUC's mapping report and in surveys done by BEUC members under the CLEAR project.¹⁹ The sharp decrease of newly installed solar PV capacities in some Member States reflects the strong headwinds against consumers' small-scale self-generation projects.

Consumers have difficulties when it comes to access to capital

Besides consumers' uncertainty with regard to the support schemes, achieving the objectives was also hampered by another aspect. BEUC found consumers' access to capital for self-generation projects to be difficult in several Member States due to high risk aversion of banks and after-effects of the financial crisis.

Mere self-consumption is a menace to successful self-generation

Looking at further barriers to consumers' self-generation projects, the BEUC mapping report showed that it is not mainly the prohibition of self-consumption which currently hampers projects' economic viability. A number of Member States tend to confine solar PV installations run by households to mere self-consumption while export of excess electricity into the grid is discouraged. Such practices do not only limit consumers' contribution to target fulfilment. Such policies also amputate the meaning of self-generation which we define as being necessarily always a combined self-consumption AND feed-in project.

Need for stable remuneration scheme for electricity fed into the grid

Solar PV electricity generation naturally peaks at noon. Consumer households like a typical family normally would not be at home and fail to directly use all their self-generated kilowatt-hours.²⁰ So, as a matter of fact, substituting electricity imports from the grid by 'home-grown' electricity alone usually does not allow to pay off an investment in self-generation, regardless of the technology and local potentials, as stated by the International Energy Agency's RE-Prosumers project report.²¹ Consumers need to be able to sell their excess electricity at an adequate price. But again, amortisation is questioned by a lack of sufficient remuneration schemes for excess electricity fed into the grid.

A high self-consumption rate does neither serve the consumer nor the system

With regard to solar PV, BEUC does not share the Commission's view of a high self-consumption rate being a value in itself (SWD(2015) 141). From the point of view of consumers to be fully integrated in future markets, this might be counterproductive. A household running a micro solar unit for mere self-consumption as an 'isolated system' with as little interaction as possible with the grid would contradict the Commission's vision of an energy producer who is actively involved in market.

12. Consultation question: In general, do you think that renewable energy potential at local level is:

X Highly under-exploited

- Under-exploited*
- Efficiently / fully exploited*
- Over-exploited (i.e. beyond cost-effectiveness)*
- No opinion*

¹⁹ The CLEAR project (Consumers Learn about, Engage with and Adopt Renewable energy technologies) guides consumers through all the stages leading to the purchase of domestic renewable self-generation technologies, <http://www.clear-project.eu>; CLEAR Project: CLEAR – WP2.1. Consumer survey 1 – Attitudes, opinion, drivers and barriers and satisfaction with regard to Renewable Energy Systems, October 2014.

²⁰ The consumption patterns of other households, e.g. tenants in huge multi-storey-dwellings differ and require a specific approach.

²¹ International Energy Agency – Renewable Energy Technology Deployment (IEA-RETD): Residential Prosumers – Drivers and Policy Options (RE-PROSUMERS), September 2014.

BEUC draft response:

BEUC's mapping report revealed that Member States that provided policies and measures to foster small-scale self-generation succeeded in tapping local renewable energy sources. As a consequence, positive socio-economic impacts were generated (see answer to question no. 1).

Small-scale solar PV is not over-exploited but needed for achieving the target

Small-scale self-generation units, e.g. households' rooftop solar PV systems, tend to have higher levelised costs of electricity generation per kilowatt-hour than large-scale units, e.g. ground-mounted commercial solar PV power plants. But this comparison is rather weak. Small-scale self-generation is not over-exploited in terms of being not cost-effective. In contrast to commercial power plants, generation costs of self-generation technologies such as rooftop solar PV systems primarily compete with consumers' retail electricity prices. Self-consumption in this regard is an attractive alternative for household consumers in most regions of the EU.

Consumers' access to capital and their expectations in terms of returns on investment naturally are other than those of established market stakeholders. A solar PV rooftop system which might seem economically unattractive to a commercial stakeholder can sufficiently pay off for a household consumer.

Support schemes for solar PV electricity and global competition have been successful in driving down investment costs and generation costs. The larger solar PV markets, the lower investment costs: According to research institute Fraunhofer ISE, the module price decreased by about 20% with each doubling of the cumulated module production since 1980 thanks to economies of scale and technological improvements.²² PV modules became an affordable renewable self-generation technology for a growing number of European households. Module prices are expected to further decrease.²³

²² Fraunhofer ISE: Photovoltaics Report, November 2015.

²³ Fraunhofer ISE/Agora Energiewende: Current and future cost of photovoltaics. Long-term scenarios for market development, system prices and LCOE of utility-scale PV systems, February 2015.

13.Consultation question: How would you rate the importance of the following barriers that may be specifically hampering the further deployment of renewable energy projects at the local level (municipalities and energy cooperatives):

	<i>Very important barrier</i>	<i>Important barrier</i>	<i>Not very important barrier</i>	<i>Not important barrier</i>	<i>No opinion</i>
<i>Lack of support from Member State authorities</i>					
<i>Lack of administrative capacity and/or expertise/knowledge/information at the local level</i>					
<i>Lack of energy strategy and planning at local level</i>					
<i>Lack of eligible land for projects and private property conflicts</i>					
<i>Difficulties in clustering projects to reach a critical mass at local level</i>					
<i>Lack of targeted financial resources (including support schemes)</i>					
<i>Negative public perception</i>					

BEUC response:

See answer to question no. 11.

14. Consultation question: Please rate the appropriateness of stronger EU rules in the following areas to remove barriers that may be specifically hampering the further deployment of renewable energy projects at the local level :

	Very appropriate	Appropriate	Not very appropriate	Not appropriate	No opinion
<i>Promoting the integration of renewable energy in local infrastructure and public services</i>					
<i>Supporting local authorities in preparing strategies and plans for the promotion of renewable energy</i>					
<i>Facilitating cooperation between relevant actors at the local or municipal level</i>					
<i>Facilitating access to targeted financing</i>					
<i>EU-wide right to generate, self-consume and store renewable electricity</i>					
<i>Measures to ensure that surplus self-generated electricity is fairly valued</i>					
<i>Harmonized principles for network tariffs that promote consumers' flexibility and minimise system costs</i>					

BEUC response:

For BEUC's view on the prerequisites for a 'welcome culture' for self-generation, including the right to self-generate, priority grid access and an appropriate remuneration, please refer to answer to question no. 2. For remarks on how to address barriers to self-generation, please see answer to question no. 11. With regard to removal of grid regulation and infrastructure barriers on the local level, please refer to our answer to question no. 20.

Local authorities can provide the tailor-made assistance that consumers search

Local authorities play an important role for consumers as the nearest contact point for information. In this context, BEUC welcomes the manifold activities of forerunners amongst local authorities that facilitate consumers' access to renewable self-generation technologies, e.g. pro-active municipalities that are united in the Covenant of Mayors. By demonstrating the use of renewable energy technologies, they act as an inspiring model.

One-stop shop on the local level should guide consumers

Generally, consumers' plans to invest in self-generation are hampered by a lack of reliable and structured information on technological options and potentials. According to BEUC's mapping report, single one-stop shops dealing with consumers' financial and administrative questions are mostly missing. Recent research looking at consumers' experiences shows that improved access to independent advice during the sales process is urgently needed.²⁴

BEUC's mapping report documented a rising number of local initiatives driven by municipalities, local energy companies or citizens' groups to provide consumer-friendly contact points. Consumer organisations have partially taken over the role of a one-stop-shop in some Member States, from independent advice up to organising collective purchase actions for solar panels.²⁵ Ideally, local authorities could act as a one-stop shop for consumers', e.g. through energy agencies.

Local stakeholders are key to make self-consumption work for tenants

A pro-active approach of local authorities and stakeholders like local energy companies, housing companies and cooperatives is particularly needed to make the benefits of self-consumption accessible to tenants.

Until now, the debate about 'prosumer' potentials and legislation mainly focuses on private owners of detached houses. Access to renewable self-generation is also relevant for cutting energy costs of vulnerable consumers, regardless if they live in their own home or as tenants in multi-storey dwellings. However, in most Member States, tenants do not yet find a favourable framework allowing them to profit from 'in-house' renewable energy use, e.g. from solar PV electricity produced on the rooftop of their multi-storey dwelling.

Empower local authorities to empower consumers

New tailor-made solutions have to be developed to tackle this potential, providing a secure legal framework covering relations between landlords, tenants and house-owners. Such new business models need more attention to avoid risks and make them work for consumers' needs. These are fields in which local authorities could be the driver of joint action.

15. Consultation question: Should the current system for providing consumers with information on the sources of electricity that they consume be further developed and improved?

BEUC response:

Consumers might be financing fossil fuels unknowingly

BEUC welcomes the Guarantees of Origin (GO) tracking scheme as common European base to provide more transparency. Future legislation should further improve the use of this tool to provide meaningful and trustworthy electricity tariffs. The current legislation²⁶ allows

²⁴ See the report of BEUC's UK member Citizens Advice: Staying FIT. Learning from consumer experience of solar PV systems to inform the development of low-carbon policies, June 2015.

²⁵ The CLEAR project run by several BEUC member organisations guides consumers through all the stages leading to the purchase of domestic renewable self-generation technologies, <http://www.clear-project.eu>.

²⁶ 2009/72/EC, art. 3(9); 2009/28/EC, deliberations (54) and art. 2(j).

suppliers to offer misleading 'green' tariffs with unsubstantiated claims. Because of suppliers' unbundled purchase of GOs, consumers might continue paying mainly for non-renewable energy sources when they opt for a 100% renewable electricity tariff. By choosing 'green' tariffs, consumers expect to contribute financially to building new power plants, thus to create additional benefits that would not have occurred without their choice, as studies and surveys from several Member States prove.²⁷ BEUC urges the Commission to ensure that future legislation stops misleading tariffs. The supplier must prove the environmental bonus that results from the consumer's choice. Only under this condition could a tariff be legitimately marketed with a 'green' claim.

GOs are just a statistical tracking tool, but no refinancing scheme

The Renewable Energy Directive states that emerging consumer markets for renewable electricity offers would be appropriate to contribute to the construction of new installations. The trade in GOs has not yet brought about such incentives. Consumers' increasing demand in GO-backed 'green' tariffs was expected to cause a rise in GO prices and then trigger investments in new capacity. But because of oversupply, GO prices have always been extremely low (ca. 0.10 €/MWh for a Norwegian hydropower GO)²⁸. Recent developments in the Dutch 'green electricity' market show that prices for Dutch wind power GOs can reach 2 to 5 €/MWh.²⁹ But it remains unclear if this will provide any relevant investment security.

Regulators must improve rules for 'green' tariffs

Regulators should establish and/or improve criteria for measurable impacts of 'green' tariffs, e.g. that a certain amount per kilowatt-hour is channelled to third-party supervised funds that refinance additional generation capacities. BEUC's mapping report documented such good practice in some Member States.

The concept of additionality is supported by the Energy Consumer Trends 2010-2015³⁰ which accompanied the Commission's State of the Energy Union Report. The document warns that *"...greenwashing in energy markets can be an issue with consumers being misled by incorrect claims on the environmental impact of the supplied energy"*.

Secure consumers' well-informed choice with a standardised format

BEUC supports the concept of 'full disclosure', aiming at a mandatory use of GOs to track all energy sources. This could help to establish a level-playing field and make statistics more accurate. Regulators must also develop binding rules on how to present the fuel mix and information related to the environmental performance of tariffs in a standardised format. This entails online price comparison tools, pre-contractual information and the bill, including the minimum requirements on fuel mix disclosure. BEUC's mapping report shows that many Member States have not yet implemented the mandatory publication of the environmental indicators (CO₂ emissions, radioactive waste).

²⁷ A study commissioned by the UK regulator Ofgem in 2014 confirmed that consumers presume that additionality forms the core of 'green' tariffs: Office of Gas and Electricity Markets (Ofgem): Green tariffs: additionality and messaging. Research summary, June 2014. In a survey of the Dutch regulator ACM in 2013, 41% of Dutch consumers expect additionality of production capacity when purchasing a 'green electricity' tariff: Autoriteit Consument & Markt (ACM): Trendrapportage Marktwerking en Consumentenvertrouwen in de energiemarkt. Eerste halfjaar 2013, November 2013, p. 10. In a survey of BEUC's German member VZBV, 69% of consumers say that by choosing a 'green' tariff they want to contribute to the installation of additional renewable power plants: Forsa: Erwartungen der Verbraucher an Ökostrom und Konsequenzen für Ökostrom-Labelkriterien, December 2011, p. 15.

²⁸ Backing a household's annual electricity consumption of 3 MWh by renewable GOs would cost only 0.30 €.

²⁹ WISE: FAQs Garanties van Oorsprong, <http://www.wisenederland.nl/groene-stroom/faqs-garanties-van-oorsprong-gvos>, 9 February 2016.

³⁰ European Commission: Energy Consumer Trends 2010 – 2015, SWD(2015) 249, 18 November 2015.

3. Decarbonising the heating and cooling sector

16. Consultation question: Please rate the importance of the following barriers in hampering the deployment of renewable heating and cooling in the EU:

	Very important barrier	Important barrier	Not very important barrier	Not important barrier	No opinion
<i>Real or perceived incoherence in existing EU policies (such as RED, EED and EPBD)</i>					
<i>Lack of administrative capacity and/or expertise/ knowledge/information at the national and local level</i>					
<i>Lack of energy strategy and planning at the national and local level</i>					
<i>Lack of physical space to develop renewable heating and cooling solutions</i>					
<i>Lack of requirements in building codes and other national or local legislation and regulation to increase the share of energy from renewable sources in the building sector</i>					
<i>Heating and cooling equipment installers lack sufficient knowledge or information to offer renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment</i>					
<i>Lack of targeted financial resources and financing instruments</i>					
<i>Lack of definition and recognition of renewable cooling</i>					
<i>Lack of electricity market design supporting demand response, decentralised energy and self-consumption and thermal storage in</i>					

<i>buildings and district systems</i>					
<i>Lack of mapping tools to identify the resources potential at regional scale with local renewable energy</i>					
<i>Lack of tools and information to compare the lifecycle costs of the various alternative heating and cooling alternatives</i>					
<i>Negative public perception</i>					

BEUC response:

N/A

17.Consultation question: Please rate the most effective means of addressing these barriers and advancing the decarbonisation of EU heating and cooling supply:

	<i>Very effective</i>	<i>Effective</i>	<i>Not very effective</i>	<i>Not effective</i>	<i>No opinion</i>
<i>Renewable heating and cooling obligation³¹</i>					
<i>Requirement for energy suppliers and/or distributors to inform consumers of the costs of heating and cooling and to offer renewable heating and cooling solutions</i>					
<i>Requirement that all urban and municipal infrastructure upgrades (energy infrastructures, and other relevant infrastructure, such as sewage water, water and waste chains) make it possible and promote the</i>					

³¹ Renewable energy obligation' means a national support scheme requiring energy producers to include a given proportion of energy from renewable sources in their production, requiring energy suppliers to include a given proportion of energy from renewable sources in their supply, or requiring energy consumers to include a given proportion of energy from renewable sources in their consumption.

<i>distribution and use of renewable energy for heating and cooling and hot water generation</i>					
<i>Measures supporting best practices in urban planning, heat planning, energy master planning, and project development</i>					
<i>Criteria and benchmarks for promoting district heating and cooling taking into consideration the local and regional conditions</i>					
<i>Nearly zero-energy building (NZEB) standards to include a mandatory minimum use of renewable energy</i>					
<i>Including systematically renewable energy production in buildings' energy performance certificates</i>					
<i>The promotion of green public procurement requirements for renewable heating & cooling in public buildings</i>					
<i>Heating and cooling equipment installers should present renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment</i>					

<i>Develop best practices for enterprises, including SMEs, to integrate renewable heating and cooling into their supply chains and operations</i>					
<i>Requirement to consider renewable energy alternatives in subnational, national, regional or EU security of supply risk preparedness plans and emergency procedures</i>					
<i>Targeted financial measures</i>					

BEUC response:

N/A

4. Adapting the market design and removing barriers

18. Consultation question: In your view, which specific evolutions of the market rules would facilitate the integration of renewables into the market and allow for the creation of a level playing field across generation technologies? Please indicate the importance of the following elements to facilitate renewable integration:

	Very important	Important	Not very important	Not important	No opinion
A fully harmonised gate closure time for intraday throughout the EU					
Shorter trading intervals (e.g. 15 min)					
Lower thresholds for bid sizes					
Risk hedging products to hedge renewable energy volatility					
Cross border capacity allocation for short-term markets (i.e., some capacity being reserved for intraday and balancing)					
Introduction of longer-term transmission rights (> 3 years)					
Regulatory measures to enable thermal, electrical and chemical storage					
Introduction of time-of-use retail prices					
Enshrine the right of consumers to participate in the market through demand response					

BEUC response:

The set of policies and measures defining future markets should be designed towards the needs of the weakest market participants who are private households engaging in self-generation. Ambitious expectations with regard to their key role in new interactive relationships with utilities and grid operators characterise the debate about the market design.

Anchor a “Think Small First” approach in the market design

We have to recall that so-called ‘prosumers’ are neither energy traders nor utilities. Although borders between generation and consumption may become vaguer, they still remain simple private households that should not be overtaken. Therefore, BEUC calls for a “Think Small First” approach. Policies and measures that want to embrace consumers as active market players through self-generation should meet consumers’ needs.

Protect small-scale self-generators against market distortion

Private households, including tenants, should be enabled to operate on the markets through being on a par with incumbent suppliers and DSOs. This is even more important with regard to the dysfunction of concentrated electricity markets in the EU. Consumers who invest in self-generation face an absurd situation. Although they help abating external costs of the incumbent energy supply system, e.g. environmental damages and health costs, they are disadvantaged: their fossil competitors’ electricity appears to be cheaper because the external costs are not shown on the bill. This discrimination should be stopped. In order to offset and overcome this market distortion, adequate support for small scale self-generation is required.

Incentivise flexibility through provisions for feed-in

Concurrently, such intervention is necessary to spur consumers on being more flexible and responsive when interacting with electricity markets. Future legislation must therefore provide an open door for self-generators’ excess electricity to be fed into the grid. Keeping households away from feed-in equals giving away their potential contribution to grid stability (see answer to question no. 11).

Self-generators to be integrated into grids and markets in a cost-efficient way

Moreover, pressure on consumers to reach a high self-consumption rate could force consumers to retrofit their solar PV systems with individual storage devices. Against this backdrop, BEUC demands to thoroughly assess the place where storage technologies can be deployed in the most cost-effective way. Such an assessment should consider the fact that the existing grid already can serve as an efficient storage system to integrate self-generators’ excess electricity. Grid integration of self-generation must serve grid stability. At the same time self-generators should be involved in the market with cost-effective solutions.

Distributional impacts of time-of-use tariffs need to be assessed

The potential of demand-side response programmes for household consumers still needs more systematic testing, including the influence of demographics, price signals parameters and use of household automation.

Simultaneously, consumers who might not be able to shift their load or reduce consumption at peak times might end up paying more with the introduction of these tariffs. BEUC thus calls on the European Commission to coordinate with Member States and energy regulators a distributional analysis on the impact of time-of-use tariffs on different social groups.

19. Consultation question: Currently, some exceptions from the standard balancing responsibilities of generators exist for energy from renewable sources. In view of increasingly mature renewable generation technologies and a growing role of short-term markets, is time ready to in principle make all generation technologies subject to full balancing responsibilities?

- Yes, in principle everyone should have full balancing responsibilities
- No, we still need exemptions

BEUC response:

Under current market conditions, small-scale self-generators should be exempted from actively taking over such duties, given disproportionately high efforts and costs. BEUC demands to assess how balancing costs could be transferred in a fair and transparent way.

Let commercial renewable power plant operators access balancing markets

Renewable power plant operators in general can however be considered to gradually take over standard balancing responsibilities. They can also offer actively ancillary services on submarkets. But they mostly have not a full access to balancing markets yet. Prequalification criteria could be adapted to allow renewable installations, e.g. biogas cogeneration units, to compete with other participants and offer primary reserve.

In a future electricity system that will be dominated by the variable renewable energy sources wind and solar energy, renewable generation capacities need to contribute to offsetting volatility by taking over more responsibility, speaking in technical as well as in financial terms. For these reasons, renewable capacities should start today to take over more and more system-related charges, for instance through virtual power plants that offer flexibility on balancing markets. Future legislation needs to provide an appropriate framework for such solutions.

Current conditions do not yet allow small-scale self-generators' involvement

Several prerequisites need to be secured, especially to enable small-scale renewable self-generation units to participate: a sufficient number of aggregators should be active on functioning, transparent markets. Priority grid access and priority grid use for those renewables that are predictable but depending on meteorological conditions will still be indispensable.

20.Consultation question: Please assess the importance of stronger EU rules in the following areas to remove grid regulation and infrastructure barriers for renewable electricity deployment:

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Treatment of curtailment, including compensation for curtailment</i>					
<i>Transparent and foreseeable grid development, taking into account renewable development and integrating both TSO and DSO level and smart technologies</i>					
<i>Predictable transparent and non-discriminatory connection procedure</i>					
<i>Obligation/priority of connection for renewables</i>					
<i>Cost of grid access, including cost structure</i>					
<i>Legal position of renewable energy developers to challenge grid access decisions by TSOs</i>					
<i>Transparency on local grid congestion and/or market-based incentives to invest in uncongested areas</i>					

BEUC response:

Grant quick and simple priority grid access

In the future legislative framework for the electricity market design, grid operators must grant priority grid access to small-scale renewable self-generators without setting any caps, e.g. on the size of consumers' installation. The duration of the permit procedure should be short and straightforward, without excessive charging for grid connection and use. Grid operators should be obliged to immediately optimise and expand their network in order to guarantee to self-generators purchase, transmission and distribution of their electricity.

Revision of network costs refinancing schemes may be needed

With regard to network fees, it is worth to consider more differentiated schemes that foster flexibility options of demand and supply, involving all electricity producers and consumers. However, retroactive changes are unacceptable.

Policy-makers in a number of Member States tend to perceive consumers who run a solar PV installation as a risk for the refinancing of the electricity grids' operating costs. Several Member States have introduced levies or other restrictions on self-generators (Austria, Belgium, Norway, Portugal and Spain).

Indeed, households that consume their own solar PV electricity will reduce their electricity consumption from the grid and will consequently contribute less to the coverage of total costs for maintenance and extension of the electricity networks since these costs are mainly paid by network fees charged on every kilowatt-hour consumed ('consumption-based fee'). At the same time, they need to make use of the grid to export their excess electricity production. A fair solution needs to be developed which is appropriate to this new role of consumers.

However, it should be born in mind that the impact of self-consumption on network fees remains limited. The effect of self-generators' diminishing contribution to network fees described above should not be overestimated. Even in far developed solar PV self-generation markets (e.g. Germany, Italy), self-consumption by households only makes up a very limited share of final electricity consumption (<0.5% in Germany). In most Member States, reliable and comparable data on household consumers' self-generation units does not exist.³² Given its limited share, self-consumption at the moment will not be liable for lowering substantially grid operators' revenue from network fees. Therefore it would be neither appropriate nor fair to burden in-house electricity generation and consumption by imposing specific levies or network fees on the self-consumed electricity.

Revised network fees could foster flexibility – but also social inequality

Revision of consumption-based network fees towards more capacity-based fees could be designed to address the fair sharing of network fees and to incentivise flexibility of electricity generation. Every household would, for instance, pay a fixed fee for being connected, regardless of the specific electricity consumption, likewise a 'flat rate' fee. But since capacity-based network fees might increase the burden for small consumers and discourage energy efficient behaviour, such a revision would require additional compensating mechanisms, including measures for vulnerable households.

21. Consultation question: Which obstacles, if any, would you see for the dispatching of energy from all generation sources including renewables on the basis of merit order principles? Should there be any exemptions in some specific cases?

- Yes, exemptions are necessary*
- No, merit order is sufficient*

BEUC response:

For a general remark on the dysfunction of existing wholesale electricity markets see BEUC's answer to question no. 18. Variable renewable energy sources, independently from being used by small-scale self-generators, generally need feed-in priority to be able to engage in the wholesale markets under current conditions.

Enable marketing of excess electricity beyond established market places

BEUC expects future legislation to enable small-scale self-generators to properly market their excess electricity beyond existing power exchanges and established market places, for instance through direct sale of renewable electricity. In such cases, the operator of a

³² Given that the Council of European Energy Regulators (CEER) highlights the number of 'prosumers' as an indicator for consumers' involvement in its position paper on well-functioning retail energy markets (October 2015), European-wide statistical data needs to be collected, e.g. on how much electricity is self-consumed by household consumers and which share of the installed capacity actually is owned by them.

solar PV system on a multi-storey dwelling should be able to directly market renewable electricity to residents and neighbours; a local citizens’ cooperative should be able to supply its members on a regional level with cheaper electricity from their wind turbine without being forced to fully transform into a utility. It is very important to enable such offers to make sure that the economic benefits of renewables really are transferred to consumers. Long-term contracts could function as a useful tool in this regard. This should in the end not serve as a pretext to suspend feed-in priority of renewable energy sources.

22.Consultation question: Please assess the importance of stronger EU rules in the following areas to remove administrative barriers to renewable energy deployment:

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Creation of a one stop shop at national level to allow for more streamlined permitting procedures</i>					
<i>Online application for permits</i>					
<i>A defined maximum time-limit for permitting procedures, and effective consequences if deadline is missed</i>					
<i>Harmonisation of national permitting procedures</i>					
<i>Special rules for facilitating small-scale project permitting, including simple notification</i>					
<i>Pre-identified geographical areas for renewable energy projects or other measures to integrate renewable energy in spatial and environmental planning</i>					

BEUC response:

See also answer to question no. 14.

First of all, it is up to national policy makers and authorities to remove these very specific hurdles that have been caused by national governments. They have been clearly identified (see, for instance, findings of the EU-funded PV GRID project and the “2020 Keep on track” project)³³. Secondly, EU legislation should respect the diversity of regional renewable resources and Member State’s specific approaches to mobilise their potentials in the most effective way.

Regulation is made for big utilities, not for private households

At the same time, administrative barriers, established in the past to regulate big utilities, discourage consumers. The EU network codes bear such a risk and should accommodate the different requirements for residential self-generation in comparison to larger utilities. This means that the elaboration of network codes should be made transparent and accessible to consumer organisations. Private households cannot handle complex permit procedures like utilities do. Such barriers disproportionately increase investment costs of private self-generation projects.

23. Consultation question: Please identify precise challenges with regard to grid regulation and infrastructure barriers in EU Member States that you are aware of.

BEUC response:

Consumers still experience unnecessary administrative barriers

BEUC’s mapping report showed that in some Member States, the different administrative levels of a national government, regions or municipalities have introduced contradictory regulation affecting consumers’ self-generation (Belgium, Italy). Partially, procedures and regulation are inappropriately lengthy and complex (Italy, Spain and Portugal).

Grid access and permit procedures remain cumbersome in many Member States

Clear and simplified rules facilitate permit procedures for consumers’ small-scale solar PV systems. Some Member States prescribe quick standard processes but distribution grid operators do not necessarily incorporate a real ‘welcome culture’ for renewable self-generation. Grid access and authorisation are hassle-free only in Germany, Slovenia and the UK. The fact that some Member States like Italy provide priority grid access does not entail a swift and equal treatment of consumers’ right to be connected to the grid. Spain applies a clearly prohibitive regulation that discourages consumers.

Frequent policy changes make self-generation more risky than necessary

Generally, the Member States analysed in BEUC’s mapping report tend to change legislation, especially for solar PV systems, in a more frequent and even retroactive way. This has clearly thwarted consumers (see answer to question no. 10). Again, the Spanish policy virtually prohibits consumers’ small-scale self-generation.

24. Consultation question: How would you rate the administrative burden and cost of compliance with the RED for national, regional and local authorities?

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Administrative burden</i>					
<i>Cost of compliance</i>					

³³ PV GRID project: Final project report, August 2014; <http://www.pvgrid.eu>; 2020 Keep on track project: Analysis of deviations and barriers 2014/2015, June 2015.

BEUC response:

N/A

25. Consultation question: Please rate the importance of stronger EU rules in the following areas to remove barriers relating to renewable energy training and certification:

	<i>Very important</i>	<i>Important</i>	<i>Not very important</i>	<i>Not important</i>	<i>No opinion</i>
<i>Incentives for installers to participate in certification/qualification schemes</i>					
<i>Increased control and quality assurance from public authorities</i>					
<i>Understanding of the benefits and potential of renewable technologies by installers</i>					
<i>Mutual recognition of certificates between different Member States</i>					

BEUC response:

N/A

26. Consultation question: How can public acceptance towards renewable energy projects and related grid development be improved?

BEUC response:

Transparent and early information as a prerequisite

Early involvement of citizens into project planning at local level is key for securing social acceptance of renewable energy projects. Local residents must not only have an opportunity to learn about projects at an early stage and have their say. It is under the remit of local authorities to explain advantages and disadvantages of a project for the community. It is important that all consumers can harvest the benefits of renewable energy sources. Therefore, people living in the region where a new renewable energy project is planned should also be offered a fair and transparent deal to take ownership of the project, for instance through becoming member of a renewable energy cooperative.

Understand and mobilise the manifold local potentials of renewables

Future legislation should better take up energy transition as a European modernisation agenda. The Energy Union strategy can fully unfold when it understands the shift to a distributed renewable energy supply in the hands of consumers as a promising, far-reaching structural change, comparable to the rise of the IT sector since the 1990s: just as a household without Internet access during that time became outdated, within the following decades any building without solar panels shall be regarded as obsolete. Renewable self-generation needs to be communicated as what it is: an economic win-win narrative. Public authorities can rely on European citizens' broad support when it comes to mobilising renewable energy potentials. Private households, farmers, municipal utilities and SMEs already have massively invested in renewables or are willing to do so in many

Member States. Renewable energy projects have proven to be a job engine, creating locally added value. The encouraging experience of this grassroots movement has to be multiplied and generalised throughout the whole EU.

Facilitate bottom-up development

Renewable energy is citizens' energy. Potentials can be tapped everywhere. Thus, social acceptance of renewable energy projects is secured by democratic and financial participation of residents. Most technologies in the electricity sector as well as in heating and cooling already are mature. Consequently, a future legislation should just help to remove obstacles to the renewable energy initiatives that are sprouting on local level.

[Question 27 missing in the official EC form]

5. Increase the renewable energy use in the transport sector

28. Consultation question: To what extent has the RED been successful in addressing the following EU transport policy objectives?

	<i>Very successful</i>	<i>Successful</i>	<i>Not very successful</i>	<i>Not successful</i>	<i>No opinion</i>
<i>Contribute towards the EU's decarbonisation objectives</i>					
<i>Reduce dependency on oil imports</i>					
<i>Increase diversification of transport fuels</i>					
<i>Increase energy recovery from wastes</i>					
<i>Reduce air pollution, particularly in urban areas</i>					
<i>Strengthen the EU industry and economy competitiveness</i>					
<i>Stimulate development and growth of innovative technologies</i>					
<i>Reduce production costs of renewable fuels by lowering the level of investment risk</i>					
<i>Facilitate fuel cost reduction by integration of the EU market for renewable fuels</i>					

BEUC response:

N/A

29. Consultation question: Please name the most important barriers hampering the development of sustainable renewable fuels and renewable electricity use in transport?

BEUC response:

N/A

30. Consultation question: Please rate the most effective means of promoting the consumption of sustainable renewable fuels in the EU transport sector and increasing the uptake of electric vehicles:

	Very effective	Effective	Not very effective	Not effective	No opinion
<i>Increased use of certain market players' obligations at Member State level</i>					
<i>More harmonised promotion measures at Member States level</i>					
<i>The introduction of certain market players' obligations at the EU level</i>					
<i>Targeted financial support for deployment of innovative low-carbon technologies (in particular to the heavy duty transport and aviation industry)</i>					
<i>Increased access to energy system services (such as balancing and voltage and frequency support when using electric vehicles)</i>					
<i>Increased access to alternative fuel infrastructure (such as electric vehicle charging points)</i>					

BEUC response:

When it comes to EVs more specifically, means of promoting their development include the following:

- **Development of infrastructure** in such a way that it is visible and convenient for consumers. The absolute number and distribution of charging infrastructure should adequately meet the needs of EV owners in each Member State. It is also important to ensure that the geographical placement of charging infrastructure is achieved in such a way that it allows for seamless long distance travel between Member States and that payment systems for using charging points across Europe do not negatively impact on EV users i.e. there should not be any barriers to making payments nor should there be additional charges for using charging points.
- **Awareness raising campaigns** can help better communicate the true performance and characteristics of sustainable renewable fuels as well as of electric vehicles. This is important given that – in the context of EV for example, range is the second most important barrier for buying an EV³⁴.
- **Research and development programmes and demonstration projects** on EVs should be supported with public money in order to improve some of the performance characteristics of those vehicles (e.g. low range, high costs of batteries). It can also increase public awareness, help receive first hand feedback from drivers and test consumer acceptance and market readiness. Public authorities also have a significant role to play in demonstrating the functionality of EVs and to design solutions which are convenient to people and provide them with flexibility.³⁵
- **Financial and non-financial incentives** can be provided to ultra-low carbon vehicles in order to help them penetrate the market, but only for a limit period of time. Financial incentives would for example help **reducing the higher upfront cost** of these vehicles, which is important given that the most important barrier for buying an EV mentioned by consumers is the price.³⁶ Non-financial incentives should only be given for ultra-low carbon vehicles that do not negatively impact users of public transportation and cyclists. Examples of non-financial incentives are free access to bus lanes and parking.

³⁴ Green eMotion (2015): The Green eMotion project – preparing the future of European electromobility.

³⁵ In the UK, the average trip length of British people is estimated to be 7.5 miles (12km), with 95% of interviewees travelling less than 25 miles (40km), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/342160/nts2013-01.pdf In Germany, cars run distances shorter than 40km on 80% of all days of a year. Source: German Renewable Energies Agency: Erneuerbare Elektromobilität, Renews Spezial 30, April 2010. Further data from the JRC further confirms this mobility pattern in Europe.

³⁶ Green eMotion (2015): The Green eMotion project – preparing the future of European electromobility.