

LOWER ENERGY CONSUMPTION, LOWER ENERGY BILLS

BEUC RECOMMENDATIONS TO MAKE ENERGY EFFICIENCY POLICY WORK BETTER FOR CONSUMERS



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Why it matters to consumers

By cutting down energy use, consumers end up with lower energy bills. Being more energy efficient can also have a positive impact on people's lives and the environment. The current revision of energy efficiency legislation must help consumers better control their energy bills by improving the efficiency of their homes, keeping them warm and comfortable. Energy efficiency will also help Europe improve security of energy supply.

Summary

An ambitious energy efficiency target for 2030 and a corresponding policy framework that delivers savings to consumers must be EU priorities. The revision of energy efficiency legislation, which extends the scope of the Energy Efficiency Directive beyond 2020 and aims to improve the buildings' energy performance, should make energy efficiency the easy option for consumers through clear information, independent advice, tailored incentives and support schemes. Therefore, BEUC calls on EU and national policy makers to design energy efficiency legislation so it meets the following consumer demands:

- **Increase EU energy efficiency by 40 % by 2030 through EU and national binding energy efficiency targets.**
- **Make sure savings happen both in the short-term and in the long-term by extending energy savings obligation beyond 2020.**
- **Close loopholes in energy efficiency policy with regard to transport and renewables.** Transport sector should be included in the calculation of energy saving obligations. Counting energy generated on-site from renewable sources towards a buildings' energy savings should not be allowed.
- **Ensure energy efficiency measures are cost-effective and monitored.** Assessment of the impact of these measures on households should be included under the Governance Regulation.
- **Prioritise energy efficiency measures in households affected by energy poverty.**
- **Ensure the costs and benefits of heating, cooling and hot water meters are analysed.** These meters should be rolled out with consumer consent and consumers' privacy should be protected.
- **Allow consumers easy access to accurate information on their building's performance** through improved energy performance certificates.
- **Information about smart features of a building should be designed in a user-friendly format.**
- **Ensure consumers can easily charge their electric cars** by making charging points interoperable and avoiding a lock in effect. The roll-out of the necessary infrastructure should be faster and there should not be exemptions for SMEs.

1. Towards an ambitious EU 2030 energy efficiency policy

The best way to tackle global warming and reduce energy bills for consumers is to cut energy consumption. It is five times cheaper to save one unit of energy than it is to supply it. An ambitious energy efficiency policy will lift millions of people out of energy poverty and make homes more comfortable.

At the same time, an 'energy efficiency first' principle should be applied in all decision-making. So where energy efficiency improvements (including improvements such as indoor air quality, health, productivity etc.) are the most cost-effective options, these should be prioritised over investments in additional inefficient generation, transmission and distribution capacity. In this regard, energy efficiency needs to be considered on equal terms with generation. A more efficient power system should result in lower bills for everybody.

Increase the ambition for the EU's 2030 energy efficiency target

The current legislation, especially the Energy Efficiency Directive (2012/27) has increased investments in energy efficiency improvements and national activities in this area. Energy efficiency can have multiple benefits for health (due to fewer greenhouse gas emissions, improved air quality and warmer homes), for employment opportunities¹ and for mitigating climate change, energy poverty and energy import dependency. An ambitious and binding energy efficiency target at EU level for 2030, together with targeted initiatives for energy poor households, need to be included in the current legislative update.

A rapid uptake of consumer-friendly energy efficiency measures can only be achieved through a binding energy efficiency target, an ambitious policy without loopholes and with consumer outcomes clearly spelled out. A higher energy efficiency target can deliver more benefits to society than a lower one. A study² by the Coalition for energy savings and Ecofys revealed significant potential to achieve higher energy efficiency targets. It shows that when applying a societal interest rate in assessing and comparing costs and benefits, lifetimes of energy efficiency measure of 30 years and the impacts on the 2031-2050 period, the benefits of a 40% energy efficiency target for 2030 exceed costs. Higher investments in energy efficiency should not disadvantage energy poor households and therefore, targeted initiatives addressing these consumers should be in place.

In addition, focusing on the period to 2030 is not enough. The EU should indicatively set a longer term target, i.e. for 2050. Tapping the full potential for energy savings in a long term should be the ultimate goal of a forward looking EU energy efficiency policy.

Energy efficiency targets must be binding also at the national level

Apart from setting an ambitious EU binding energy efficiency target, the European Commission's proposal for the Governance Regulation requires Member States to set out an indicative national energy efficiency contribution to achieve the EU's target. Making it indicative only could lead to the target being missed. Only binding national targets accompanied by trajectories provide legal and investment certainty and send a positive signal to the energy efficiency services market.

¹ For every 1% extra energy efficiency, employment increases by 336,000 jobs. Coalition for energy savings.

² Study by the Coalition for energy savings: Critical review of the European Commission assessment for the Clean Energy For All Europeans package. Towards a cost benefit analysis. <http://www.ecofys.com/files/files/ecofys-ces-2017-impact-assessment-eed.pdf>

How to ensure energy efficiency policy delivers benefits to consumers

- EU and national policy makers should set the EU 2030 energy efficiency binding target at 40%.
- EU and national policy makers should agree on national binding energy efficiency targets.
- Targeted initiatives addressing energy poor households should be in place.

2. EU energy efficiency policy without loopholes

Energy savings obligations should be extended

BEUC supports the European Commission's proposal to extend energy savings obligations beyond 2020 without setting a new sunset clause. While Article 7 allows flexibility for different design options within Member States, it is the main provision in the Energy Efficiency Directive which holds Member States accountable. However, BEUC observes several shortcomings described below which could undermine the overall effectiveness of energy savings schemes.

The focus should be on long-term savings

While the European Commission's proposal provides for Member States to achieve cumulative end-use energy savings in different periods, ie. 2014-2020, 2021-2030, 2031-2040 and 2041-2050, the proposal does not guarantee that savings accumulate between different periods. This may result in Member States focusing on measures with a short-term impact. Savings should build over time (ie. savings delivered for instance in the period 2021-2030 should continue also in the period 2031-2040 and beyond) in order to encourage energy efficiency measures such as wall insulations which deliver long-term savings.

Loopholes should be closed

First, loopholes, such as exemptions for transport in the calculation of energy saving obligations, should be closed unless it is proven that Member States are being unfairly disadvantaged. Available analysis shows that there is no strong rationale for allowing the continued exemption for the transport sector.³ While the large potential for energy efficiency improvements is in buildings, including transport in the baseline calculation can pull additional energy efficiency in the transport sector. This could benefit consumers in the form of reduced fuel bills and cost reductions in clean transport solutions (along with local effects such as reduction of local air pollution).

³ Study evaluating progress in the implementation of Article 7 of the Energy Efficiency Directive, Ricardo Energy & environment (2014): "The main benefit of keeping the flexibility (ie. excluding transport sector from the baseline) is that it protects those Member States with a disproportionate level of transport energy consumption from being unfairly disadvantaged. However, these Member States would only be disadvantaged if i) energy savings from transport were not allowed to contribute to the delivery of the target (this is not the case) and, ii) if it were more difficult to deliver energy savings in the transport sector than for other energy end-use sectors (this could be questioned). In addition, the exclusion of transport has not been restricted to just those Member States with a disproportionate level of transport energy consumption. On this basis, it is considered that there is only a weak rationale for allowing the continued use of this flexibility."

Secondly, while Member States should have the necessary flexibility to choose suitable measures, BEUC is concerned about counting energy generated on-site from renewable sources towards a buildings' energy savings. As the focus is on energy savings, this exemption may undermine the overall energy efficiency objective and may not help to improve the living conditions inside the building. Renewables are encouraged under the EU's renewable energy target and counting energy generated on-site from renewable sources should not be allowed for the calculation of energy saving obligations.

Thirdly, when calculating the impact of energy efficiency obligation schemes or alternative policy measures, Annex V (paragraph 1d) of the current Energy Efficiency Directive includes measures such as advice, information campaigns, labelling, certification schemes or smart metering. BEUC asks to delete smart meters, certification schemes and information campaigns from this list as these are either covered by different policies or the impact on consumers' behaviour is very difficult to prove. BEUC recommends that labelling schemes are eligible only if they are additional to EU measures, binding at the national level and generate additional and verifiable energy savings.

Prioritise energy efficiency measures for energy poor

While the responsibility for protecting vulnerable consumers, including action on energy poverty, lies with Member States, the EU should nevertheless manage the impact of energy efficiency policy on energy poverty. There is a risk that the cost of developing incentives for proactive consumers is shifted to consumers who in practice do not have the same opportunities and are often in vulnerable situation.

The study on the state of energy poverty,⁴ published by the European Commission, shows that approximately 54 million European citizen are in a situation where they are not able to adequately heat their homes at an affordable cost. BEUC welcomes the European Commission's proposal amending the Energy Efficiency Directive (Articles 7a, 7b) to strengthen the social dimension of energy efficiency and prioritise, under the energy efficiency obligation scheme, energy efficiency measures in households affected by energy poverty. However, the same should apply for alternative policy measures⁵, i.e. when designing alternative policy measures, Member States should not only consider the effect on households in energy poverty but they should also prioritise efficiency measures for energy poor households.⁶ Extra support should be provided to assist fuel poor consumers manage the costs of replacing less energy efficient appliances and investing in home energy efficiency. In addition, tenants who represent a significant part of the population⁷

⁴ Energy poverty and vulnerable consumers in the energy sector across the EU: analysis of policies and measures, INSIGHT_E, May 2015.

https://ec.europa.eu/energy/sites/ener/files/documents/INSIGHT_E_Energy%20Poverty%20-%20Main%20Report_FINAL.pdf. This study also recommends a higher allocation of funds (including EU funds) to renovation programmes focusing on fuel poor and low-income households.

⁵ According to the current Energy efficiency Directive 2012/27/EU, these policy measures may include, but are not restricted to, the following policy measures or combinations thereof:

- a. energy or CO₂ taxes that have the effect of reducing end-use energy consumption;
- b. financing schemes and instruments or fiscal incentives that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption;
- c. regulations or voluntary agreements that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption;
- d. standards and norms that aim at improving the energy efficiency of products and services, including buildings and vehicles, except where these are mandatory and applicable in Member States under Union law;
- e. energy labelling schemes, with the exception of those that are mandatory and applicable in the Member States under Union law;
- f. training and education, including energy advisory programmes, that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption.

⁶ Similar provisions already exist in several countries such as Austria, France, Ireland. For instance, according to the Austrian law, energy efficiency measures that are implemented in low-income households are upgraded by the factor 1.5.

⁷ As many as around 150 million Europeans, i.e. 30% of the EU population, are tenants. Eurostat: Housing statistics, http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_statistics, 11 May 2016

should not be left behind and the revision of energy efficiency legislation should include tailored measures and incentives also for these consumers. However, the focus on the energy poor and tenants can only work when done as part of a wider programme given the nature of the scheme (i.e. the measures that are covered are limited and need to be planned in parallel with other long term measures, such as improving the housing stock and buildings performance).

Measures should be cost-effective, controlled and verified by trusted parties

Energy efficiency measures must be cost-effective and properly monitored at a fair cost. The focus should be on measures targeting long-term savings which are cost-effective, practical for many consumers and certain to last for many years. There are more potential carbon savings when using measures targeting for instance boilers and heating systems. However, achieving these lifetime savings is dependent not only on the quality of new products and installation but also on the overall heating system. Member States should put in place measurement, control and verification systems that should be conducted by independent and entrusted parties as proposed by the European Commission.

Impact of energy efficiency policies on bills should be monitored and reported

Transparency and scrutiny of the impact of energy efficiency schemes on energy savings and costs as well as a regular review of the impact that these schemes have on both the consumers' energy bills and energy consumption is needed. Therefore, the Governance Regulation should require Member States to assess and publish the impact of the energy savings obligation on households, including those affected by energy poverty or in social housing, in terms of the impact on bills and in terms of measures delivered. National reporting under the Governance Regulation should cover the consumer experience on both savings and improved living conditions as well as the progress of initiatives to reduce the extent and depth of fuel poverty.

How to ensure the updated Energy Efficiency Directive delivers benefits to all consumers

- Extend energy savings obligation beyond 2020 without setting a new sunset clause.
- Ensure the savings accumulate between different time periods.
- Include transport in the calculation of energy saving obligation.
- Counting energy generated on-site from renewable sources towards a buildings' energy savings should not be allowed.
- Ensure energy efficiency measures are cost-effective and properly monitored.
- Include the assessment of the impact of the energy savings obligation on households, including those affected by energy poverty, in terms of the impact on bills and in terms of measures delivered in the Governance Regulation.
- Prioritise energy efficiency measures in households affected by energy poverty under the energy efficiency obligation scheme and oblige the same focus within alternative policy measures.
- Tenants should not be left behind and tailored incentives should be included in the revision of the energy efficiency legislation.

3. Improving metering and billing for heating, cooling and hot water

3.1. Roll out solutions that benefit consumers

Consumers use a significant part of their overall consumption expenditure on heating and cooling (i.e. 6% on average). However, they often get very mixed levels of service. For instance, with regard to district heating, consumers are not protected in the same way as with gas and electricity providers. They have no right of redress should something go wrong and they cannot switch suppliers. The European Commission's proposal revising the current Energy Efficiency Directive contains provisions and technical solutions (Articles 9a - 11a) to clarify metering and billing for district heating, district cooling and domestic hot water.

BEUC supports proposals to improve measuring consumption information and a more robust system of heat measurement as it helps to identify how consumer bills can be improved. However, due to a different situation across Europe, EU legislation should not specify concrete technical solutions such as individual meters or heat cost allocators because the costs will always be transferred onto consumers while consumer benefits are not guaranteed. It would be more appropriate to take the national context into account and focus on a beneficial outcome for consumers. For instance, there are concerns about the ability of consumers to respond to provided information and better control their bills as they often live in properties where they have very limited possibilities to improve the energy efficiency of the building.

A focus on improving efficiency of existing properties and the heating system in many cases will deliver more benefits to consumers than the installation of meters with new functionalities. Costs and benefits of these measures should be analysed and the implementation of these measures should be subject to consumer consent. Some consumers may be concerned about costs and some may not be in favor of the roll out of remotely readable devices. As these devices are in a way similar to smart meters, the provisions on metering in heating, cooling and hot water should be aligned with relevant rules for smart meters. The current legislative proposal fails to address the protection of consumer's privacy and therefore should include a provision ensuring that consumers are always in control of their data. The transfer of data to third parties should only be possible with the consumer's consent. National reporting under the Governance Regulation should cover the consumer experience and outcomes for consumers provided by these meters or cost allocators.

In addition, it is unclear why the criteria of technical feasibility and cost efficiency with regard to the installation of remotely readable individual meters or cost allocators should be considered only for existing buildings and why these criteria do not apply also for new and renovated buildings. Due to the relatively low energy consumption of new or newly renovated buildings, the meaningfulness of measuring systems must be checked on the basis of these criteria too.

Last but not least, consumers' bills, their transparency and their clarity must be urgently improved. For years BEUC members have been raising concerns about unclear energy bills. BEUC welcomes proposals that bills and billing information should be free of charge as, in some countries, this service often comes with high costs to consumers, also due to a limited competition.

How to ensure the best outcome for consumers?

- Costs and benefits of individual meters and heat cost allocators should always be analysed (incl. technical feasibility and cost efficiency) and their roll out should be subject to consumer consent. Consumers should always be in control of their data.
- National reporting under the Governance Regulation should cover the consumer experience and outcomes provided by these meters or allocators.
- Billing information for heating, cooling and hot water need to be improved and provided free of charge.

3.2. Clarify metering and billing for gas

While the European Commission proposed several changes related to metering and billing for gas under the Energy Efficiency Directive (Articles 9-11), there are still unclear provisions which need to be clarified. First, it is unclear what "competitively priced" means when the text says consumers for natural gas should be provided with "*competitively priced individual meters that accurately reflect the final customer's actual energy consumption and that provide information on actual time of use*".

Secondly, under the current Energy Efficiency Directive, accurate information based on actual consumption is requested when smart meters are not installed. However, where

smart meters are rolled out, accurate billing information based on actual consumption should be 'enabled'. BEUC calls on the EU to rectify this inconsistency as accurate bills must be guaranteed when meters' smart functionality is turned on.⁸

Thirdly, there must be compliance with the data protection framework and effective enforcement. Consumers must have the right to access and control all the data generated by the smart meter. As owners of the data, consumers should be able to get hold of a copy of all their data that has been collected from service providers, and they should be informed about who has access to their data and for what purposes. This should be provided to them in a format which is transparent and consumer-friendly and which they can share with other service providers or use in comparison websites, in order to be able to switch. This is not adequately addressed by the current Energy Efficiency Directive.

How to ensure consumers can benefit from updated provisions on metering and billing for gas

- Accurate energy bills based on actual consumption must be guaranteed with smart meters.
- More clarity of terms in the Energy Efficiency Directive such as "competitively priced" is needed.
- The consumer must have the right to access and control all the data generated by the smart meter. As owners of the data, consumers should be able to get hold of a copy of all their data in a consumer-friendly format which they can share with other service providers.

4. Improving information on energy performance of buildings

The European Commission's proposal to update the Energy Performance of Buildings Directive (EPBD) includes new provisions on energy performance certificates (EPCs) and a database for registering these certificates to allow tracking the actual energy consumption of the building. From the consumer perspective, energy performance certificates are an important tool so improvements are welcome. However, there are several loopholes which need to be addressed during the ongoing revision by amending Article 10 of the current Energy Performance of Buildings Directive.

Residents, owners of properties and service providers should be able to easily access information in a form that is useful to them. This should always be possible through the national database or register that should be established by Member States.⁹ The database should deliver value for consumers for instance through the possibility to compare and get reliable advice. If consumers were able to access their data and provide it to third parties, they would be able to get better advice on how to improve their homes.

Energy performance certificates are frequently used by many consumers. For instance, in a typical year, 5% of Danish one-family-homes are traded and approximately 10% of the

⁸ For instance in the UK, consumers' acceptance of smart meters is voluntary and can choose the smart functionality of the meter to be turned off.

⁹ While many Member States are developing or managing registers or databases for energy performance certificates, some countries such as Germany lack such a tool.

population moves, including flats and rentals.¹⁰ However, according to the existing EPBD, the validity of energy performance certificates can be up to 10 years. In practice, this means that prospective tenants and buyers are provided with outdated information and recommendations that have already been acted on or are out of date due to technological changes. The energy performance certificate should provide accurate information to buyers and tenants and should be presented for all buildings. Their validity and accuracy should be improved to better support consumers through their choices of energy efficiency technologies and solutions. Therefore, BEUC welcomes the Commission's proposal on using energy performance certificates to assess savings from renovations by comparing EPCs before and after renovation. At the same time, minimum requirements for energy performance certificates should be set at EU level to ensure that all European consumers get high quality certificates.

Moreover, as the energy performance certificate is a document that by law must be provided by a seller or landlord when marketing their home, a significant amount of money is being spent on these certificates. In the UK for example, property owners have so far spent around £650 million.¹¹ Therefore, the data should be managed and used more proactively in helping consumers to take control of their bills.

Finally, energy performance certificates can be useful when looking for financial measures for energy efficiency improvements and the value of energy efficiency should be embedded in the housing market. For instance, the value of Danish houses increases approximately by €100 per sq. meter per upgrade point (the letter in the energy scale) through energy renovation.¹²

How to ensure consumers get better information about the building performance

- Energy performance certificates should be accurate to provide better information to consumers and should be used more proactively by the consumers.
- Energy performance certificates should be updated after renovation.
- Member States should ensure consumers have an easy access to the data through national register or database to compare and get better advice.

5. Measuring smart features of a building

A smartness indicator is introduced by the European Commission for the Energy Performance of Buildings Directive to measure flexibility features and enhanced functionalities that should allow occupants and the building itself to react to comfort or participate in demand-side response.

¹⁰ Danmarks Statistik: <http://www.statistikbanken.dk/EJEN88> and <http://www.dst.dk/Site/Dst/Udgivelser/GetPubFile.aspx?id=17952&sid=dkital>

¹¹ Citizens Advice (2015) *Policy Briefing: Energy Performance Certificates*, <http://bit.ly/2ehKaRy>

¹² SBI 2013:06 "Sammenhæng mellem energimærkning og salgspris" by Anders Rhiger Hansen, Ole Michael Jensen and Jesper Kragh, available at: [SBI 2013-06.pdf](http://www.sbi.dk/SBI_2013-06.pdf)

The purpose of this indicator is unclear. An indicator alone will not help the consumer understand what financial or environmental benefit a property's smart technologies offer. These should, in any case, be incorporated into the overall ratings, recommendations, and energy bill estimates. The need to elaborate what is measured, and according to what methodology, should be examined separately to what and how it is communicated. A smartness indicator as a simple letter (A-G) may not be the right format and BEUC is concerned that the presentation of such a rating could dilute the message provided by a clear A-G rating on the energy performance of the home.¹³ The presentation of an indicator on the energy performance certificate and on the database should be considered with the relevant users' needs in mind. Last but not least, smartness is a characteristic which evolves quickly due to market and technological developments. Therefore, an indicator has to be designed in such a way that it does not lose its value.

What's in the smartness indicator for consumers?

- Clarification is needed with regard to the purpose of the smartness indicator and its format that will be communicated to consumers.

6. Paving the way for electric vehicles

The amended Energy Performance of Buildings Directive includes a number of new provisions on the recharging of electric vehicles. E-mobility is a key component for decarbonising the transport sector and is set to play an important role in the flexible, renewables-based energy system of tomorrow. The European Commission's proposal embraces this development by including the charging infrastructure as a part of the "technical building system", hence including it in the consumer's options for improved energy management and potentially demand-side response.

Access to charging infrastructure is important for consumer convenience and confidence. From a consumer point of view, the main interest is to push for a solution which offers charging functionality, and is simple, interoperable and takes into account possible future technological developments to avoid any lock-in effect. If charging of electric vehicles is to play a role in balancing the energy system, they should be charged when overall demand is low in the system. A smart grid will play an important role and should enable smart charging to avoid distribution networks overloading. Moreover, if the electrical wiring is installed, there will have to be safety measures behind due to increased energy demand by electric vehicles.

The European Commission's proposal contains different requirements for residential and non-residential buildings. Regarding residential buildings, there is a requirement for pre-cabling for a future charging point for buildings with more than ten parking spaces. Since the cost of pre-cabling is rather low and later cabling would result in additional costs, BEUC supports the Commission's proposal to implement pre-cabling in all new and renovated residential buildings.

Regarding the public access to charging in connection with non-residential buildings, the proposal also includes a possibility to exempt small and medium-sized enterprises

¹³ For example, Citizens Advice's predecessor, Consumer Focus, found that consumers were confused by the presence of both energy and environmental ratings on the energy performance certificate. Source: Consumer Focus (2012) Room for Improvement

(companies with up to 250 employees) from these rules. In practice, this would mean that supermarkets and many shops will not have to comply with the rules. If the aim is to provide easy access to charging for consumers, such an exemption should be deleted.

What should be improved in the Energy Performance of Buildings Directive to facilitate the uptake of electric vehicles?

- Solutions for charging electric vehicles should be user-friendly, interoperable and avoid lock in effect.
- All new and renovated residential buildings should have pre-cabling in place.
- Small and medium-sized enterprises should not be exempted from implementing charging points as this may result in consumer inconvenience.

END



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