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Comments on the European Commission Policy Options for the Review of the EED and EPBD Directives

Orgalime thanks the Commission for its energy efficiency commitments and progress made to date in this area. No doubt, the Ecodesign, Energy Labelling, Energy Efficiency and Energy Performance of Buildings Directives have been *the* instruments in bringing results to Europe's energy efficiency path and in supporting European manufacturers own energy efficiency work.

We hereafter provide our comments to the Commission's policy options for the review of Directives 2012/27/EU on Energy Efficiency (EED) and 2010/31/EU on the Energy Performance of Buildings (EPBD) that have been presented at the Commission's stakeholder meeting of 14 March 2016. These comments are based on our contributions to the following related Commission public consultations:

- [EED](#)
- [EPBD](#)
- [Energy Market Design](#)
- [A new Renewable Energy \(RES\) Directive](#)
- [Energy Union Governance](#)

Orgalime supports the review of the EED and EPBD so as to implement the Energy Union's "**Energy Efficiency First**" principle and the **new 2030 energy and climate targets** throughout the different market segments and thereby to live up to the commitments of the **Paris Agreement**.

We believe that to be future proof and contribute to the realisation of the headline priority of the Juncker Commission of a forward looking, resilient EU energy and climate policy, ...

....**the EED review should:**

- establish "*energy efficiency*" as an energy source in its own right that can compete with generation capacity on equal level (article 1 EED).
- carry forward the success of the Ecodesign and Energy Labelling Directives at the level of standalone appliances to the *systems* to which they are integrated, notably buildings, the energy system itself, transport and wider industry sectors (articles 3, 7 and 8 EED), since the energy efficiency potential of standalone appliances are reaching their technical and economic limits.
- strive for *combining energy efficiency with demand flexibility* (articles 12-15, annex XI EED and articles 9-11 EED) to optimise and better manage European energy infrastructures with more RES in the system, to reduce energy losses, to increase the overall efficiency of the energy system while empowering energy users and decreasing Europe's energy import dependence.

Orgalime, the European Engineering Industries Association, speaks for 42 trade federations representing the mechanical, electrical, electronic, metalworking & metal articles industries of 24 European countries. The industry employs some 10.3 million people in the EU and in 2014 accounted for more than €1,800 billion of annual output. The industry accounts for over a quarter of manufacturing output and a third of the manufactured exports of the European Union.

....the EPBD review should:

- strengthen *renovation requirements of existing buildings*.
- tap into the significant potential in *building systems and the operation of systems*, where the Commission's evaluation has demonstrated the poor performance of the Directive today. Therefore:
- strengthen the *integrated approach* (beyond the building envelope) and enable "*smart buildings*" that provide integrated management and control domains with ever more holistic performance coverage and more decentralised energy production through RES, and
- drive the concept towards "*connected buildings*" and appliances inside (link "digitalisation") and thus buildings connected to smart and flexible distribution grids (see annex).

Considering that the electricity system in 2030 can be expected to be based on some 50% centralised energy production and some 50% distributed production from renewable energy sources¹ (with solar farms and wind parks being one pillar, private photovoltaic installations being a second pillar and further storage capacities to develop), the future challenge will be to successfully manage this **coexistence of decentralised and centralised energy production and the need for a smarter distribution grid to accommodate them**.

Moreover, the **digitalisation of the energy system**, which for some time has already been a reality at the generation and transmission level, is developing rapidly and is now also offering tremendous opportunities (with the (professional and private) consumers at the core), such as:

- through an increasing level of automation and control to better manage processes,
- through an increasing use of software and data analytics ("big data") to increase overall efficiencies, or
- at the energy retail level through empowering the consumer so that he can be efficient, manage his own energy consumption and optimise his overall carbon and environmental performance.

Against this background, **more energy efficiency, more RES and smart distribution grids** are indispensable, mutually reinforcing no regret options on which Europe now has to progress. The **EED and EPBD as end use and demand side instruments have a (if not the) key role to play for the new market design to implement the New Deal for Consumers**, which for the above mentioned reasons requires a **holistic approach**.

Orgalime therefore asks the Commission for coherence and consistency of the upcoming Energy Efficiency, Market Design and RES Proposals, driving a further evolution of the EED and EPBD in recognition of their leading energy efficiency role from a demand side and end user perspective to the benefit of consumers.

In line with **Better Regulation Principles**, stakeholders should be thoroughly consulted on all policy options for the envisaged review of any EU legislation, and in particular on the Commission's envisaged policy options on the market design and RES proposals following its stakeholder consultation in October 2015 and February 2016.

We further on specify our comments on the partial policy options presented at the stakeholder consultation meeting of 14 March 2016 for the EED and EPBD reviews:

1. COMMENTS ON EED REVIEW POLICY OPTIONS

- ARTICLE 1: SUBJECT MATTER AND SCOPE

The subject matter and scope of the EED should properly reflect the Energy Efficiency First principle, and proposal of treating energy efficiency as a resource in its own right in particular.

Overall, the EED in our view represents a key instrument for stimulating energy efficiency improvements in the EU and should therefore be used to its full potential.

¹ Fraunhofer IWES (2015): The European Power System in 2030 – Flexibility Challenges and Integration Benefits.

Notwithstanding the rather early state of play of implementation, the review of the Energy Efficiency Directive, in our view, offers the opportunity to truly implement the “Energy Efficiency First” principle of Energy Union throughout all market segments and the successful COP21 outcome, which we support.

The review should reinstall the level of ambition needed to come on track for the 2050 objectives in this area and to complete the current gaps in the fields of buildings, transport, industry and energy, including renewables and smart infrastructures.

Treating energy efficiency as a resource in its own right, representing the value of energy saved, will be a fundamental step in this context so as to allow energy efficiency and demand side response to compete on equal terms with generation capacity and a stricter target for 2030 to be implemented through tapping energy system savings potentials.

- ARTICLES 1 AND 3: ENERGY EFFICIENCY TARGETS

Policy Options/questions presented by the Commission:

1. What should be the level of the target?
2. How shall the target be formulated and should it be indicative or binding?
3. Regarding the nature of the target, how should it be expressed?
4. Energy consumption expressed as energy

Orgalime comments:

Regarding article 1, a stricter target for 2030 should be established and implemented through tapping energy system savings potentials. In the light of COP21 agreement and the need to adjust the 27% energy savings objective in order to reflect its real potential, the 2030 target should be levelled up to at least 30%. At an earlier stage, Orgalime supported an indicative 40% EU energy efficiency target in conjunction with a binding 40% carbon target.

In its impact assessment, the Commission should also assess the costs and consequences of not acting/not acting timely enough on energy efficiency improvements. In our view, the more action is taken now, the easier and less costly it will be to live up to already made commitments and further ones. Assessing the socioeconomic aspects of carbon (cost and benefits, GDP effects) is equally important to be taken into account.

We ask for transparency of the parameters on which the impact assessment will be based.

The 2014 approach of indicative national energy efficiency targets but binding measures has been positive and should be continued. Member States’ possibility to maintain or introduce stricter measures should also continue.

In addition, it is important to accompany the indicative target with a regular feedback mechanism on results achieved at national level. Therefore, a good link of the EED and National Energy Efficiency Action Plans and their future role within the Energy Governance and regular State of the Energy Union Report is essential.

Regarding article 3, Orgalime suggests opting for energy relative savings target, which is a combination of energy intensity and absolute energy savings (see our response to the EED consultation).

- ARTICLE 6 : PURCHASING BY PUBLIC BODIES

The Commission reported that Member States have just recently transposed article 6 and that it would therefore be too soon to evaluate the effectiveness of article 6 and not be included in the impact assessment.

Orgalime comments:

We would see potentials in a combined assessment of article 6 with articles 4 and 5, in particular considering that the Commission envisages a full review of the EPBD and the potentials of an EED Building Roadmap that does not focus on central governments only.

In particular, it needs to be clear that the term “public bodies” does not only refer to central governments, but also to regions, cities etc. so as to increase the effectiveness of the EED, as is already the case under the EPBD.

We support improving the Commission’s guidance of 2013, too.

Public purchasing criteria should move from initial purchase price to the life cycle costing principle. Accounting rules should be screened and adapted to ensure effective public procurement. Today, it is not possible to finance capital investments by savings on operational expenses, which represents a barrier to energy efficiency investments.

- ARTICLE 7 : ENERGY EFFICIENCY OBLIGATION SCHEME

Policy Options presented by the Commission:

1. Do nothing
2. Extend the obligation period to 2030
3. Simplify and streamline requirements of art7 and annex V (e.g.: additionality, materiality and eligibility)
4. Assess the right level of savings
5. Review scope (clarify eligible savings, extending to savings achieved from on-building RES)

Orgalime comments:

We welcome the overall concept of the initial 1.5% target and the flexibility given to Member States to opt for alternative measures for its implementation and recommend maintaining it. At the same time, due to the huge diversity of measures taken by Member States, which may impact the possibility to assess results stemming from this provision, we support more convergence of Member States alternative measures in this area.

Orgalime supports extending the obligation period to 2030. Until 2020, the existing 1.5% target appears appropriate. Beyond 2020, it should be aligned according to the new international commitments.

Article 7.2.c EED already combines end use and supply side by allowing Member State to achieve energy savings in the energy transformation, distribution and transmission sectors, including efficient district heating and cooling infrastructure, as a result of the implementation of the requirements set out in Article 14(4), point (b) of Article 14(5) and Article 15(1) to (6) and (9) to be counted towards the amount of energy savings required under article 7.1 EED. This combination should be maintained as it stands.

However, if an energy supplier obligation on RES were under debate, we believe that it should be better dealt with in the RES Directive considering all RES measures and the interactions between them at once. This would also ensure a strong energy efficiency implementation of article 7 EED in the future.

The obligation to remunerate customers for the flexibility that they can provide to the energy system should be taken up in articles 15.1, 15.4 and annex XI of the EED.

- ARTICLES 9-11 : METERING AND BILLING INFORMATION

Policy Options presented by the Commission:

1. Business As Usual: Implement current EED, accompany with more guidance
2. Update annex VII according to technical progress through a delegated act (not co-decision)
3. Targeted changes to clarify and improve on specific points to address some of the gaps
4. Full review and consolidation with IEM provisions

Orgalime comments:

Orgalime advocates for technology neutrality. Smart meters are one means to empower the consumer and enable him to better manage his energy consumption. Standardisation could in our view be a good route for better harmonisation of minimum functionalities of smart meters.

The availability of billing information has in our view improved to some extent, however not sufficiently. The information requirements in Article 9 are too general and improvements would be needed, such as:

- The quality and timeliness of information provided directly from the smart meter to the final consumer must be improved.
- The consumer needs near real time information through an in-home interface, “near real time” or at least updates every 15 minutes. The possibility to compare the consumption from the last day/month/year... is also very important to have better in results in term of energy efficiency.
- Giving consumers a benchmark to allow them to compare their own consumption with that of others and thereby trigger action.
- The information on consumption should be provided using open standards.

The criterion of “technically feasible” is no longer an issue. However, harmonised criteria for “cost effectiveness” across the EU should be established so that all European citizens could benefit from the technology. “Cost effectiveness” should not depend on the amount of energy/money that an individual consumer can save but the benefits it brings to the whole system as well as the cost of not implementing the technology.

Articles 9-11 are closely linked with other EED provisions, in particular articles 12-15, and the wider internal energy market legislation. We strongly advocate for a holistic assessment of these provisions with other internal market provisions and therefore support the Commission’s policy option 4 in so far as it is meant that the EED should further evolve, especially in combining energy efficiency and flexibility. Other legislation, notably the Electricity and Security of Electricity Supply Directives should complement the EED for the supply side. We would however not support a transfer of any EED provision into other Internal Energy Market legislation, given the explicit demand and end user focus of the EED.

In concrete terms, we suggest strengthening article 15 of the EED and its related annex XI of the EED through a new obligation to remunerate customers for the flexibility that they can provide to the energy system. The “Energy efficiency criteria for energy network regulation and for electricity network tariffs” in annex XI.3 should introduce more performance based remuneration of DSOs (rather than CAPEX based remuneration). The network tariffs provisions of the Electricity Directive should then complement the so amended EED through incentivising Distribution System Operators (DSOs) to invest in smart distribution grids.

2. COMMENTS ON THE EPBD REVIEW POLICY OPTIONS

General Policy Options presented by the Commission:

1. BAU – no EU policy change
2. Improve implementation and enforcement or doing less/simplification
3. Alternative policy approaches/instruments/scope
4. Options that take account of new technological developments (notably in the area of buildings systems to take into account developments in the grid, link of building and with what is happening around the buildings, such as e-vehicles)

Orgalime comments:

We support option 4.

The concept of buildings should be designed with new technology developments and their deployment in mind, such as the potential for buildings energy storage technology (electrical, thermal etc.), renewable technologies and electric vehicle infrastructure. Europe should demonstrate a 2030-2050 vision and introduce “smart readiness criteria” into the EPBD.

The understanding of “Smart Building” should:

- build on the thinking of how technology can empower people for interactive, more sustainable activities inside the buildings and thereby overall improve quality of life, comfort and security.
- include private homes and other buildings (non-residential, office, industrial or commercial) to tap the highest degree of potentials and benefits for users
- be forward looking and embrace the potentials of digitalisation/Internet of Things
- bring multiple benefits of smart appliances coupled with energy management and services and self-generation/self-consumption to consumers.

The concept should move towards:

- “connected” buildings and appliances inside buildings that interact with smart, flexible distribution grids
- the integration of different management and control domains overall sustainability from a life cycle perspective
 - starting with energy efficiency, better utilisation of green on-site production and energy management perspective is interesting and promising for consumers, environment and industry.
 - with sufficient flexibility and technology neutrality for individual solutions to develop bottom up.

The new market design proposal needs to drive flexibility and competitive energy management services. Today’s high focus on the building structure and deep renovation, which requires high initial investment, remains a barrier. More focus should be on solutions with lower up-front investment costs, such as automation and control solutions.

Also, we recommend using Building Information Modelling (BIM) for new buildings in the EPBD in the future.

- ARTICLE 3: DETERMINATION OF THE ENERGY PERFORMANCE OF BUILDINGS

Policy Options presented by the Commission:

1. Business As Usual (“do nothing”)
2. Enforcement (1 building = 1 energy performance; efficient systems, especially those with RES adequately covered by all methods, calibration of the asset rating with reality)
3. Non legal clarification of the calculation Framework (annex I)
4. Develop a Framework for disclosure of actual energy consumptions (ICT, database to enable benchmarking of energy consumption, develop more deeply energy management of buildings)

Orgalime comments:

We support a combination of options 2, 3 and 4.

- ARTICLES 4 and 5: MINIMUM PERFORMANCE STANDARDS

Policy Options presented by the Commission:

1. Do nothing (better enforcement)
2. Clarify (and possibly accelerate) timeline for implementing cost optimal levels, both for existing and new buildings, beyond 2020
3. Long term individual renovation plans linked to financing schemes
4. Set a 2030/2050 vision for the transformation of the existing building stock

Orgalime comments:

We support options 2, 3 and 4.

- ARTICLE 11-14: PROVISION OF INFORMATION THROUGH CERTIFICATION AND INSPECTION

Policy Options presented by the Commission:

1. Do nothing: keep provisions as they are and have better enforcement
2. Improve the quality and reliability of EPC ratings
3. Introduce better information for all building owners and tenants

4. Streamline provisions on regular inspections and alternative systems
5. Incentivise systems that make buildings smart-ready (e.g.: link to electrification of e-vehicles infrastructure and link up to grids)

Orgalime comments:

We support a combination of options 2, 3, 4 and 5.

In particular, introducing “smart readiness criteria” of a building are very promising and should be developed in line and consistently with the new market design proposal. We understand smart readiness as incentivising systems and technologies that support the connectivity/interaction of buildings and grids.

The possibility given to Member States by the EU Public Procurement Directive to encourage, specify or mandate the use of Building Information Modelling (BIM) should be taken into account. We propose to include BIM as an option in coordination with the development of relevant and preferably harmonised EU standards.

Investigating one single commissioning and continuous commissioning for an effective maintenance will in our view benefit the overall mid to long-term sustainability of a building.

We also see improvement potential for increasing the credibility of the EPC, for example by taking into account different type of buildings (residential/non-residential etc.) and including operational rating aspects.

- FINANCIAL AND FISCAL INCENTIVES

Policy Options presented by the Commission:

1. Do nothing
2. Reinforce links between building codes and financing (through EPC ex ante conditionalities)
3. Facilitate aggregation of small projects into investible packages
4. Encourage retail banks to offer products adapted for renovation of privately rented buildings
5. Reinforce quantification and forward looking aspects of renovation roadmaps with a 2030-2050 perspective

Orgalime comments:

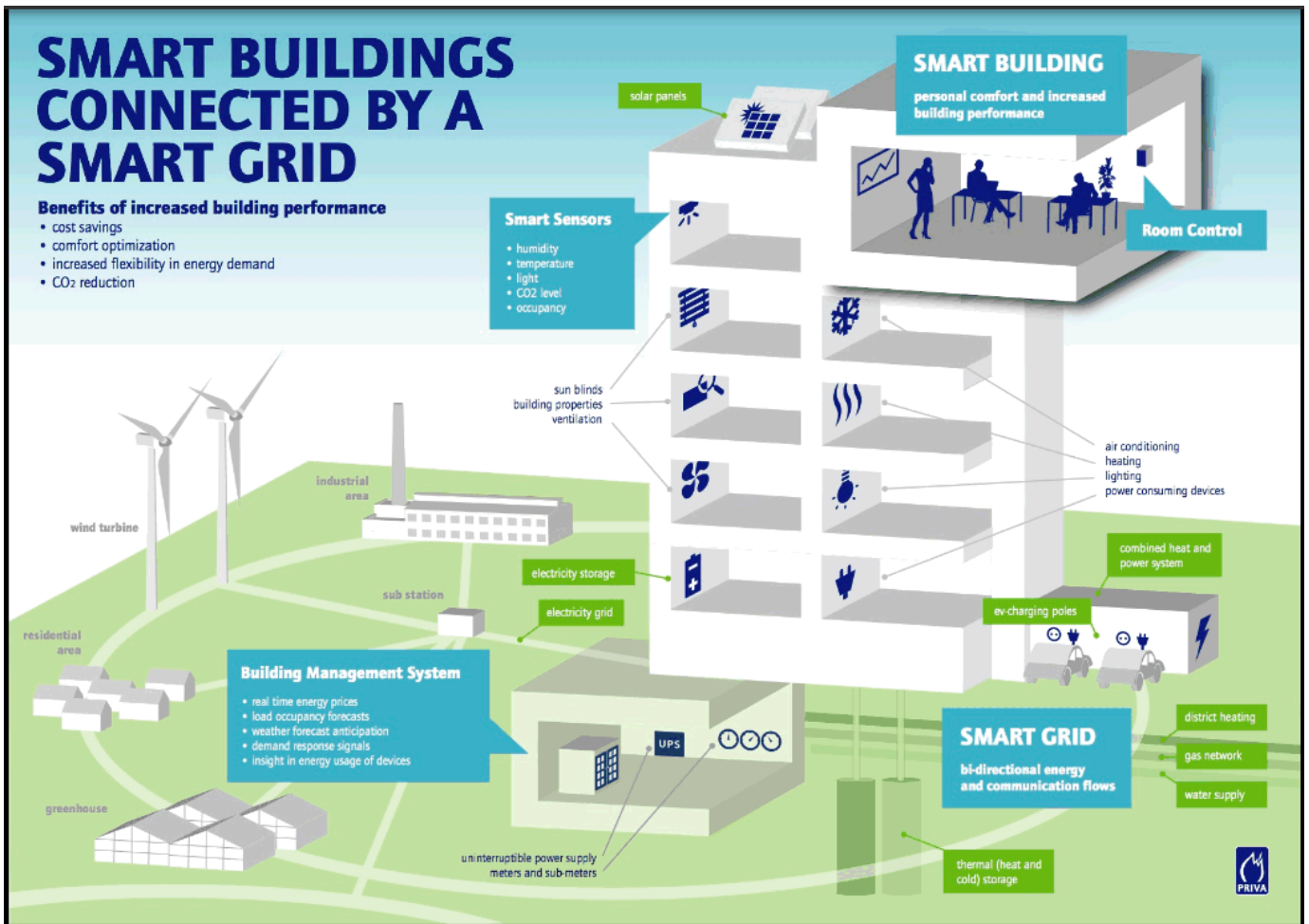
We support a combination of options 2, 3, 4 and 5. The work and recommendations of EEFIG should be supported.

CONCLUSIONS

Orgalime advocates for consistent energy efficiency, market design and RES proposals to be presented by the Commission in 2016:

- The future energy market design requires a holistic approach, which includes all levels of the energy value chain, starting with giving special attention to demand efficiency, all sources of flexibility, and closing the current regulatory and innovation gap at distribution level. The new energy market should be much more market driven and competitive, where price peaks function as investment signals rewarding flexible, clean and “fast delivery” technology solutions.
- Consequently, we support an evolution of the Energy Efficiency Directive to close current gaps at end use, distribution and smart grid level, and an evolution of the Energy Performance of Buildings Directive towards “connected buildings” to carry forward the energy efficiency successes of the existing Ecodesign Directive to these systems levels, and thereby bringing these policy tools on track for the EU’s 2030 and 2050 energy and climate commitments.

ANNEX: Smart Buildings Connected By Smart Grids



Source: <http://www.strategyr.com/MarketResearch/Infographics/Images/MCP-6331/5.jpg>

For further information, please contact:

Sigrid Linher, Energy and Environment Manager: sigrid.linher@orgalime.org