

Brussels, 6 September 2017

**DRAFT REPORT OF RAPPORTEUR BENDTSEN ON THE
ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE (EPBD):
Bringing the benefits of clean energy buildings
to all Europeans**

EXECUTIVE SUMMARY

Europe stands in front of a unique opportunity: creating a fresh boost to jobs and growth in Europe and a win-win for all stakeholders - the planet, EU citizens and European industry, which a forward looking and determined review of the EU Energy Performance of Buildings Directive (EPBD) can provide as part of the wider Clean Energy Package and the pending energy market reform.

Energy efficiency represents a real opportunity to move forward on implementing the Paris climate change agreement, on improving living conditions for ordinary citizens and on creating an integrated modern energy system.

But, with some two thirds of our buildings in Europe built before energy performance standards even existed and renovation rate of the building stock which overall does not at present exceed 1% per annum, it would take a century to upgrade the building stock to modern, near-zero energy levels.

We believe that the core issue will be how Article 8 of the EPBD is shaped: this will determine how far the EU will be able to deliver on the Paris climate goals, consumers will be able to manage their energy consumption, renewables will be integrated, the core essential E-vehicle charging infrastructures will be created and thereby a flexible modern grid accommodating both centralised and decentralised production.

Building on the draft report of Rapporteur MEP Bendtsen Orgalime therefore counts on the European Parliament to play its role as a game changer and provide hereafter our detailed recommendations.

1. INTRODUCTION

Energy efficiency represents a real opportunity in multiple ways for all (see annex). It is the building sector that accounts for 40% the EU's energy consumption and 36% of the EU's CO2 emissions, while significant energy efficiency potential in this sector remain untapped. Two thirds of our buildings were built before energy performance standards even existed. Roughly 80% of today's existing building stock should still be there in 2050.

Orgalime, the European Engineering Industries Association, speaks for 41 trade federations representing the mechanical, electrical, electronic, metalworking & metal articles industries of 23 European countries. The industry employs nearly 11 million people in the EU and in 2016 accounted for some €2,000 billion of output. The industry represents over a quarter of the output of manufactured products and over a third of the manufactured exports of the European Union.

www.orgalime.org

The renovation rate of the building stock does not exceed 1% per annum in many cases, which would mean that it would take a century to upgrade the building stock to modern, near-zero energy levels.

Clean energy buildings are, however, about much more than saving energy: they increase living comfort and quality of life, have the potential to integrate renewables, smart appliances, energy management systems and services, storage, digital technologies and they have the potential to link buildings with our energy grid and transport systems.

As our energy system undergoes the fundamental and irreversible transformation of decarbonisation, decentralisation and digitisation, buildings are increasingly becoming part of this new energy system: they become a flexible energy source in themselves, where active prosumers self-generate, self-consume, aggregate, trade and sell surplus electricity to the grid. In this new setting, buildings will no longer be a load only (consumer of electricity) but “virtual power houses” that consume and produce electricity at the same time to the overall satisfaction of their occupants and that increase the overall energy efficiency of the grid.

E-vehicle charging infrastructure is an integral part of electrical installation in homes and buildings. Thanks to their storage capacity, e-vehicles can help to increase the level of Renewable Energy Sources (RES) and the level of flexibility in the future grid. Smartly managing the charging process is the issue: Efficient off peak charging and charging when there is plenty of RES should be the preferred option to charging in peak hours. Charging points should be increasingly capable of starting and stopping but also to adapting power charging levels in reaction to price signals or to building management system signals.

This EPBD review, which will design Europe’s buildings of the next decade and beyond, needs to **close the confirmed gap and current market failure of managing all actual energy uses inside of all buildings** if Europe wants to live up to its international commitments and own 2030 energy and climate targets:

- **Accelerating the cost-efficient decarbonisation of the existing building stock, notably through reaping the energy efficiency and flexibility benefits of technical building systems and other appliances in support of consumer empowerment and cost-efficiency of the energy system should therefore be the main focus of the pending EPBD review.**
- We call upon Members of the European Parliament to set in place a proper framework for the deployment of infrastructures (such as on-site renewable electricity generation, energy management and communication technologies or electro-mobility) and of demand-responsive devices that will facilitate the buildings’ integration into a wider energy ‘eco-system’ where consumers will indeed be enabled to become active, truly empowered prosumers.

2. ARTICLE 2: DEFINITIONS

- **Definition of “technical building systems”**

The definition of technical building systems should use proper technical terminology according to already existing regulations (e.g. of Directive 2014/94/EU, which already provides for the definitions of “electric vehicles” or “recharging point”) and to remain inclusive to the different kinds of technologies and systems, which will all influence the energy efficiency performance of buildings and the level of empowerment of consumers.

Orgalime recommends to extend the definition of “technical building systems” to “*on-site infrastructure for recharging of electric vehicles in the meaning of Directive 2014/94/EU, on-site vertical mobility such as lifts or elevators, and on-site energy storage systems*” and “*solar shading*”.

Amendment 205 and 212 should be supported.

Amendments 204, 206, 207, 210, 211, 213, 214 remain insufficient for addressing the remaining gaps and should therefore be rejected.

- **Definition of “building and automation control system”**

For the sake of legal certainty, we welcome the introduction of a new definition of “building and automation control system” in the revised EPBD. This definition should however be consistent with the definition provided for in EN Standard 15232, including, in particular, solar shading that has significant cooling energy savings potentials.

Amendment 226 should be supported.

- **Definition of “Decarbonised building stock”**

A common understanding of “decarbonised building stock” supports Member States in their task of defining long-term renovation strategies according to article 2.a and sends a clear investment signal to the market. It is however important that such a definition follows the Energy Efficiency First and NZEB principles established by the EPBD.

Amendment 215 should be supported and finally adopted.

Amendments 216, 231, 242 and 243 also bear valuable clarifications, however, in comparison to amendment 215, miss out on the aspect of intelligent integration of buildings into a decarbonised and flexible energy system.

3. ARTICLE 2.a: LONG-TERM RENOVATION STRATEGIES

We support an ambitious article 2.a on “long term renovation strategy”, requiring Member States to set out a roadmap with clear milestones and actions to deliver on the long-term 2050 goal to decarbonise their national building stock with specific milestones for 2030 and 2040.

Combined with the newly proposed definition of “*decarbonised building stock*” and newly proposed provisions regarding the mobilisation of investment, clear market signals would be given to correct existing market failures.

Amendments 1, 3, 5, 6, 13, 18, 19, 247(g), 248(g), 310, 317, 318, 320, 321, 322, 326 and 447 should be supported.

Amendments 27, 319, 324 and 326 regarding the Report on implementation of its long-term renovation strategy in accordance with Governance Regulation should be supported, too.

Amendments 17, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 316, 317, contain many valuable elements for the long-term strategy for mobilising investment, which should however not prioritise renovation of the building envelope over the deployment of smart and connected technologies in buildings for consumer empowerment. The Impact Assessment has clearly demonstrated that the EPBD today falls short in the area of article 8. It would also be complementary to include the notion “*and in particular energy management infrastructure and technical building system technologies*” in the last paragraph of article 10.1.

4. ARTICLE 8: TECHNICAL BUILDING SYSTEMS

Article 8 of the EPBD in or view represents the core article of the current review in terms of delivering on the EU's energy and climate goals and implementation of the Paris Agreement in the EU. It is also the area where it will be decided if consumers will be truly empowered and enabled to manage their own energy consumption.

Orgalime recommends making a true step towards smart buildings by encouraging the roll out of the relevant energy management infrastructure and technologies (such as automation, control and communication technologies) in article 8 – in particular, non-residential buildings should be leading examples of innovation platforms.

E-vehicle charging infrastructure is an integral part of electrical installation in homes and buildings. Thanks to their storage capacity, e-vehicles can help to increase the level of RES and the level of flexibility in the grid. We consequently generally support for suggested roll out of e-mobility infrastructure, differentiated by non-residential and residential buildings, however see the need:

- to better combine the e-mobility infrastructure roll-out with energy management infrastructure and technologies, at least in non-residential sector
 - to avoid increasing peak load and to ease stress on electricity grid, so as
 - to accelerate cost effective renovation of the existing buildings.
- to manage the charging process (“smart charging”), and
- to introduce a mandatory smartness indicator to assess the technological readiness of the building (see point 5 of this paper).

Regarding article 8.2 (non-residential):

- **Amendments 9, 341 and 397** with respect to the promotion of smart charging **should be supported, as well as amendment 339** to preserve the provision on intelligent metering systems in accordance with the revised Electricity Directive.
- **Amendments 342, 344, 347, 348, 350, 352, 353, 354, 355, 359, 360, 361, 362, 364, 365 partly reflect our position.**
- Amendments 340, 345, 346, 357, 358, 363 however should be rejected.

Regarding article 8.3 (non-residential):

- Amendments 370, 373, 374, 376, 377, 378, 379, 380, 381, 382, 383, 384, 386, 398 are taking into account some of our recommendations.
- Amendments 368, 369, 375, 385, 390, 391, 392, 394 should be rejected.

Regarding article 8.3.a and b, amendments 444, 445 and 446 should be supported.

Regarding article 8.3.c(new), we support amendment 399.

Regarding article 8.4, we support amendment 404.

Regarding article 8.4.a(new), we support amendments 32, 407 and 408.

Regarding article 8.2.4.b(new), we support amendment 33 concerning simplified permitting and approval procedures for owners and tenants to enable the deployment of recharging points.

Regarding article 8.5.a(new), we support amendment 422.

5. ARTICLE 8.6: SMARTNESS INDICATOR

Orgalime supports the introduction of a mandatory smartness indicator as a means to reliably inform consumers about the performance and technical capabilities and state of the art of their building.

We consider the tool of a smartness indicator fit for providing one comprehensive picture to consumers, that would also encompass the EPC, air quality information or the concept of the newly proposed “Building Renovation Passport”. A multiplication of different tools should be avoided. Administrative burden should be kept to a minimum and synergies that the Smartness indicator can bring should be exploited.

Amendments 34, 35, 58, 428, 430, 431, 432, 439, 627, 628 and 629 should be supported.

In the conduct of its activities, however, the Commission should be required to mandate European Standardisation Organisations to develop a definition of “smartness indicator” based on technical considerations, which the Commission may adopt as a delegated act for the sake of harmonisation.

Amendments 424, 425, 426, 427, 429, 433, 434, 435, 437, 438 and 440 however, do not support the necessary market transformation and should be rejected.

6. ARTICLE 14: INSPECTIONS

The option for Member States to require the roll out of Building Automation Controls in non-residential buildings as a possible alternative to carrying out regular building inspections (article 14), is in our view not sufficiently ambitious. Such roll outs should be mandated in article 8 instead.

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.

Regarding article 14.1, amendment 486 should be supported.

Regarding articles 14.2 and 14.3, amendments 501, 502, 509 should be supported.

Regarding article 15, we support amendments 528 and 544.

7. OTHER AMENDMENTS

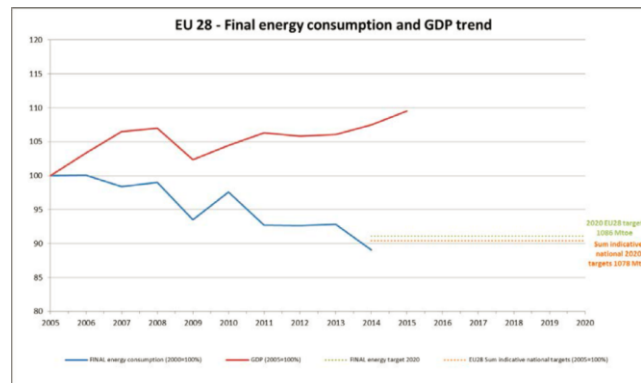
Finally, we recommend also supporting the following amendments:

- **Amendments 25, 301, 304, 579, 580** concerning advisory tools (one-stop-shops for consumers, informing of available financial instruments for EE renovations)
- **Amendments 12 and 203** concerning a holistic approach (district instead of single building, article 1)
 - **Amendments 328 and 329** concerning alternative systems (article 6)
 - **Amendment 338** concerning the exemplary role of public bodies’ buildings (new article 7a)

ANNEX: Energy Efficiency is an opportunity for all – and it is so in multiple ways:

Gains from an increased EE Target ... in terms of:		... of 30%	... of 35%	... of 40%
Security of Supply	Gas Net Energy Imports 2030 Volume compared to 27% target	Less 12%	Less 29%	Less 42%
Fossil Fuel Import Savings	Billion Euro (2020 – 2030)	70	199	287
Bill of Energy Users	Reduction of Annual Energy Purchase in Billion Euro	28	55	86
Health	Millions of Life Years saved (PM25)	2.5	11	16.9
	Billion Euro saved by year on average	7	30	45

Energy efficiency and GDP growth are fully compatible:

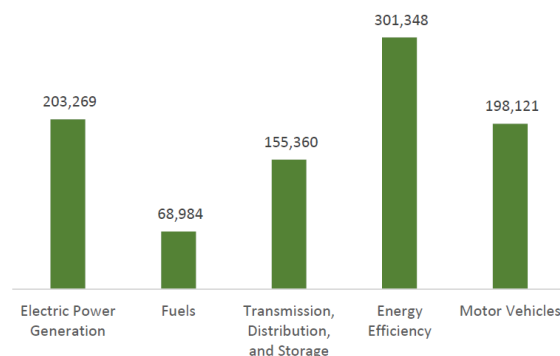


Source: Eurostat

Energy efficiency means employment in innovative, future-oriented jobs:

The example of California (Source: US Energy and Environment Report of January 2017):

Figure 1. Employment by Major Technology



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