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Impact of the Energy Union on Residential Energy Efficiency in Central and Eastern Europe

ABOUT THE PROJECT

This study was commissioned by Habitat for Humanity International. The work was conducted and recognized in partial fulfillment for the “Policy Labs” course within the School of Public Policy at Central European University.

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1 INTRODUCTION

The European Union's energy use is, in more than one respect, a double edged sword. In 2014, the EU was the world's largest economy¹ with the third highest energy consumption.² However, this prosperity does not come without significant costs. Rising levels of atmospheric greenhouse gases generated by human activity are causing devastating environmental changes across the planet. Additionally, the international market for energy has become increasingly convoluted. Developing nations are driving up the demand for fuel and energy supplying nations are increasingly using their resource oligopolies to influence global affairs. Because of this, the leaders of the EU have sought the necessary steps to mitigate these dangers by improving their countries' energy efficiency and promoting renewable energy production.

On the 25th of February, 2015 the European Union took a historic step forward in this endeavor when the Directorate General for Energy launched the Energy Union, a strategic framework designed to benefit the European Union in five key dimensions. These are:

- Energy security, solidarity and trust
- A fully integrated European energy market
- Energy efficiency contributing to moderation of demand
- Decarbonizing the economy
- Research, Innovation and Competitiveness

The Energy Union will affect not only the European Union, but the rest of Europe as well. This report will investigate and summarize how the Energy Union will impact residential energy efficiency for three country classifications: EU Member States, EU Accession States, and Eastern Partnership States. Residential energy efficiency is a crucial topic for the Energy Union as residential housing continues to be a major source of energy consumption in the EU. This falls directly in line with Habitat for Humanity's international mission of advancing residential energy efficiency.

The report is the final deliverable of the academic year 2015/2016 Policy Lab at Central European University. It is structured as follows. Chapter 2 summarizes eight key documents connected to the Energy Union that were agreed upon in the Policy Lab's Terms of Reference. Chapter 3 lists additional online sources identified during the creation of this report that may be relevant for HFHI's advocacy. Chapter 4 gives a brief overview of how the Energy Union will affect EU Member States, EU Accession States, and Eastern Partnership States. Chapter 5 describes funding sources for the energy efficiency renovation of housing stock made available in the context of the Energy Union. Chapter 6 concludes with some final remarks. References to the sources used in the report can be found in chapter 7.

Habitat for Humanity being one of the leading advocates for advancing residential energy efficiency, we hope that this report will both clarify and focus Habitat for Humanity's advocacy work in this new Energy Union Europe.

¹ According to the World Bank.

² According to the CIA's 2009 World Factbook.

2 SUMMARIES OF KEY DOCUMENTS

This section contains the summaries of the key documents specified in the Terms of Reference:

1. World Energy Outlook: Energy and Climate Change
2. Europe 2020
3. Energy Union Package
4. Energy Union Package - Annex
5. Energy performance of buildings directive
6. Energy efficiency directive
7. Cohesion policy funding for the energy renovation of building
8. Energy Poverty

In the first document, the International Energy Agency gives an overview of the world's situation in terms of energy and climate change and the main challenges to be expected in this respect. The second document describes the EU's answer to these challenges through the Horizon 2020 strategy. The third and the fourth document are the core documents of the Energy Union. They outline what the Energy Union is and what the Commission plans in order to implement it. The fifth and the sixth document are the EU directives that will make the main elements of the Energy Union legally binding. In the seventh document, a technical guide, the Commission explains how cohesion policy funding can be used for the energy renovation of buildings. The eighth document, finally, deals with a topic closely connected to the Energy Union: it outlines the main findings of a research initiative on energy poverty and vulnerable consumer in the EU.

2.1 WORLD ENERGY OUTLOOK: ENERGY AND CLIMATE CHANGE

Title of document: [World Energy Outlook Special Report 2015: Energy and Climate Change](#)

Type of document: **Policy Report**

Publication date: **2015**

Publisher: **International Energy Agency**

Intended audience: **General**

As part of its 2030 framework, the European Union (EU) has set the ambitious goals of consistently reducing its emission of greenhouses gasses (GHG) over the next 35 years. To achieve this, the union will improve its energy efficiency while substituting its GHG emitting energy sources with renewables, such as wind, solar, etc. Currently, the EU is on track to meet its initial goal of a 20% GHG reduction by 2020, in relation to 1990 levels. Thus far, this target has not had an overly negative impact on the economy, which has continued to grow, signaling that EU economic development is becoming less dependent on fossil fuels. Both these factors are important as the EU's ultimate goal is an 80% decrease in GHG emissions by 2050.

Power Sector

Based on leading predictions of how the EU's energy needs will evolve over the next 15 years, it is expected that residential and service sectors will expand their consumption of energy while industrial energy demands will decrease. Based on these forecasts, it is expected that overall EU energy demand will have grown by 10% in 2030. Accompanying this evolution in energy demand, the EU will also experience a revolution in energy production. Demand for coal-fired energy will drastically decrease, by nearly 40%, while gas-fired energy production will grow by a third. Most significantly, renewable energy will generate half of the EU's energy capacity. Ultimately, despite the increased demand for electricity, the EU will have cut its GHG production by 2030.

End-use sectors

The energy needs of the end-user sector (consumers of final goods or services not involved in the production or distribution) will progress over the next 15 years. Energy demand from this sector is expected to decline by 6% while also reducing its GHG discharge by 20%. This decrease in GHG will come about thanks to stricter fuel economy standards and increased access to alternative fuel sources, such as biofuels and renewable electricity. However, costly initial investment and uncertainty surrounding biofuel sustainability drastically hinder this transition. Because of this, the transportation industry will continue to be reliant on oil.

Improving building and industry energy efficiency is a vital part of the EU's plan to achieve their GHG reduction plans. There are a variety of methods to reach this end, from installing LED lights to upgraded heaters, electric motors, fans, etc. Building owners and managers will be encouraged to adopt this improved technology thanks to the Energy Efficiency Directive (EED) and the Energy Performance of Buildings Directive, both of which seek to reduce energy consumption of these two sectors.

Investment

Over the next 15 years, the EU expects to invest \$150 billion to improve end-user energy efficiency. Half of this sum will be devoted to upgrading transportation, with buildings receiving the second largest part to enhance their heating and cooling plus other electrical appliances. However, at the country-level, EU member states are expected to only periodically provide funding for renewable/efficient energy projects over the foreseeable future.

2.2 EUROPE 2020

Name of document: [EUROPE 2020 - A strategy for smart, sustainable and inclusive growth \(COM/2010/2020 final\)](#)

Type of document: **Communication from the Commission**

Publication date: **3.3.2010**

Publisher: **European Commission**

The Europe 2020 strategy was adopted in 2010 with the goal to achieve sustainable growth through collective action by combating global challenges at EU level. It serves as a basis for the Europe 2030 and Europe 2050 strategies, which were adopted later. It lays out the common vision of a social market economy for the European Union. There are three main priorities: smart growth, sustainable growth, and inclusive growth. Sustainable growth is defined as the promotion of the resource efficient economy.

It sets out the following headline targets: employment of at least 75% of the total population, research and development investments amounting to 3% of GDP, and a restatement of the 20/20/20 Targets among others, namely to reduce "greenhouse gas emissions by at least 20% compared to 1990 levels [...], to increase the share of renewable energy sources the final energy consumption to 20%, to increase energy efficiency by 20%, and to target a reduction of poverty".

In order to achieve these goals, Member States should tailor the Strategy to the existing set of conditions with assistance from the Commission. Among the Commission's flagship themes to reinforce the growth are the *innovation union*, *youth on the move*, *a digital agenda for Europe*, *resource efficient Europe*, *an industrial policy for the globalization era*, *an agenda for new skills and jobs*, and the *European platform against poverty*. These initiatives are planned to be fulfilled using EU-level instruments.

Two major pillars of the EU economic governance regarding Europe 2020 are the thematic approach encompassing the core themes mentioned above and country reporting. Country reporting will take the form of 'country-specific recommendations' to help member states create and maintain strategies for sustainable growth with an adequate use of public financing.

The role of EU institutions:

European Council: has the ownership of the strategy.

Commission: monitors progress and facilitates policy exchange.

Parliament: mobilizes citizens and acts as a co-legislator of the proposal.

The role of national and local authorities:

National and local authorities are expected to work towards the implementation of the targets in partnership with parliaments as well as with representatives of civil society. Under the flagship initiative *resource efficient Europe*, the Commission will assist the adoption and implementation of a revised Energy Efficiency Action Plan and work on the promotion of resource efficiency by supporting households and small and medium sized enterprises. Support will be provided through structural and other funds. At the same time Member States are required to provide incentives for energy savings. More importantly, Member States shall reduce energy use by applying building performance standards, market-based instruments, and appropriate regulations. Member States are also encouraged to invest in the energy efficiency of public buildings using structural funds.

2.3 ENERGY UNION PACKAGE

Title of document: [Energy Union Package - A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy](#)

Type of document: **Communication from the Commission**

Publication date: **25.2.2015**

Publisher: **European Commission**

Intended audience: **European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions, and the European Investment Bank**

The official Energy Union Communication from the Commission explains (1) why the EU needs the Energy Union, (2) which dimensions the Energy Union strategy should consist of, and (3) how the Energy Union is going to be governed and implemented. It is a rather wordy document with few definite actions proposed. More concrete steps the Energy Union Action Plan consists of are outlined in the Annex to the Energy Union Package, which is summarized below.

Why do we need an Energy Union

Energy Union is aimed at pursuing “an ambitious climate policy at its core is to give EU consumers - households and businesses - secure, sustainable, competitive and affordable energy.”³ The principal idea is to put citizens in the center of the energy transition, so that they could “benefit from new technologies to reduce their bills (and) participate actively in the market”.⁴ Protection of vulnerable consumers is the other important goal of the Energy Union. This document warns that “If [the EU] continues on the present path, the unavoidable challenge of shifting to a low-carbon economy will be made harder by the economic, social and environmental costs of having fragmented national energy markets.”⁵

The five dimensions of the Energy Union

The Energy Union strategy consists of “five mutually-reinforcing and closely interrelated dimensions designed to bring greater energy security, sustainability and competitiveness”⁶:

- (1) Energy security, solidarity and trust;
- (2) A fully integrated European energy market;
- (3) Energy efficiency contributing to moderation of demand;
- (4) Decarbonising the economy, and
- (5) Research, Innovation and Competitiveness.

The section below outline the most important points in the dimensions relevant to this report.

The dimension **Energy security, solidarity and trust, Decarbonising the economy, and Research, Innovation and Competitiveness** are not directly relevant for this report as they are not directly related to housing focus outlined in the Terms of Reference.

(1) A fully integrated European energy market⁷

First of all, the “Commission will seek the phasing-out of below cost regulated prices through the competition and economic governance frameworks” In doing so, “Member States need to propose a mechanism to protect vulnerable consumers.” These mechanism “could preferably be provided through the general welfare system” or through the energy market, for example through schemes such as “a solidarity tariff or as a discount on energy bills.”

³ All on page 2.

⁴ All on page 2.

⁵ Page 3.

⁶ Page 4.

⁷ All on page 12.

Another important point is that the “Commission will continue to push for standardisation and to support the national roll-out of smart meters.”⁸ Since smart meters require and facilitate the measurement of the energy consumption of separate households, this point could be used as an argument for the energy efficiency renovation of condominiums and other forms of multi-family dwelling.

(2) Energy efficiency contributing to moderation of demand⁹

To increase the energy efficiency in the buildings sector, actions “by Member States, particularly at the local and regional levels, are needed to exploit the energy efficiency potential of buildings.” When it comes to financing the required actions, the “Commission will support ways to simplify access to existing financing and offer ‘off-the-shelf’ financing templates for financial instruments [...], promote new financing schemes based on risk and revenue sharing, develop new financing techniques and support in terms of technical assistance.” In this context, the “European Fund for Strategic Investments provides an opportunity to leverage major investments in renovating buildings.”

The Energy Union in fifteen action points¹⁰

The document sets out fifteen action points, which are crucial for achieving the Energy Union targets. The fifth, the eighth, and the tenth action point are particularly important for HFHI because they either affect vulnerable citizens and consumers or the energy efficiency of buildings – both topics that are important for HFHI’s mission. The fifth action point promises to create “a seamless internal energy market that benefits citizens.” The eighth point concerns greater transparency on energy costs and prices: “At the national and local levels, action should be taken to protect vulnerable consumers through social policies.” The tenth point explains that building “have huge potential for energy efficiency gains.” That is why the “Commission will develop a ‘Smart Financing for Smart Buildings’ Initiative to make existing buildings more energy-efficient, facilitating access to existing funding instruments” and why the “Commission will propose a strategy to facilitate investment in heating and cooling.”

2.4 ENERGY UNION PACKAGE - ANNEX

Title of document: [Energy Union Package – Annex – Roadmap for the Energy Union \(original version\)](#)

Type of document: **Communication from the Commission**

Publication date: **25.2.2015 (updated on 18.11.2015)**

Publisher: **European Commission**

Intended audience: **European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions, and the European Investment Bank**

This summary is based on the updated version of the document, found under the link above.

⁸ Page 11.

⁹ All on page 13.

¹⁰ All on page 20.

The roadmap for the Energy Union outlines the actions foreseen for implementing the Energy Union, the responsible parties, and the expected timetable. All relevant points are summarized below.

Regarding the **energy retail sector**, the Commission and the Member States plan a new deal for energy consumers. This deal should empower the consumers by deploying Demand Side Response and the use of smart technologies. In addition, regulated prices should be phased out, flanked by measures to protect vulnerable consumers. The communication on the deal was published in [2015](#). Legislative proposals are expected to follow.

When it comes to **energy efficiency measures**, reviews of the Energy Efficiency Directive and the Directive on Energy Performance of Buildings, including the Smart Finance for Smart Buildings initiative, are planned for 2016. (An inception impact assessment of the reviews has already been [published](#).) A strengthening of the targeted use of financial instruments to support investments in energy efficiency is expected from 2015 onwards. ([This](#) EU Commission website provides on up-to-date overview of the EU funding schemes for energy efficiency.)

In terms of **heating and cooling**, the EU strategy for Heating and Cooling is foreseen for 2016. It will concern the contribution from heating and cooling in carrying out the EU's energy and climate objectives.

As a **cross-cut measure**, the review of the Guidelines on State aid for environmental protection and energy is scheduled for 2017-2019. In addition, the Commission plans to provide data, analysis and intelligence for the Energy Union in 2016. The goal is an initiative pooling to make accessible all relevant knowledge in the Commission and Member States.

2.5 ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE

Name of document: [DIRECTIVE 2010/31/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 19 May 2010 on the energy performance of buildings](#)

Type of document: **Directive of the European Union**

Publication date: **19.05.2010**

Publisher: **Official Journal of the European Union**

The **European Buildings Performance Directive** is one of the two main legislation pieces of the EU on the common energy policy. The Directive is a basis for additional legal documents of the EU on the topic issued after 2010 (see [list from EuroLex](#)). It was adopted by the European Parliament and the Council in May 2010. It is expected to be amended in late 2016. The provisions of this document are obligatory for EU Member States (MS) to fulfill: the Directive sets minimum requirements for MS and assigns roles in implementation and monitoring processes to the respective EU institutions and MS.

Its overarching goal is to improve “the energy performance of buildings within the EU, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness.” (*Article 1*)

The **main objectives** of the Directive are:

- 1) To establish the “inspection schemes for heating and air conditioning systems or put in place measures with equivalent effect.”
- 2) To ensure that all new buildings in the EU are ‘nearly zero energy buildings’ (NZEB) by the end of 2020 (all new public buildings by the end of 2018). The idea of ‘nearly zero energy buildings’ along with the ‘cost-optimal method’ (which will be discussed later in this report) was introduced in 2011 around the EU discussions on how to support the implementation of the EPBD into the national legislations. The nearly zero energy performance requirements for new buildings were expected to be included into the national action plans. Even though the targets may differ, some of the elements such as the definition of NZEBs, numerical indicators for primary energy use (in kWh/m² per year), intermediate targets by 2015, etc. should be reflected in national regulations.¹¹
- 3) To adopt “minimum energy performance requirements for new buildings, for the major renovation of buildings, and for the replacement or retrofit of building elements (heating and cooling systems, roofs, walls, etc.)” by the MS. That means that new buildings in all MS should meet such requirements, which must be calculated according to a comparative methodology framework for determining cost-optimal levels, set out by the European Commission. Therefore, such requirements may differ from state to state.¹²
- 4) To require buildings to have energy performance certificates and to adopt policies for regular independent inspections and control systems.
- 5) To set out lists of financial measures on the national level to support the energy efficiency of buildings.

Most relevant articles:

(Article 3) MS “shall apply a methodology for calculating the energy performance of buildings in accordance with the common general framework (...) at national or regional level.” (See [ANNEX I](#)).

(Article 4) MS “shall take the necessary measures to ensure that minimum energy performance requirements for buildings or building units are set with a view to achieving cost-optimal levels.”

Though, they may not be applied to “residential buildings which are used or intended to be used for either less than four months of the year or, alternatively, for a limited annual time of use and with an expected energy consumption of less than 25 % of what would be the result of all-year use” (paragraph 2, d).

As mentioned above, the European Commission designed a calculation methodology for cost-optimal levels, which are defined as “the energy performance level which leads to the lowest cost during the estimated economic lifecycle” (Article 2.14). The framework itself was adopted in 2012 by the Commission. Basically, it requires MS to define reference buildings and the energy efficiency measures that were undertaken, and then to assess other building needs and calculate costs accordingly.¹³ This

¹¹ Ecofys, Politecnico di Milano / eERG, University of Wuppertal, (2013).

¹² European Council for an Energy Efficient Economy, (2011).

¹³ Concerted Action of Energy Performance of Buildings, (2013).

approach aimed at differentiating the measures used in the MS to address the energy performance of buildings requirements, so that MS have flexibility according to their specific needs and capabilities. However, it also led to a situation where it is nearly impossible to compare the energy efficiency requirements across Member States.

(Articles 6, 7) **New and existing buildings**

While new buildings are required to “meet the minimum energy performance requirements”, existing buildings shall “undergo major renovation, the energy performance of the building or the renovated part thereof is upgraded in order to meet minimum energy performance requirements set in accordance with Article 4 in so far as this is technically, functionally and economically feasible.”

(Article 9) **Nearly zero-energy buildings & National Action Plans**

MS are expected to ensure that all new buildings are nearly zero-energy buildings by 31 December 2020 and that “after 31 December 2018, new buildings occupied and owned by public authorities are nearly zero-energy buildings”. To reach these goals, MS shall create and implement National Action Plans.

(Article 10) **Financial incentives and market barriers**

MS are expected to create and update the National Action Plans on the three-year basis and to list financial measures that could be implemented on the national level. “The Commission shall, where appropriate, assist upon request Member States in setting up national or regional financial support programmes with the aim of increasing energy efficiency in buildings, especially of existing buildings, by supporting the exchange of best practice between the responsible national or regional authorities or bodies” (paragraph 4). This article also discusses the possibility of financial programs at EU level by implementing multiannual financial framework.

(Article 11) **Energy performance certificates**

MS “shall lay down the necessary measures to establish a system of certification of the energy performance of buildings. The energy performance certificate shall include the energy performance of a building and reference values such as minimum energy performance requirements in order to make it possible for owners or tenants of the building or building unit to compare and assess its energy performance.”

(Article 20) **Information**

MS “shall take the necessary measures to inform the owners or tenants of buildings or building units of the different methods and practices that serve to enhance energy performance.”

“The Commission should lay down a comparative methodology framework for calculating cost-optimal levels of minimum energy performance requirements. Member States should use this framework to compare the results with the minimum energy performance requirements which they have adopted.”

(Article 28) **Transposition**

MS “shall adopt and publish, by 9 July 2012 at the latest, the laws, regulations and administrative provisions necessary to comply with Articles 2 to 18, and with Articles 20 and 27.”

General comments:

The EPBD has had major effects on the energy efficiency policies in Member States and the contracting parties of the Energy Community. New coordinated solutions to address problems related to the energy performance of buildings were found on the national levels. However, several challenges occurred during their implementation. Even though MS used the same units together with the cost-optimal approach, energy requirements differ significantly across the European Union. Another important issue is the lack of awareness of national and regional authorities of financial mechanisms and opportunities. The gap between the banking sector and national authorities as well as energy experts remains one of the biggest obstacles to the implementation of the regulations.¹⁴ All in all, the issue of general compliance with the requirements was the main challenge during the first phases of the implementation of the Directive and it is expected to be addressed further in the revised version of the EPBD in 2016.

2.6 ENERGY EFFICIENCY DIRECTIVE

Title of document: [Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency](#)

Type of document: **Directive of the European Union**

Publication date: **25.10.2012**

Publisher: **Official Journal of the European Union**

Main goal: A shift to a more energy-efficient economy in the European Union by decreasing primary energy consumption. By 2020, primary energy consumption should have been reduced by 20% (compared to 1990 levels).

Objectives: "... to update the Union's legal framework for energy efficiency with a Directive pursuing the overall objective of the energy efficiency target of saving 20 % of the Union's primary energy consumption by 2020, and of making further energy efficiency improvements after 2020."

Member states obligations:

(3) 'Member States are **required to set national targets** in close dialogue with the Commission and to indicate, in their National Reform Programmes, how they intend to achieve them.'

(13) 'Member States should be able to take into account national circumstances affecting primary energy consumption.'

(18) '... should encourage municipalities and other public bodies to adopt integrated and sustainable energy efficiency plans with clear objectives, to involve citizens in their development and implementation and to adequately inform them about their content and progress in achieving objectives.'

(64) 'The obligation to transpose this Directive into national law should be limited to those provisions that represent a substantive change as compared with Directives 2004/8/EC and 2006/32/EC.'¹⁵

¹⁴ Concerted Action of the Energy Performance of Buildings, (2015).

¹⁵ Directive 2004/32/EC on the Promotion of Cogeneration based on useful Heat Demand in the Internal Energy Market and Directive 2006/32/EC on energy end-use efficiency and energy services.

(Ch 2, Article 4) ‘Member States shall establish a long-term strategy for mobilising investment in the renovation of the national stock of residential and commercial buildings, both public and private. This strategy shall encompass: (a) an overview of the national building stock based, as appropriate, on statistical sampling; (b) identification of cost-effective approaches to renovations relevant to the building type and climatic zone; (c) policies and measures to stimulate cost-effective deep renovations of buildings, including staged deep renovations; (d) a forward-looking perspective to guide investment decisions of individuals, the construction industry and financial institutions; (e) an evidence-based estimate of expected energy savings and wider benefits.’

Renovations:

(Ch 2, Article 5) ‘... shall ensure that, as from 1 January 2014, **3 % of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year** to meet at least the minimum energy performance requirements that it has set in application of Article 4 of Directive 2010/31/EU.’

(17) ‘The rate of building renovation needs to be increased, as the existing building stock represents the single biggest potential sector for energy savings’.

Reporting to the European Commission:

(Ch 4, Article 24.1) ‘By 30 April each year as from 2013, Member States shall report on the progress achieved towards national energy efficiency targets, in accordance with Part 1 of Annex XIV. The report may form part of the National Reform Programmes referred to in Council Recommendation 2010/410/EU of 13 July 2010 on broad guidelines for the economic policies of the Member States and of the Union.’

(Ch 4, Article 24.2) ‘By 30 April 2014, and every three years thereafter, **Member States shall submit National Energy Efficiency Action Plans**. The National Energy Efficiency Action Plans shall cover significant energy efficiency improvement measures and expected and/ or achieved energy savings, including those in the supply, transmission and distribution of energy as well as energy end-use, in view of achieving the national energy efficiency targets referred to in Article 3(1).’

Role of the Union:

(1) ‘The Commission should (...) closely monitor the implementation of national energy efficiency programmes through its revised legislative framework and within the Europe 2020 process.’

Other paragraphs relevant for housing:

(Ch 1, Article 20.7) ‘Member States may use their revenues from annual emission allocations under Decision No 406/2009/EC for the **development of innovative financing mechanisms** ... improving the energy performance of buildings.’

(16) ‘Member States should establish a long-term strategy beyond 2020 for **mobilising investment** in the renovation of residential and commercial buildings with a view to improving the energy performance of the building stock.’

(Ch 4, Article 21) ‘The Commission shall, where appropriate, directly or via the European financial institutions, assist Member States in setting up financing facilities and technical support schemes with the aim of increasing energy efficiency in different sectors.’

Reduction of the green-house emissions:

(17) ‘... buildings are crucial to achieving the Union objective of reducing greenhouse gas emissions by 80-95 % by 2050 compared to 1990.’

General comments:

Energy efficiency is one of the key areas of concern for the EU to ensure economic growth and reduce energy demand. The EED 2012 was seen as ‘a compromise deal’ to reach 15% energy savings, according to ECOFYS, a large consultancy firm, which specializes in energy efficiency and renewable energy. The biggest achievement of the EED resulted in encouraging all Member States to set national energy efficiency goals and mechanisms to reach them. Such national plans are supposed to be followed by detailed progress reports to the European Commission every three years. Energy savings schemes had effects on renovating the building stock, too.

The incorporation of the Directive into the national legislations was particularly difficult as not all Member States met the set deadline. A certain lack of consistency and clarity was also an issue. The most prominent example are audits – even though the targets were clear, there was a lack of clarity regarding who should review them, how they should be assessed, and what the penalties are for failing to meet the targets.

The interim overview of the implementation of the EED was published in 2014, two years after its coming into force in 2012. The European Commission issued a communication on the results which state inter alia several problems that arose during the implementation years.¹⁶ The final review of the Directive is expected for 2016.

“The EED has acted as a driver to incite national governments to focus on what they can do to achieve the 2020 EE target. A positive development that the EED provoked is the preparation of long-term strategies under Article 4 for boosting investment in the renovation of the existing building stock. [...] – EuroACE (European Alliance of Companies for Energy Efficiency in Buildings).”¹⁷

2.7 COHESION POLICY FUNDING FOR THE ENERGY RENOVATION OF BUILDINGS

Title of document: [Financing the energy revolution of buildings with Cohesion Policy funding](#)

Type of document: **Technical Guide**

Publication date: **17.02.2014**

Publisher: **European Commission**

Intended audience: **Relevant authorities in EU member countries**

Overall EU Energy Policy

In 2007, the EU set the goals of

- reducing greenhouse gas (GHG) discharges by 20%;
- deriving 20% of its energy consumption from renewable sources;
- decreasing the region’s energy utilization, through increased energy efficiency, by 20%.

¹⁶ European Commission, (2016).

¹⁷ European Commission, (2016), p 11.

In order to achieve this by the target date of 2020, the EU established National Targets for measuring individual member state's (MS) progress. Currently, though, MS are failing to meet their stated objectives as the EU is not on track to reach the 2020 deadline.

Relevant Directives

The key EU legislation documents designed to motivate MS to reach their renewable and efficiency objectives are the

- Energy Performance of Buildings Directive (EPBD) and the
- Energy Efficiency Directive (EED).

The EPBD is a multi-pillar approach to decrease the energy consumption of current and future buildings in the EU. This directive stipulates new inspection policies for boilers and air conditioning units and the creation of energy efficiency certification for buildings. The ultimate objective is to have all buildings constructed after 2021 to have net neutral energy demands. They will require the absolute minimal amount of energy to function. Furthermore, the little electricity they demand will be derived from renewable resources.

The EED requires that EU member states implement plans to provide long term funding for the renovation of residential and commercial buildings to be less environmentally impactful. As part of this, all member states must create a review that summarizes the nation's building stock, highlights the most cost-effective method of improving the energy efficiency of buildings, and incorporates cost-effective policies that drive cost-effective building renovations, in addition to encouraging long term investment planning. This directive replaces the Directive on Energy Services and the Directive on Cogeneration. By implementing the EED, the EU expects to reduce the energy demand in all of its sectors.

Cohesion Policy

The Europe 2020 plan is not only designed to reduce GHG emissions but also to further connect Member States. This will be achieved through

- the European Regional Development Fund (ERDF), providing support for regional economies as they reorient themselves to encourage sustainable development;
- the European Social Fund (ESF), aiding worker mobility as they familiarize themselves with production systems that minimize environmental impact;
- the Cohesion Fund (CF), strengthening the unity of the EU by encouraging sustainable development and investing in the environment.

2014-2020 programming period

Over the six years until 2020, the EU will invest €325 billion to support its Cohesion Policy. As part of this, European Structural and Investment Funds (ESI Funds) will become available that will be managed by the Commission and the Member States. This funding will further be divided amongst the European Regional Development Fund (ERDF), European Social Fund (ESF), Cohesion Fund, European Agricultural and Development Fund (EARDF), and the European Maritime and Fisheries Fund (EMFF).

During this period, all member states must produce their own Partnership Agreement (PA). These will identify their funding priorities, outline national goals, and discuss how they will promote sustainable and encompassing development. These plans will not be complete unless they include reports on the

weaknesses and inequalities within the country, their thematic objectives, a summary of anticipated results from each of the five ESI Funds, and how the state’s objectives relate to the ESI Funds.

2.8 ENERGY POVERTY AND VULNERABLE CONSUMERS

Title of document: [Energy poverty and vulnerable consumers in the energy sector across the EU: analysis of policies and measures \(appendices\)](#)

Type of document: **Policy Report**

Publication date: **May 2015**

Publisher: **INSIGHT_E**

Intended audience: **European Commission and other energy stakeholders**

The policy report “assesses how Member States define the issue of energy poverty and vulnerable consumers, and the measures that have been implemented to address these issues.” To accomplish this, the following four research questions were considered:

1. How is ‘energy poverty’ and ‘vulnerable consumers’ defined by Member States?
2. Through what measures have Member States addressed ‘energy poverty’ and ‘vulnerable consumers’?
3. How do Member States differ in their responses to the first and second question?
4. With this information, how can the Commission address ‘energy poverty’ and ‘vulnerable consumers’ within the European Community?

The following sections summarize the key findings from this study.

Definitions for Energy Poverty and Vulnerable Consumers

- Currently, a standard definition for ‘vulnerable consumers’ does not exist across the European Community (EC). Instead, each Member State has developed its own unique definition to address issues it has encountered with identifying this problem. This has generated differing actions across the EC.
- ‘Energy poverty’ is only explicitly recognized by less than one third of EC Member States. These states consider ‘energy poverty’ and ‘vulnerable consumers’ to be both interconnected and distinctly different problems from one another.

Measures for Energy Poverty and Vulnerable Consumers

- In the short-term, financial intervention is necessary to protect vulnerable consumers. Typically, this is carried out through a Member State’s social welfare system as it is already designed to identify eligible support recipients and transfer financial aid to them.
- Member States must provide additional protection to vulnerable consumers, more often than not, through disconnection policies. Regulators and energy suppliers are usually responsible for developing and implementing these measures.
- Any plan to solve energy poverty must include energy efficiency measures. This can include a variety of policies but most focuses on retrofitting energy-poor homes. Additionally, there are numerous methods by which Member States have carried out these measures from subsidies

and grants to new restrictions. However, each one was specifically designed for each country in order to generate the greatest success possible.

- Awareness campaigns are important as they provide consumers with valuable information pertaining to prices and billing. They also increase transparency in the system.

Based on these findings, the report lists seven actions that it recommends the Commission to take:

1. Encourage Member States to recognize the difference between protecting 'vulnerable consumers' and addressing 'energy poverty'.
2. Using examples from its Member States, establish an EC definition for 'vulnerable consumers'.
3. Explicitly define 'energy poverty' and encourage Member States to address it using their own individual metrics.
4. Assemble a database of metrics currently being used by Member States to evaluate consumer protection and energy poverty.
5. Encourage Member States to address 'energy poverty'.
6. Improve measurements of 'energy poverty' by developing new reporting techniques.
7. Implement more rigorous requirements for assessing policies designed to aid 'vulnerable consumers' and the 'energy poor'.

3 ADDITIONAL RESOURCES

During the course of constructing this report, the following additional resources were identified. They were selected as they add insight and information that supplement the key documents identified in the Terms of Reference. They are presented below in alphabetical order.

Name of Resource: **13th Energy Community Ministerial Council adopts 20% headline target on energy efficiency and trans-European energy infrastructure regulation, moves forward on institutional reform**

Type of document: **Web page**

Publication date: **16.10.2015**

Publisher: **Energy Community**

URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/NEWS/News_Details?p_new_id=11661

Summary: Summary of 13th Energy Community Ministerial Council and its outcomes.

Name of Resource: **2016 Projects of Energy Community Interest**

Type of document: **Web page**

Publication date: 2016

Publisher: **Energy Community**

URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/Instruments/Investments/PEICs/2016

Summary: An over review of infrastructure projects currently being funded by the Energy Community.

Name of Resource: **Energy Community Adopts Sanctions Against Bosnia Over Gas Regulations**

Type of document: **News Report**

Publication date: **16.10.2015**

Publisher: **SeeNews**

URL: <https://powermarket.seenews.com/news/energy-community-adopts-sanctions-against-bosnia-over-gas-regulations-497694>

Summary: A discussion of sanctions imposed on Bosnia and Herzegovina by the Energy Community.

Name of Resource: **Energy Community Facts in Brief**

Type of document: **Publication**

Publication date: **NA**

Publisher: **Energy Community**

URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/3808265/1ED59E8950B46D4CE053C92FA8C095CB.PDF

Summary: a review of the energy community

Name of Resource: **Energy Community – Tapping on Its Energy Efficiency Potential**

Type of document: **Publication**

Publication date: **1.6.2015**

Publisher: **Energy Community**

URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/3750146/18B2AB6BA84663F2E053C92FA8C064DA.PDF

Summary: Reviews the Energy Community Treaty and opportunities for energy efficiency financing.

Name of Resource: **European Fuel Poverty and Energy Efficiency (EPEE)**

Type of document: **Webpage**

Publication date: **NA**

Publisher: **European Commission**

URL: <https://ec.europa.eu/energy/intelligent/projects/en/projects/epee>

Summary: A study of energy poverty in Europe and policy recommendations.

Name of Resource: **Financial and Support Instruments for Fuel Poverty in Social Housing (FINSH)**

Type of document: **European Commission**

Publication date: **NA**

Publisher: **European Commission**

URL: <https://ec.europa.eu/energy/intelligent/projects/en/projects/finsh#results>

Summary: An overview of the Financial and Support Instruments for Fuel Poverty in Social Housing with results and lessons learned.

Name of Resource: **Improving the Energy Performance of Buildings across Europe**

Type of document: **Website**

Publication date: **2016**

Publisher: **BPIE**

URL: <http://bpie.eu/>

Summary: Analysis of sustainable and renewable energy transition efforts in Europe.

Name of Resource: **Projects of Energy Community Interest**

Type of document: **Webpage**

Publication date: **NA**

Publisher: **Energy Community**

URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/Instruments/Investments/PECI

Summary: Review of infrastructure projects that the Energy Community has identified as being of “highest positive impact in the largest possible numbers.”

Name of Resource: **Secretariat Requests Four Contracting Parties to Rectify failure to Impose Legislative Thresholds on Sulphur Content of Liquid Fuels**

Type of document: **Webpage**

Publication date: **21.12.2015**

Publisher: **Energy Community**

URL: https://www.energy-community.org/portal/page/portal/ENC_HOME/NEWS/News_Details?p_new_id=12062

Summary: A report on why the Energy Community Secretariat is discussing imposing sanctions on 4 countries.

Name of Resource: **Speech by Vice-President Maroš Šefčovič at the Celebration Ceremony of 10th Anniversary Energy Community**

Type of document: **Manuscript**

Publication date: **27.8.2015**

Publisher: **European Commission**

URL: http://europa.eu/rapid/press-release_SPEECH-15-5542_en.htm

Summary: Manuscript from Vice-President Maroš Šefčovič on the Energy Community.

Name of Resource: **State of the Energy Union**

Type of document: **Webpage**

Publication date: **NA**

Publisher: **European Commission**

URL: http://ec.europa.eu/priorities/energy-union-and-climate/state-energy-union_en

Summary: A collection of documents pertaining to the Energy Union.

Name of Resource: **State of the Energy Union**

Type of document: **Archive**

Publication date: **NA**

Publisher: **European Commission**

URL: http://ec.europa.eu/priorities/energy-union/state-energy-union/docs/annex1-communication-state-energy-union_en.pdf

Summary: An archive of articles and reports pertaining to the Energy Union.

Name of Resource: **State of the Energy Union - questions and answers**

Type of document: **Fact Sheet**

Publication date: **18.11.2015**

Publisher: **European Commission**

URL: [http://europa.eu/rapid/press-release MEMO-15-6106_en.htm](http://europa.eu/rapid/press-release_MEMO-15-6106_en.htm)

Summary: A series of questions and answers about the Energy Union.

4 EFFECTS OF THE ENERGY UNION ON MEMBER STATES, ACCESSION STATES, AND STATES IN THE EASTERN PARTNERSHIP

4.1 MEMBER STATES

All EU Member States are directly affected by the Energy Union. The action plan of the Energy Union Strategy mentions the following steps that the Commission will take to realize the Energy Union:

- New deal for energy consumers: demand side response, smart technologies, phasing out of regulated prices while protecting vulnerable consumers (communication in 2015).
- Reviews of the Directive on Energy Performance of Buildings and the Energy Efficiency Directive (2016).
- Creating a Smart Finance for Smart Buildings initiative (2016).
- EU strategy for heating and cooling (2016).
- Initial pooling: data, analysis and intelligence for the Energy Union (2016).
- Review of the Guidelines on State aid for environmental protection and energy (2017-2019).

Legally, Member States have to comply with the Energy Efficiency Directive and the Energy Performance of Buildings Directive. The rest of the points are partially less binding and leave room for Member States to make their own decisions. In addition, significant additional amounts of EU funding for energy efficiency measures will be available. However, to what extent all of the steps mentioned in the action

plan will actually be implemented cannot be foreseen at the moment. This depends largely on the Commission's interaction with civil society activists, lobbyist, and researchers during this process and the dialog with the Parliament and the Council.

4.2 ACCESSION STATES AND ENERGY COMMUNITY

Founded: 1 October 2005

Classification: International organization

Member Parties:

- European Union: all 28 Member States
- Contracting parties: Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Moldova, Montenegro, Serbia, Ukraine
- Observers: Georgia, Armenia, Norway, Turkey

Background

The Energy Community was formed in 2005 when the Energy Community Treaty was ratified in Athens, Greece. It is an international organization that unites nations within the EU and those neighboring it, including accession states, to form a cohesive energy market which spans western, central, and into Eastern Europe. These countries agreed to join the Energy Union as its singular energy market allows them to enjoy economies of scale, encourages the adoption of renewable and energy efficiency; develops regional energy security; and implements reliable regulatory and market operations. The effects of the Energy Union on Accession States will mainly be through the Energy Community.

The Energy Community and the Energy Union

Currently, the Energy Community and Energy Union remain two separate international entities. That said, the Energy Community's role has recently begun to shift as it is now not only seen as an instrument for regional collaboration but also as the external companion to the EU's Energy Union, which currently only exists within the EU's borders. This point was stressed by European Commission Vice-President Maroš Šefčovič at his 27th of August 2015 address in Vienna. At the event, Šefčovič stressed that the Energy Community and Energy Union were on the verge of a historically unprecedented energy partnership that will one-day stretch across all of Europe but much remains between now and when this grand goal is achieved.

Recent Developments and the 13th Energy Community Ministerial Council

On October 16th, 2015 the 13th annual Energy Community Ministerial Council was held in Tirana, Albania. This was significant event as it marked the continued convergence between the Energy Union and Energy Community as the latter agreed to adopt:

- Directive 2012/27/EU, which emulates the EU's "Europe 2020 Strategy" by requiring all Contracting Parties to improve their energy efficiency by 20%. This will be achieved through mandatory energy system improvement schemes that will meet annual yearly reduction objectives.

- Regulation (EU) No 347/2013 on Guidelines for Trans-European Energy Infrastructure which will construct an all-inclusive regulatory system and legal structure that streamlines the government process.
 - Established the Projects of Energy Community Interest (PEICs) which receives funding from the EU's Instrument for Pre-Accession Assistance and the Neighborhood Investment Facility (Only pertain to infrastructure and energy transmission/storage)
- TEN-E regulation which provides a foundation for a future pan-European shared energy system.
- Formed the Energy Community Parliamentary Plenum.
- Implemented a Roadmap for improving the Energy Community.
- Agreed to the Joint Act on Security of Supply which establishes regulatory framework to secure gas supply between Contracting parties and EU States.
- The Ministerial Council formally, sanctioned Bosnia and Herzegovina for being unable to implement the Second Energy Package by the designated deadline. Specifically, the country failed to construct the required governmental regulation to manage its gas market. This will last for one year.

Sanctions on Bosnia and Herzegovina

Following the 13th Energy Community Ministerial Council meeting in Tirana, Albania, the Energy Community implemented, for the first in its history, sanctions against a contracting country. Bosnia and Herzegovina failed to meet the 2014 deadline to implement the second EU Energy Package and is now suffering the consequences. Lasting a single year, these sanctions could carry with them heavy fiscal loss for Bosnia and Herzegovina as the country can now be excluded EU financial assistance. Although the full implications of the sanctions are not known, they could signal a warning to other countries. Although not yet receiving official sanctions, Macedonia, Serbia, and Ukraine have yet to fulfill all their Energy Packet requirements and additional penalties may be forthcoming.

4.3 EASTERN PARTNERSHIP

The Energy Union is envisioned with the idea of creating an energy market for the extended Europe, bringing together EU and its Eastern European partners. Since 2009 there has been an established framework institutionalizing dialogue and collaboration between EU and non-EU Eastern European countries, - Eastern Partnership (EaP) - which covers Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine. EaP initiative promotes good governance, cooperation of market economies and supports sustainable development. Partner countries benefit from the EU funds via various financial instruments, like the European Neighbourhood Instrument (2014-2020).

Energy efficiency and energy performance of buildings are becoming increasingly hot topics in EaP Partner countries. The effects of Energy Union on these countries are not direct and do not result in direct changes in national legislations, however, EU promotes energy efficiency in Eastern European countries. EIB has recently launched different themes of supporting energy efficiency projects across industrial, public and residential sectors. Currently there is a specific energy efficiency related initiative - Eastern Europe Energy Efficiency and Environmental Partnership (E5P). The multi-donor Fund, coordinated mainly by EIB, is going to launch, first, in Ukraine and then enlarge to other EaP countries.

The Fund “merges financial contributions from the European Union and a group of 18 nations, including countries which are benefiting from the fund.” (ESP Ukraine, 2016) Grants will be allocated by the decision of the EIB in cooperation with International Financial Institutions. The other prominent example would be Eastern Partnership Technical Assistance Trust Fund (EPTATF), focused on financing projects on local private sector development and development of social and economic infrastructure in Armenia, Azerbaijan, Georgia, Moldova and Ukraine.

Moreover, it is important to note that Armenia had its own Sustainable Energy Action Plan, which reminded of National Action Plans adopted by EU Member States in the aftermath of Energy Efficiency Directive and European Buildings Performance Directive. Started in 2012, it was at the time supported by the European Bank for Reconstruction and Development (EBRD) (EBRD Press Office, 2012). It focused on reaching energy efficiency goals in both industrial and residential sectors.

Some of the EaP partner countries have joined Energy Community, mentioned above as contracting party (Ukraine) or as observers (Armenia). The status of contracting party requires all legislation adopted by the Energy Community, i.e. Energy Efficiency Directive 2010, to be integrated into the national legislation and implemented, while the observer status usually does not imply any specific actions, unless otherwise agreed by an observer. Moreover, there are other EU-funded initiatives in EE such as Energy Saving Initiative in the Building Sector, which helps with policy advocacies, capacity building, and technical assistance.

Overall, non-EU Eastern Europe has a crucial significance for the energy security of the EU. Energy Union Initiative will indirectly affect the development of the energy efficient technologies and the implementation of the energy and environment related projects via financial and technical assistance, bringing EE national energy standards closer to the EU level.

References:

- ESP Ukraine. 2016. Eastern Europe Energy Efficiency and Environment Partnership. URL: <http://ukraine.e5p.eu/about-e5p/>
- EBRD Press Office. 2012. National Action Plan for Armenia. <http://www.ebrd.com/news/2012/sustainable-energy-action-plan-for-armenia.html>

5 FUNDING SOURCES

The Energy Union Framework Strategy implies various funding opportunities for Member States to develop and implement energy efficiency projects across sectors, including the residential housing sector. Even though a lot of founding legal documents are to be revised and newly adopted in the second half of 2016, there are present funding opportunities available mentioned in both the EED and the EPBD. Member States can receive financial support from multi-donor funds such as the European Regional Development Fund with increased investments in energy efficiency in housing, the 2014-2020 European Structural and Investment Fund under the "Shift to low-carbon economy" thematic objective,

and the Cohesion Fund, as well as from numerous thematic objectives opened at the European Investment Bank.

Moreover, Member States are expected to accumulate funding at the national level and list them in the National Action Plans, required by both Directives mentioned above. For contracting parties of the EU Energy Community these funds are also mostly available. Further information on this topic can be found in the table below. As mentioned in the “Eastern Partnership” section of this report, Eastern Partnership countries have access to specific funds, such as the E5P Fund.

Name	Abbreviation	Individual Applications	Public Applications	Private Applications/NGO	Energy Union	Energy Community	Eastern Partnership	Time frame	Type of projects
European Energy Programme for Recovery	EEPR	Yes	Yes	Yes	Yes	No	No	Ongoing	Gas and electric infrastructure; Offshore wind energy; European Energy Efficiency Fund
Horizon 2020		No	Yes	Yes	Yes	No	No	2014-2020	Focused on: consumers; buildings; heating and cooling; industry, services, and products; finance for sustainable energy
NER 300		NA	Yes	Yes	Yes	No	No	Currently being considered for extension	Carbon capture and storage; Biofuels, concentrating solar power, photovoltaics, geothermal, wind, ocean, hydropower
Cohesion Fund		No	Yes	No	Yes	No	No	2014-2020	Energy-related projects that reduce green house gas emission
European Regional Development Fund	ERDF	No	Yes	Yes	Yes	No	No	2014-2020	Innovation and research; The digital agenda; Support for small and medium-sized enterprises (SMEs); The low-carbon economy
European Investment Bank	EIB	Yes	Yes	Yes	Yes	Yes	Yes	Ongoing	Loans for a variety of projects

6 CONCLUSION

With the Europe 2020 Strategy, as well as the ones that followed, the European Union is aiming to address global energy challenges and to achieve sustainable growth through unprecedented collective action – the Energy Union. By choosing to adopt this plan, the EU seeks to promote energy security, renewable energy production, and higher energy efficiency. Throughout its recent strategic and legal documents, the EU has set out targets and measures to reduce energy consumption and push for more efficiency. The latter is particularly important for the construction of new buildings and the renovation of the existing stock of public and private housing. Buildings are crucial to achieve the targets for reducing greenhouse gas emissions and energy consumption. This is why the EU created the European Buildings Performance Directive and Energy Efficiency Directive, which led to the adoption of National Action Plans in Member States and beyond. The first steps towards the Energy Union are now being revised and new overarching legislation is expected to follow in the second half of 2016.

As this report has demonstrated, the Energy Union has and will not only impact the EU, but also Accession States that are a part of the Energy Community, and those countries in the EU's Eastern Partnership. The Energy Union is envisioned to create the unified energy space in the European region beyond the current borders of the EU. With this new framework come new responsibilities for governments and new funding opportunities for organizations. One of the failures of the implementation of the first steps of the Energy Union was to inform national authorities and businesses of the funding opportunities to reach the targets. There are numerous financial instruments at the European and national levels that can be used by firms and local authorities. We have listed the most prominent of them in this report.

The new frameworks coming with the Energy Union can be used to strengthen Habitat for Humanity's advocacy work in the region. We hope that this report has been insightful and wish you successes in your forthcoming endeavors. We would like to thank the Central European University and Habitat for Humanity for the opportunity to participate in this Policy Lab.

7 REFERENCES

Concerted Action of the Energy Performance of Buildings, (2015). Effectiveness of the Support Initiatives. Overview and Outcomes. Available at: <http://www.epbd-ca.eu/outcomes/2011-2015/CA3-CT-2015-7-Effectiveness-of-Support-Initiatives-web.pdf>

Concerted Action of Energy Performance of Buildings, (2013). Implementing the Energy Performance of Building Directive. Featuring Country Reports 2012. Available at: <http://www.epbd-ca.org/Medias/Pdf/CA3-BOOK-2012-ebook-201310.pdf>

Ecofys, Politecnico di Milano / eERG, University of Wuppertal, (2013). Towards nearly zero-energy buildings. Definition of common principles under the EPBD. Final report.

European Council for an Energy Efficient Economy, (2011). Cost optimal building performance requirements. Stockholm.

European Commission, (2016). Public Consultation for the Review of Directive 2012/27/EU on Energy Efficiency. Final Synthesis Report. Brussels.