

Dear reader,

Two weeks ago, the European Commission tabled a comprehensive package to define the future energy system of Europe. The building sector is covered in many different pieces, as we summarised in [a short overview](#).

The proposal for revising the Energy Performance of Buildings Directive (EPBD) is however rather insufficient, as it does not provide any meaningful stimulation to renovate the European building stock. Important improvements of the current Directive are missing as we [summarise in a first analysis](#). The EU should support Member States and steer the market towards cost-effective renovation, delivering cost-savings to citizens and businesses, while reducing the EU's growing energy import bill. Renovating the European building stock would result in a large number of benefits for individuals and society at large; and the political negotiation process in 2017 is an opportunity to improve the current proposal. Two recent online tools highlight the opportunities in the building sector: the [Building Stock Observatory](#) tracks the changes in the building stock, while the [DEEP database](#) demonstrates the economic viability of efficiency investments.

As we are reaching the end of the year we are providing you with an overview of our 2016 publications in which you will find many recommendations and ideas on how to make our building stock fit for the future. I am sure that 2017 will be a busy year, and the BPIE team is looking forward to a continued exchange and collaboration with many of you.

The BPIE team and myself wish you a peaceful and happy Christmas and all the best for the New Year.

Warm regards,

Oliver Rapf, Executive Director

HIGHLIGHTS OF THE YEAR

BPIE and the [i24c initiative](#) explored how Europe can rapidly **ramp up innovation and competitiveness of the construction sector** throughout the entire value chain to scale up the depth and rate of energy renovation in two reports:

- [Scaling up deep energy renovation](#): recommendations to tap into the potential of deep energy renovations.
- [Driving transformational change in the construction value chain - Reaching the untapped potential](#): mapping the construction value chain before presenting industrial innovation opportunities.

Strategies for the **renovation of buildings** were presented in these publications:

- [Building Renovation Passports – Customised roadmaps towards deep renovation and better homes.](#)
- [Building renovation strategies under the spotlight](#): survey based on 69 qualitative interviews.
- [Accelerating the renovation of the Bulgarian building stock](#): defines a long-term roadmap for further development of the Bulgarian renovation programme for multi-family buildings.
- [Financing building energy performance improvement in Poland](#): analyses the energy performance of the Polish building stock and the characteristics of the renovation market. It also covers financing schemes and their impact on the market.
- [Renovating Germany’s building stock: an economic appraisal from the investors’ perspective](#): suggests different combinations of policy tools and targeted support measures to stimulate investments in the German building stock.

On the topic of **buildings as micro energy-hubs**:

- [Smart buildings in a decarbonised energy system](#): BPIE defines 10 principles for buildings to become micro energy-hubs which should be the reference when re-designing our energy system. [A Chinese summary of this report is now available!](#)
- [Buildings as micro energy-hubs delivering climate solutions](#): a short briefing.

The **multiple benefits of increasing the energy performance of buildings** were highlighted in the following reports:

- [Energy poverty handbook](#): several authors, including BPIE, share their knowledge on energy poverty and identify solutions to tackle it.
- [Safeguarding energy security in South-East Europe with investment in demand-side infrastructure](#): the study explores the vulnerability of the building sector to gas supply disruptions in specific SEE countries, introducing a newly-developed Building stock Vulnerability Indicator. A [short briefing](#) and [an article in the European Energy Innovation](#) magazine are now also available.
- [9 Ways to make the EPBD more effective](#) summarises recommendations based on earlier BPIE analysis for the revision of the EPBD.
- A piece on the multiple benefits of energy efficiency was included in the “World Energy Perspectives” published by the World Energy Council ([see page 130](#))



BPIE is featured in the highlights video for this year's [Renovate Europe Day](#) on how to boost energy renovation. As a partner of the European Utility Week 2016, BPIE's Executive Director [Oliver Rapf was interviewed on the benefits of smart buildings](#) in a second video.

DATABASES & WEBSITES



New tool: the EU Building Stock Observatory
The [EU Building Stock Observatory](#) provides a comprehensive snapshot of the building stock characteristics in EU28 and monitors the implementation of relevant Directives in Member States. It includes data from EU projects, national statistics, EPC databases, cities' sustainable energy action plans, industry and others, as well as factsheets. It aims at supporting the successful implementation of policies and programmes, better compliance and enforcement, map energy poverty areas, inform investors and was developed for the European Commission by BPIE, in collaboration with ECN, Ecofys, Enerdata and SEVEn, as well as national partners.



DEEP, disclosing investment data to reduce risk

The [De-risking Energy Efficiency Platform](#) is an open-source evidence-base with +7800 industrial and building-related energy efficiency projects from 25 data providers, including public banks, private investment funds, financial institutions and ESCOs. It provides factsheets and case studies of financial institutions deploying capital into energy efficiency. The platform, to which BPIE contributed, is a source of operational risk management information, helping project developers, financiers and investors assess the risks and benefits of energy efficiency investments by increasing transparency, easing performance monitoring and benchmarking.



ExcEED website now live

The EU-funded project ExcEED – standing for “European Energy Efficient building district Database”-, just launched its [website](#). The project will collect actual buildings' energy performance data and provide information to designers, energy managers and policy-makers. Four exciting new tools will be published later in the project. Find it on Twitter @ExcEED_H2020

FOCUS ON

What will the "Clean Energy for all Europeans" package do for buildings?

On November 30, the European Commission released important pieces of the European energy legislation. The package covers energy efficiency, renewable energy, the electricity market, consumers and governance rules for the Energy Union and will shape the European Union’s climate and energy legislation beyond 2020. BPIE prepared summaries and direct links to each piece as a [guide through the documents, highlighting the files which are relevant from a building's perspective.](#)

[A more detailed analysis is also available.](#)

Shopping centres' renovation: technologies to improve comfort and reduce energy consumption developed in the [CommONEnergy](#) EU-funded project

- [Thermal zone optimisation](#): proposes two enhanced concepts for food stores, analysing their effect in terms of energy savings, thermal comfort and costs, including simulations.
 - [Green integration](#): presents the impact of adding vegetation on buildings and their surroundings, focusing on shopping centres. Modelling and simulations are performed to assess sensitivity, including different climate and environmental zones.
 - [Thermal and acoustic components](#): digs into design guidelines and regulations for thermal and acoustic panels in shopping centres, and presents existing technologies.
 - [Integrative Modelling Environment](#): The planning of a high-quality shopping centre retrofitting requires taking into consideration different aspects simultaneously: climate, architecture, HVAC, lighting, refrigeration, etc. Each system has an influence on the building behaviour and consequently on other systems: the IME, based on the Trnsys simulation software, allows a holistic consideration of the effects of each measure.
 - [Shopping centre energy distribution](#): presents state-of-the-art, proposed concepts and scenarios for refrigeration systems.
 - [Position paper on standardisation](#): explores EU building codes and normative instruments for energy efficiency and analyses potential legislative and normative barriers per technology, providing solutions to overcome them.
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Heat Roadmap Europe workshop, March 7, 2017

[Heat Roadmap Europe](#) organises a workshop in Brussels on March 7, 2017, where policy-makers, academia, local authorities, utilities and energy companies are invited to join. The event will focus on the recently-launched thermal atlases (available for 14 project countries, up to 90% of heat demand), heating and cooling demand detailed profiles as well as cooling technology datasheets for these countries. [Registration is open until February 20](#)

Wymagania techniczne i możliwości wsparcia dla termomodernizowanych budynków

This [report](#), only available in Polish, sets up a simplified assessment methodology for renovated single-family buildings, a financing scheme for the Polish building stock and policy recommendations that could incentivise and support deep renovation. The reports follows a [multi-stakeholder engagement process](#) debating the development of a viable renovation framework for single-family buildings in Poland.

Green Solution House wins the Active House contest

Active House Alliance, a network of companies sharing a vision of buildings that create healthier and more comfortable lives for their occupants without negative impact on the climate, recently announced the winner of the [Active House label contest](#). The jury awarded [Green Solution House](#) because of its detailed modernisation of existing buildings and educational characteristics. Three of the shortlisted projects were also awarded: Isobo Aktiv Haus in Norway, LichtaktivHaus in Germany and House at Lake Garda in Italy.

WHERE TO MEET US

- December 16, 2016: "[2 Years Renovation Pact](#)" (in Flemish), Brussels
 - January 18-19 : [Energy efficiency finance market place](#), Brussels
 - February 21: "[Step-2-Sport](#)", Brussels
 - March 1-3: The [World Sustainable Energy Days](#), Wels, Austria
 - March 7-8: The [Internet of Energy conference](#), Cologne, Germany
 - March 24: [Energy & Buildings seminar](#), Vaasa, Finland
 - September 7: [CommONEnergy final conference and award ceremony](#), Brussels
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