



CLEAN ENERGY FOR ALL EUROPEANS

Energy Performance of Buildings

Rotterdam, 30 May 2017

**CREATING JOBS & GROWTH, BRINGING DOWN GREENHOUSE GAS EMISSIONS,
SECURING ENERGY SUPPLY**



**Putting energy
efficiency first**



**Demonstrating
global leadership
in renewables**



**Delivering a fair
deal for
consumers**

**Buildings can be one of the drivers
for modernization of the sector and
its work force**

COM(2016)860 Accelerating clean energy in buildings

Under its **Skills Agenda for Europe** the Commission launched effort to help tackle skills challenges

The Commission will

- provide **platforms for sectors and workers to adapt skills to the needs of clean energy transition**
- roll out **new Blueprints for Sectoral Cooperation on Skills** within the area of renewable energy and for the construction sector with a focus on low carbon technologies
- **invite stakeholders** of the construction sector to discuss the challenges and opportunities that sustainable energy building investments represent for the sector, and how this can be further promoted

EVALUATION

EPBD is effective (will deliver the 60-80 Mtoe energy savings by 2020)

The overall architecture is working (especially for new buildings)

The NZEB sets a 'future-proof' vision for the sector and mobilise stakeholders accordingly

Cost-optimality is an efficient approach to set energy performance requirements

EPCs is a useful demand-driven market tool

Relatively limited regulatory failures

Amending Directive
2010/31/EU on **Energy
Performance of
Buildings**



Opportunities for
simplification

Decarbonisation of
buildings in the
long-term strategy

Modernisation in terms of
technological progress
towards 'smarter' buildings

Better linking them with financial
support systems

Databases can be a key instrument
for reinforced compliance



Main features of the proposal

Smart, by ensuring the use of ICT and modern technologies

Simple, by streamlining provisions that have not delivered the expected output

Supportive of building renovation, by linking policy and financing to results

Simpler and more impactful provisions – Renovation strategies



Long term building renovation strategies (Article 2a):

Provisions on long-term strategies in Article 4 of Directive 2012/27/EU (EED) in the EPBD moved in a new article 2a.



Completed by 2 new paragraphs:

- ✓ Vision of a decarbonised building stock by 2050;
- ✓ Smart Finance for Smart Buildings approach to mobilisation of investment.

Renovation of the existing building stock will create
million of jobs in the EU

Skilled and educated workforce of all levels is necessary
for the decarbonisation of the building stock

MODERNISATION AND SMART BUILDINGS

EXTENDING THE SCOPE



Smartness indicator– support uptake smart technologies

- Rating the readiness of the building to adapt its operation to the needs of the occupant, of the grid, and to improve its performance



Electro-mobility

- Gradual requirement on infrastructure for electro-mobility in non-residential buildings
- Tackling barriers in apartment blocks through pre-cabling for electric charging in residential buildings

The **digital future of the construction sector** is already addressed

Training is essential, as the digitalization of the construction sector will not turn out to become a market fragmentation

SIMPLIFICATION

NEW BUILDINGS, INSPECTIONS



Simplification of Articles 6 and 7

- The pre-feasibility study of high-efficiency alternative systems is deleted



Simplification of Articles 14 and 15

- Higher thresholds for inspections
- Introduce the possibility to replace physical inspections for buildings equipped with **electronic monitoring** (and building automation and control systems)

- Focus on medium to large buildings
- Leveraging the effectiveness of electronic monitoring

Simpler but more
demanding
provisions in
terms of skills

Smarter provisions – Technical Building Systems



An updated definition of Technical Building Systems (TBS) extending the scope of TBS to building automation and control, on-site electricity generation, on-site infrastructure for electro-mobility



Additional provisions to **better documenting the initial performance of technical building systems** and maintain their operational performance over time

Support the uptake of technical innovation and technological progress in the building sector

Technical barrier:
lack of skilled,
certified and qualified
workers

FINANCIAL INCENTIVES AND MARKET BARRIERS

TACKLING REMAINING BARRIERS



Updated Article 10 on financial incentives and market barriers

- Using EPCs to assess savings from renovations financed with public support
- Buildings frequently visited by the public (over a certain size) to disclose actual energy consumption data

Financial barrier:

lack of capacity and skills to structure bankable projects keep finance demand low

THE "SMART FINANCE FOR SMART BUILDINGS" INITIATIVE

MAJOR GOALS

More effective use of public funds

- Deploying **Financial Instruments** and flexible energy efficiency and renewable financing platforms
- Building on EFSI II blending with ESIF funds



Assistance and aggregation

- Supporting the project pipeline at EU and local level
- **Project Development Assistance** facilities
- "One-stop-shops"



De-risking

- Understanding the risks and benefits for financiers and investors
- The De-risking Energy Efficiency Platform
- Commonly accepted underwriting framework



Human capital is important

The building industry needs to deliver new and renovated buildings with a very high level of energy efficiency and use of renewable energy source

New jobs

Digitalization

Technological progress

More demanding

Financial barriers

Skills, training for sustainable construction is a very crucial parameter

Increasing need for cooperation between different professionals

Synergies will be developed with the Commission "BUILD UP Skills" initiative, which looks into the upskilling of construction sector workers on energy efficiency and renewable energy technologies, their installation and management



ENERGY UNION



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Thank you!

Athanasios Dimitrios
Policy Officer – Energy Efficiency Unit
DG ENER, European Commission