









Paula Rey García European Commission

DG Energy

ACE-BAK workshop
Architecture: Towards a Step
Change in Building Performance



SUS<mark>TAINABLE</mark> FNFRGY WFFK





European Commission

Clean Energy for All Europeans Package

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















What can we expect in terms of results?

2016 2030



The package presents a dual opportunity to speed up decarbonisation and to speed up growth and job creation.



Investment:

- extra 177bn EUR euros per year of investment from 2021 to meet 2030 climate & energy targets
- Crucial role for EFSI



Economic growth*:

- 1% increase in GDP
- 190bn EUR into the economy
- 900,000 new jobs

*Upper end of estimates



Decarbonisation:

- Carbon intensity of the economy 57% lower in 2030 than in 2015
- 72% share of non-fossil fuels in electricity generation in 2030

FOR ALL EUROPEANS









How do we get there?

THE RIGHT REGULATORY FRAMEWORK FOR POST - 2020

Giving a clear signal to investors that the clean energy transition is the growth sector of the future, both through:

adapting our regulations and putting on the table an enabling environment.





The Smart Finance for Smart Buildings Initiative





Policy conclusions for 2030



Building renovation has to do more

- → Review of EPBD
- → Review of Art. 7 EED



Financing has a more important role to play

→ Smart Finance for Smart Buildings



Digital/ICT has a big potential to contribute

- → Capture behavioural change potentials
- → Contractually guaranteed energy savings as business model
- → Capture demand response potentials





Looking forward: **next generation** of building policies?

- Lack of long term vision for the existing building stock
- Need for modernising building codes to better support smart and user-adapted building systems



- Improve links between legal tools and financial support
- Address energy performance (energy efficiency & renewables) more systematically







The proposal to revise the EPBD: better buildings, faster

• Smart- supporting ICT, smart building technologies and infrastructure for e-mobility



Simpler



• Supportive of building renovation











Long term **renovation** strategies reinforced



Long term building renovation strategies (Article 2a):

Article 4 of Directive 2012/27/EU (EED) → new article 2a EPBD

Completed with:

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

Working in synergy with Article 7 of the EED







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)







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 nonresidential buildings
- Tackling barriers in apartment blocks through pre-cabling for electric charging in residential buildings







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

Updated Article 20 on information

Simplifying recommendation requirements

Annex II on independent control systems

Clarifying statistical methodology





Calculation of energy performance Combining energy efficiency and renewables more effectively



Clarification of Annex I

- Improve transparency and consistency in the way energy performance is determined at national or regional level
- Take into account the importance of the indoor environment
- Consideration of renewable energy sources







Considering a broader, most holistic perspective?



- **Non-energy benefits** of better performing buildings part of the Impact Assessment and informing the Clean Energy Package: health, well-being, asset value, productivity, etc (see Annex IV EPBD IA)
- The energy performance of buildings during their operation is one element of the much broader environmental performance of a building over its life-cycle
- **Policy options assessed** in the Impact Assessment included amending the cost-optimal methodology to include additional benefits (e.g. asset value, comfort, indoor environmental quality)
- Revised EPBD: Annex I updated to improve transparency in the way energy performance is determined at national or regional level and to take into account the importance of the indoor environment





Implementation Directive 2010/31/EU Making progress

- Adoption of the EPBD standards, a tool for Member States' implementation
- Reporting progress: national cost-optimal calculations
- Achieving the nearly zero-energy building targets: Commission guidelines for Member States
- Good practices document <u>http://ec.europa.eu/energy/sites/ener/files/</u> <u>document s/</u>
 <u>5 en autre document travail service part1 v</u>
 <u>4.pdf</u>
- Concerted Action: from IV to V
- Upcoming: NZEB targets, 2018 cost-optimal calculations, reinforcement of EPC

implementation

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Good data is gold!



EU Building Stock Observatory

https://ec.europa.eu/energy/en/eubuildings



Thank you for your attention

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EUROPEAN COMMISSION

https://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition