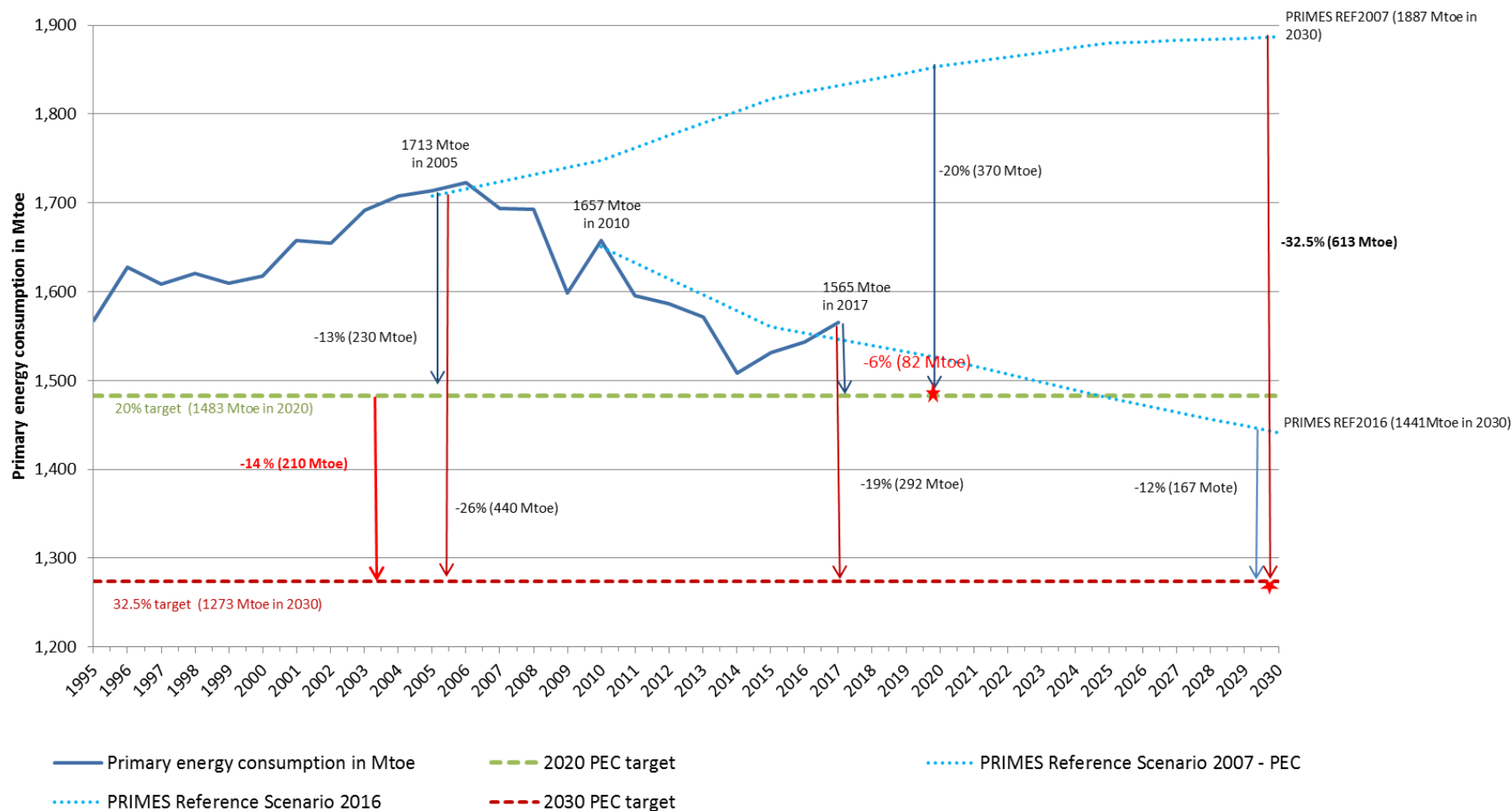




Revised Energy Performance of Buildings Directive

European Commission- DG Energy
Energy Efficiency Unit
Buildings & Finance Team

EU 32.5% Primary Energy Consumption Target



THE RIGHT REGULATORY FRAMEWORK FOR POST – 2020



Energy Union Governance



Energy Efficiency (Energy Efficiency Directive, European Performance of Buildings Directive)



Renewables (Revised Renewable Energy Directive)



New Electricity Market Design (including Risk Preparedness)



Energy prices and costs report



Energy Efficiency Directive

32.5% energy efficiency target for 2030



Ecodesign Working Plan 2016-2019

- List of new product groups
- Contribution to circular economy objectives



Energy Performance of Buildings

- Supportive of renovation
- Smarter – ICT, smart buildings
- Simpler



Energy efficiency update:

- Revised **Energy Performance of Buildings Directive** agreed and published – 19 June 2018, entry into force – 9 July 2018.
- Revised **Energy Efficiency Directive** agreed and published – 21 December 2018, entry into force – 24 December 2018.
- Revised **Tyre labelling regulation** adopted (2 May).
- In preparation - **revised or new ecodesign & energy labelling regulations:**
 - *household and commercial fridges, dishwashers, washing machines, electronic displays, lighting*
 - *external power supplies, motors, industrial fans, transformers, servers and welding equipment*

EPBD review: focus on buildings – for good reasons

FACTS



75% of the housing stock is energy inefficient, missing the benefits of increased renovation.



Renovation rates are too low and renovation depth is too shallow.



Need to accelerate and finance building renovation investments.



Tapping the potential of smart building technologies.

Main outcomes of the revision

A STRENGTHENED DIRECTIVE

- ✓ Stronger **long term renovation strategies** for Member States, aiming at decarbonisation by 2050 and with a solid financial component.
- ✓ Enhanced **transparency** of national building energy performance calculation methodologies.
- ✓ Targeted support to **e-mobility** infrastructure deployment in buildings' car parks.
- ✓ Reinforcement of **building automation**: additional requirements on room temperature level controls, building automation and controls and enhanced consideration of typical operating conditions.
- ✓ A **Smart Readiness Indicator** for buildings.

Focus on electro-mobility

AN IMPORTANT CONTRIBUTION TO TRANSPORT DECARBONIZATION



Additional provisions to support the deployment of the EU infrastructure for electro-mobility (Article 8)

- ✓ Provisions on minimum number of charging points (depends on building type)
- ✓ Targeted **exemptions** (e.g. for SMEs).
- ✓ **Simplification** of the deployment of recharging points (including - permitting procedure).
- ✓ Requirement for the installation of ducting infrastructure in new and major renovated buildings with more than 10 parking spaces

Focus on inspections & smart technologies

A GREATER ROLE FOR SMART TECHNOLOGIES



Inspections on heating & air-conditioning systems are updated (Articles 14 and 15)



Thresholds for inspections are set up at **70 kW** for both heating and air-conditioning systems.



installation of **building automation and control systems** in large non-residential buildings by **2025**

- with an effective rated output of more than 290 kW
- by 2025
- where technically and economically feasible



Additional requirements on the installation of **self-regulating devices** for room temperature level control in new buildings or when heat generators are replaced.

Focus on the Smart Readiness Indicator

RAISING AWARENESS ON SMART TECHNOLOGIES

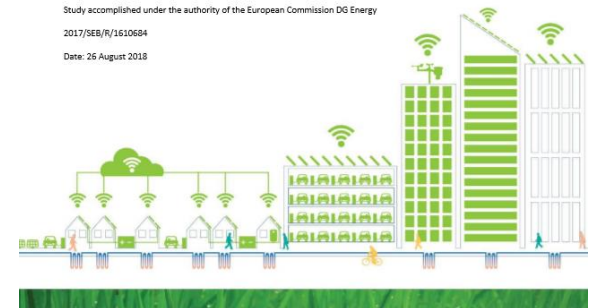
- ✓ “An optional common Union scheme for rating the smart readiness of buildings” (Article 8(10) amended EPBD)
- ✓ Establishment thanks to:
 - A delegated act for **definition and calculation methodology** and;
 - an implementing act for **implementation modalities**
- ✓ The indicator is **developed by the Commission**, with the support of **technical studies**:
 - 1st technical study: March 2017 – August 2018
 - 2nd technical study: started in December 2018
- ✓ Extensive consultation of Member States and stakeholders

SUPPORT FOR SETTING UP A SMART READINESS INDICATOR FOR BUILDINGS AND RELATED IMPACT ASSESSMENT FINAL REPORT



VITO: Stijn Verbeke, Yixiao Ma, Paul Van Tichelen, Sarah Bogaert, Virginia Gómez Oñate
Waide Strategic Efficiency: Paul Waide
ECOFYS: Kjell Bettgenhäuser, John Ashok, Andreas Hermelink, Markus Offermann, Jan Groezinger
OFFIS: Mathias Usler, Judith Schulte

Study accomplished under the authority of the European Commission DG Energy
2017/SEB/R/1610604
Date: 26 August 2018



Provisions already in place

A GREATER MOBILIZATION OF INVESTMENTS

- ✓ **Minimum energy performance requirements**
 - Building, component and system level
 - Revised at regular intervals
 - Set according to the cost-optimal methodology
- ✓ **Nearly zero-energy buildings (NZEBs)**
 - Public buildings by end of 2018
 - Rest of buildings by end of 2020
- ✓ **Energy Performance Certificates**
 - Obligatory for new buildings and buildings sold or rented
 - Must be shown in advertising media

The "Smart Finance for Smart building" Initiative

A GREATER MOBILIZATION OF INVESTMENTS



Smart Finance for Smart Building Initiative aims at **unlocking investments and private financing** through:



Aggregation of projects



De-risking



Effective use of public funding



Financing Initiatives:

- **European Local Energy Assistance (ELENA)** - Technical assistance to develop large-scale projects
- **De-risking Energy Platform (DEEP)** - database aiming at de-risking energy efficiency investments
- **EFFIG Underwriting toolkit** - guide which aims to assist financial institutions to scale up their deployment of capital into energy efficiency.



Buildings

Horizon 2020 Energy Efficiency Call for proposals 2019

<https://ec.europa.eu/easme/en/energy>

Innovation Actions

- EE-1 Decarbonisation of the EU building stock: innovative approaches and affordable solutions changing the market for buildings renovation
24 proposals received for call 2018

Coordination & Support Actions

- EE-2 Integrated home renovation services * * Single beneficiaries eligible
- EE-3 Stimulating demand for sustainable energy skills in the construction sector
- EE-4 Upgrading smartness of existing buildings through innovations for legacy equipment
- EE-5 Next-generation of Energy Performance Assessment and Certification
(Innovation Action in 2019)
- EE-18 Bioclimatic approaches for improving energy performance in buildings in Africa and Europe



ENERGY UNION



Thank you!

Pau GARCIA AUDÍ
Energy Efficiency Unit
DG ENER, European Commission

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

#EnergyUnion