



European
Commission



SMART AND CLEAN ENERGY FOR ALL

World Sustainable Energy Days 2017
Paul Hodson, 3 March 2017

Energy Efficiency is the most cost-effective way of achieving Energy Union objectives...



Security of supply



Global leadership in renewables



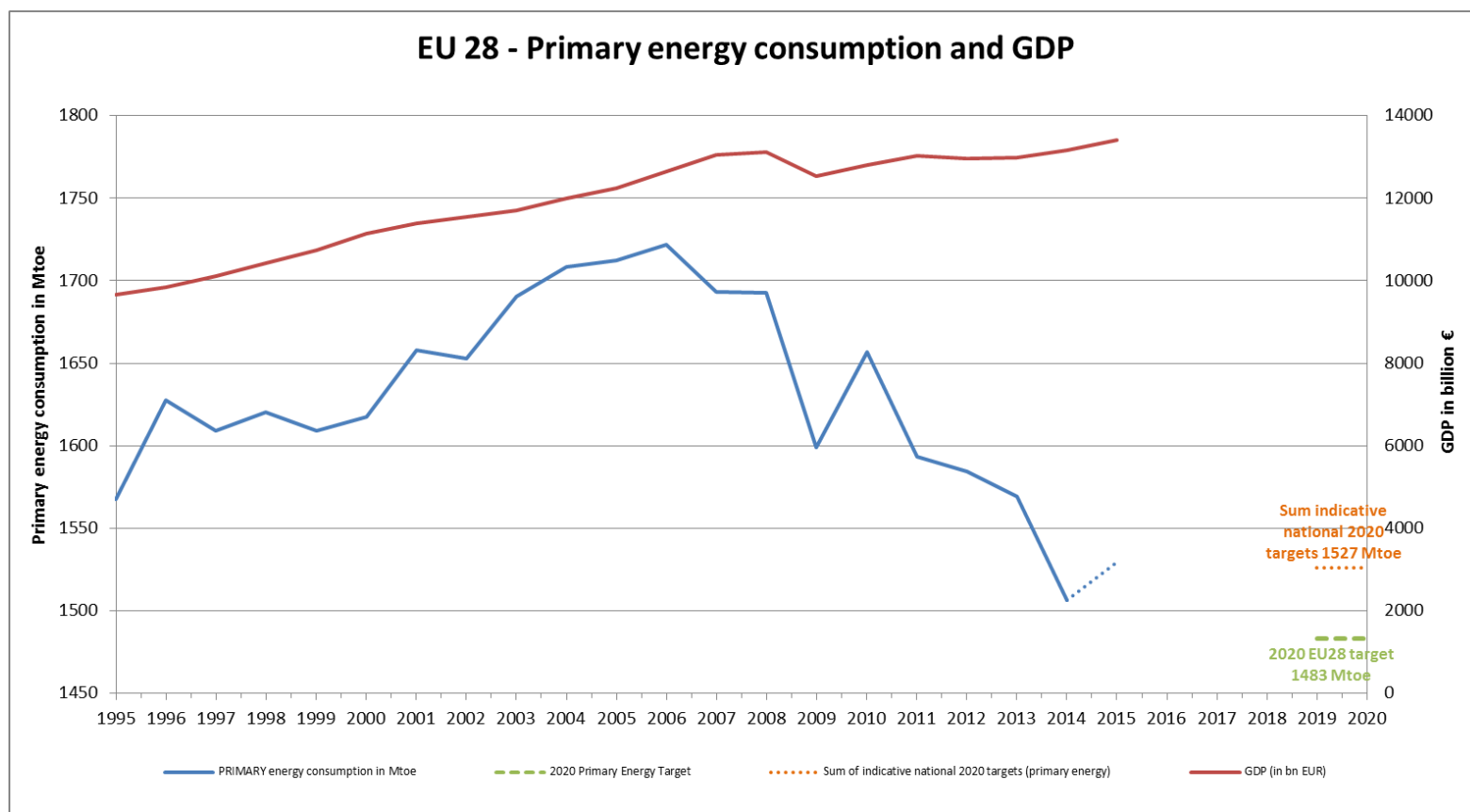
Decarbonization (Paris Agreement)



**SUSTAINABLE
GROWTH**

Promoting growth, jobs and investments

It's not a dream...



THE 30% ENERGY EFFICIENCY TARGET

WHAT ARE THE POSITIVE IMPACTS COMPARED TO A 27% TARGET?



**SUSTAINABLE
GROWTH**

**Up to 400,000 more jobs
in 2030**

**Up to 0.4% increase of
GDP in 2030 (~ 70 bn €)**

WHAT ARE THE IMPACTS OF THE WHOLE 2030 ENERGY AND CLIMATE PACKAGE COMPARED TO BUSINESS AS USUAL?



**SUSTAINABLE
GROWTH**

**Up to 900,000 more jobs
in 2030**

**Up to 1% increase of GDP
in 2030 (~ 190 bn €)**

WHAT NEW LEGISLATION?

Amending Directive
2012/27/EU on
Energy Efficiency



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



Ecodesign
Working Plan 2016-
2019



ENERGY SAVINGS

ARTICLE 7 EED



Extending existing energy saving obligations beyond 2020 (1.5%/year)



- Attracting private investment for energy efficiency renovations



Strengthening the social dimension



- Lower energy bills for consumers and reduced energy demand
- Requiring MS to consider energy poverty in designing energy efficiency obligation schemes or alternative measures



Improving coherence with the EPBD



- Increasing buildings renovation rate
- Simplifying and streamlining

METERING AND BILLING PROVISIONS

ARTICLES 9-11 EED



Contributes to the **New Deal for Energy Consumers**:



Clarification of the EED provisions on metering and billing for **thermal energy** (district heating/cooling, central supply of heat/cooling/hot water).



Ensuring **access to clearer consumption information** and more frequent feedback for consumers in multiple-apartment buildings.



New **meters to be remotely readable** by 2020, and existing meters to be adapted to be remotely readable by 2027 where this is cost effective.

ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE (EPBD)

SMARTER AND MORE SUSTAINABLE BUILDINGS FASTER



Smart

- To encourage the use of **ICT and smart technologies** ensuring buildings operate efficiently:
 - By introducing **building automation and control systems** as alternative to physical inspections;
 - By encouraging the roll out of the required **infrastructure for e-mobility** (with focus on **large commercial buildings** and excluding public buildings and SMEs);
 - By introducing a **smartness indicator** to assess the technological readiness of the building to interact with the occupants, the grid, while managing itself efficiently



Simple

- By streamlining **outdated or cumbersome provisions** that have not delivered the expected output

ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE (EPBD)

SMARTER AND MORE SUSTAINABLE BUILDINGS FASTER



Supporting an increased renovation rate

- **Strengthened** provisions on national **renovation strategies**, with a long term vision and more detailed financial mechanisms
 - Provisions in Article 4 of Directive 2012/27/EU (EED) are now part of a new article 2a
 - Completed with: (1) Vision of a **decarbonised building stock** by **2050**; and (2) Smart Finance for Smart Buildings approach to **mobilisation of investment**.
- Creating a **stronger link** between financial measures, energy performance certificates and the quality of renovation – Article 10;
- Gather **good quality data** on the energy consumption of the building stock – Article 10;
- Improve **transparency and consistency** in the way energy performance of buildings is determined at national or regional level – Annex I.

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



ECODESIGN AND ENERGY LABELLING

NEW DEVELOPMENTS



New Ecodesign Working Plan 2016-2019 includes a list of new product groups (building automation and control systems; electric kettles; lifts; refrigerated containers; hand dryers; high pressure cleaners; photovoltaic systems) and how ecodesign will contribute to circular economy objectives



Guidelines for voluntary agreements to facilitate industry pursuing self-regulation as an alternative to legislation



Clarifying the rules for verification tolerances (amending most existing ecodesign and energy labelling regulations) to strengthen compliance checking by Member States



Minimum energy efficiency requirements for air heating and cooling products



Standardisation requests in support of ecodesign measures for solid fuel boilers and local space heaters

Energy Savings



Existing Measures:

Energy savings equivalent to the primary annual energy consumption of Italy by 2020



New Measures:

Energy savings equivalent to the primary annual energy consumption of Sweden by 2030



Benefits for Consumers

Ecodesign policy means

€490 Savings

On household energy bills each year