

Commission





### The Clean Energy Package: EED and EPBD – What's in for Energy Efficiency?

Paul HODSON, Head of the Energy Efficiency Unit, DG ENER, European Commission EUFORES IPM18 on RE and EE (20 October 2018, Vienna)

- **2. The new framework**
- 3. Don't forget 2020!
- 4. Issues for the future



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More energy savings mean:

- less GHG emissions
- less gas imports
- fewer people in energy poverty
- more jobs
- higher GDP
- better air quality
- buildings we love to be in...

(we have Member State estimates for most of these)



# **Energy efficiency and renewable energy complement each other:**

- more wind and solar → less energy needed for electricity generation
- less final energy consumption → easier to have a high share of renewable energy
- faster and deeper building renovation → more efficiency and more on-building renewable energy



# Why doesn't energy efficiency come automatically?

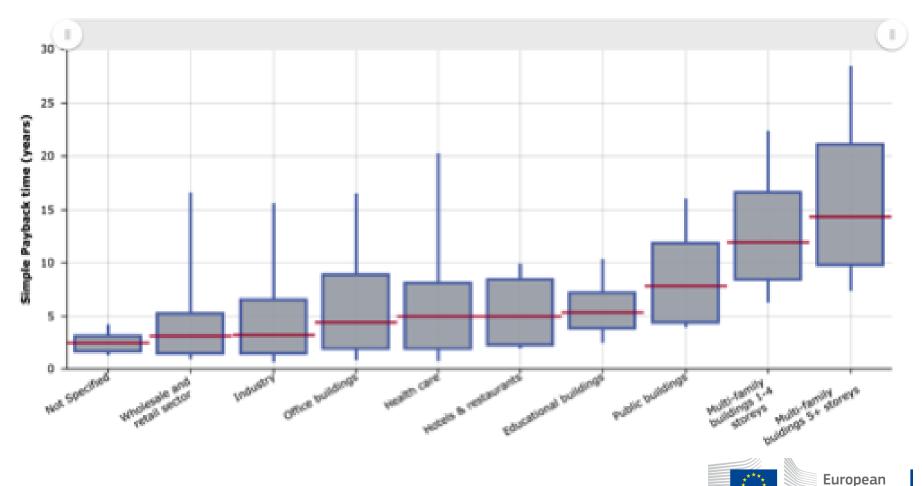
(1) Energy efficiency needs investment...

(2) ... energy efficiency investments offer attractive returns...



### Saved from: https://deep.eefig.eu/viewcharts/buildings/

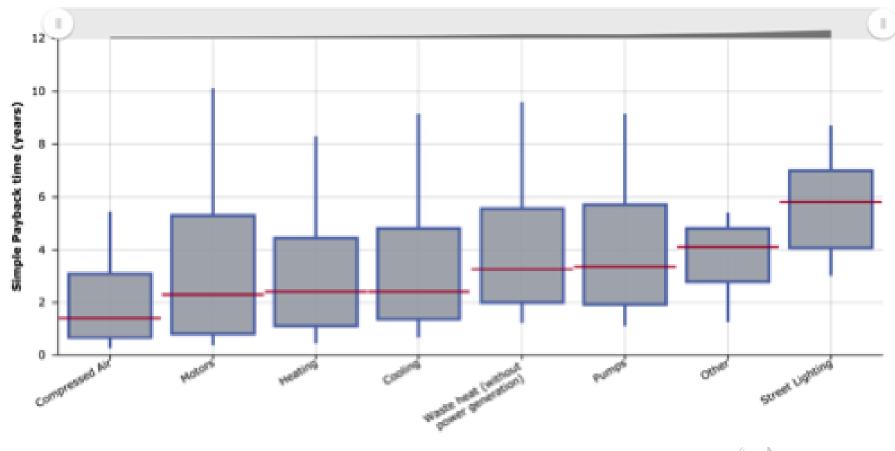
#### Distribution of payback time on 10%, 25%, 75% and 90th percentiles - Building types



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### Saved from: https://deep.eefig.eu/viewcharts/industry/?country=EU

#### Distribution of payback time on 10%, 25%, 75% and 90th percentiles - Measure types





European Commission ...but...

(3) ... the literature on behavioural discount rates shows that these returns are not seen as enough:

- Consumers average demanded payback time: 2-3 years (discount rate 43%)
- Industry average demanded payback time 2-3 years (discount rate 46%)

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European Commission

### ... SO...

### (4) ... public action is needed



## **2. The new framework**

## 3. Don't forget 2020!



# Themes of EU energy efficiency policy

1) Set a **framework** for action: EU *target* 

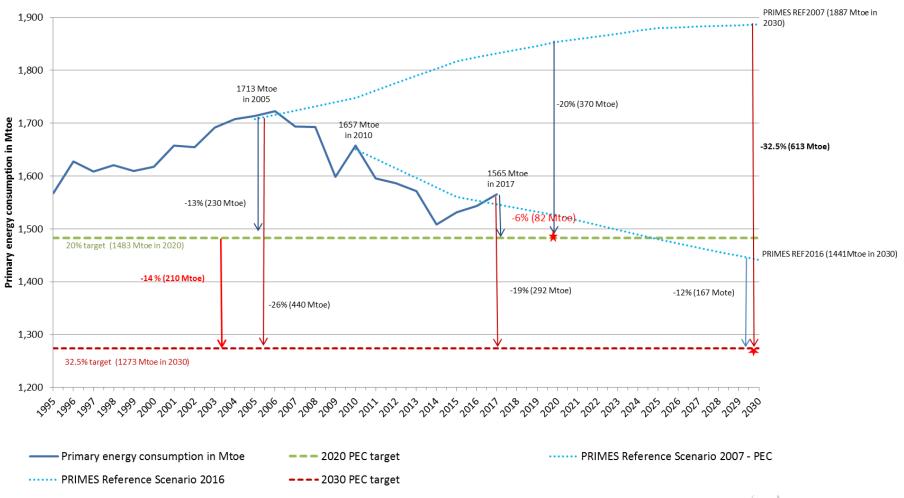
2) **Information** - so that *when* a household or business decides to buy/renovate/replace a product/system/building, they are able to compare the efficiency of different choices

3) **Minimum requirements** – so that the available choices all *make sense* 

4) Incentives to speed up decisions to invest



#### Framework for action: EU target: 32.5%





### **EED and EPBD - new actions for Member States**



- (1) Decide national contribution to the EU's
  32.5% target include it in draft National Energy and Climate plan, December 2018 (EED Art. 3)
- (2) National strategy for **decarbonising buildings** by 2050, including finance plan & energy poverty (EPBD Art. 2a)
- (3) Strengthen Energy Efficiency Obligation
  Schemes (or alternatives) & include energy poverty (EED Art. 7)



- (4) Express national **standards for building performance** in a way that allows crosscountry comparison (EPBD Annex I)
- (5) Remote reading of heat meters and monthly billing information for customers of district heating and residents of multi-apartment buildings (EED Art. 9-11)
- (6) Electric vehicle **charging points** in buildings with 10 or more parking spaces (EPBD Art. 8)



### Meanwhile: action at EU level

- (1) Labels and performance requirements for **products**
- Performance requirements for vehicles (cars & CO2 now also lorries)
- (3) **Capacity building** for Member States and cities (new sub-programme under LIFE from 2021)
- (4) **Smart readiness indicator** for buildings (EPBD Art. 8)



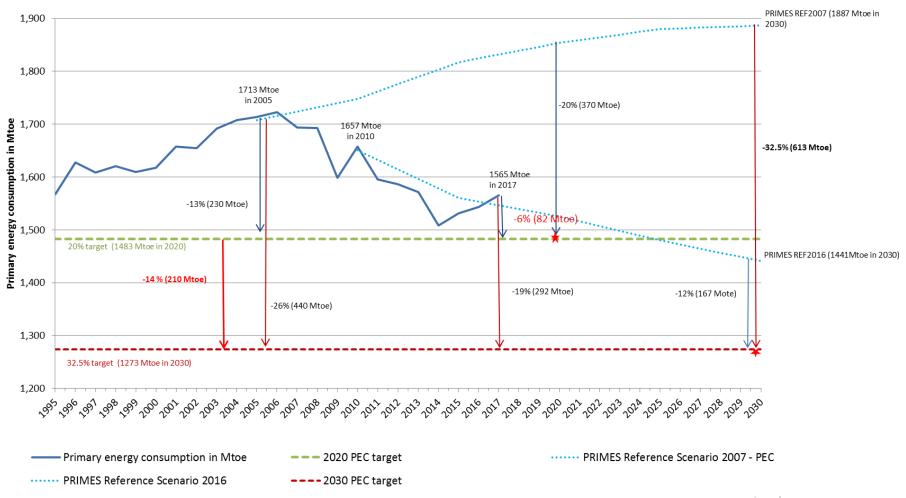
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## Mobilising more efforts for 2020:

(1) Good legislative implementation:

- **Market surveillance** of product standards (EU can support)
- Energy performance certificates for buildings sold or rented (EPBD)
- Minimum standards for **building renovation** (EPBD Art. 7)
- Monitoring and verification of energy savings (EED Art. 7)
- Opportunities from energy audits of big companies (EED Art. 8)
- (2) New actions? (Member States Task Force)
- (3) Invest in public buildings (revision of Eurostat accounting rules)



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Julie Powell, cookery writer, Julie and Julia, **2005**:

It's always nice to go back to the folks' house [in Texas, from her flat in New York]. There's no mildew in the bathtub... There's a queen-sized bed to sleep in, no roaring semitrucks passing in the night, a hundred channels on the television, and broadband on the computer. On Christmas Eve we jack up the air-conditioning so we can light a fire.

Alain Prost, racing driver, interview in Le Soir, 25 August **2018**:

- Do you think that young people are less interested in Formula 1 today?

- Certainly... In my day, everyone was interested in cars. The car was a symbol of freedom and of status... It's a bit different today. My 22-year old daughter passed her test last year, but she isn't specially interested in cars.



### CHALLENGES

- Must we try to change **behaviour**? (are technical changes not enough?)
- Is **transport** *a monster that cannot be beaten* Prof. Werner Brog, 1996 ?
- **Finance**: why is no-one knocking on my door trying to sell me energy efficiency?



### PPORTUNITIES

OCTA+

101010

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**Cities** as partners

### Internet of things/big data

### Thank you - paul.hodson@ec.europa.eu



