



European  
Commission



# CLIMA 2019

## Session: BACS

### supported performance

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*

## 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.

## Provisions already in place

### ARTICLES WITHOUT CHANGES

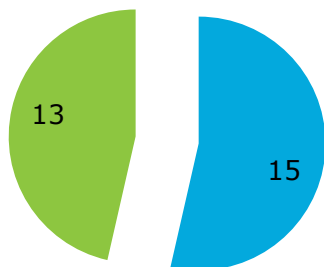
- ✓ **Minimum energy performance requirements**
  - Building, component and system level
  - Revised at regular intervals
  - Set according to the cost-optimal methodology
  
- ✓ **Nearly zero-energy buildings (NZEBs)**
  - Public buildings by end of 2018
  - Rest of buildings by end of 2020
  
- ✓ **Energy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

## Inspection of Heating and Air-conditioning systems

### CURRENT SITUATION

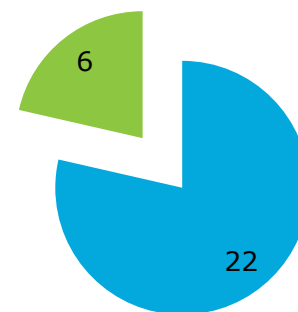
#### Heating systems

■ Inspections ■ Alternative Measures



#### Air-conditioning

■ Inspections ■ Alternative Measures



## INSPECTIONS AND BUILDING AUTOMATION

### A GREATER ROLE FOR AUTOMATION



**New provisions on self-regulating devices (Article 8(1)) and update of TBS definition (Article 2(3))**



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



**BACS** in the definition of Technical Building Systems:

"building automation and control system" means a system comprising all products, software and engineering services that can support energy efficient, economical and safe operation of technical building systems through automatic controls and by facilitating the manual management of those technical building systems;"

## INSPECTIONS AND BUILDING AUTOMATION

### A GREATER ROLE FOR AUTOMATION



**Inspections on heating, air-conditioning and combined systems are updated (Articles 14 and 15)**



**Thresholds** for inspections are set up at **70 kW**



**Wider scope** – combined systems



**Alternative measures** to mandatory inspections



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



Exceptions for buildings under agreed energy performance criterion (subject to equivalence) or buildings with BACS



## REQUIREMENTS ON BACS

### A GREATER ROLE FOR AUTOMATION



#### **Installation of building automation and control systems (BACS)**

i.e. systems that comply with the definition given in Article 2(3a) of the EPBD and has all of the capabilities listed in paragraph 4 of Articles 14 and 15



Requirements apply to all (i.e. new and existing) non-residential buildings above the threshold:

- Scope: at least heating, air-conditioning, combined heating / air-conditioning and ventilation
- It is for Member States to detail in which specific cases feasibility could not be ensured



In **large non-residential buildings**:

- with an effective rated output for heating, air-conditioning, combined heating and ventilation, combined air-conditioning and ventilation of more than 290 kW
- by 2025
- where technically and economically feasible

## 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)

<https://smartreadinessindicator.eu/>

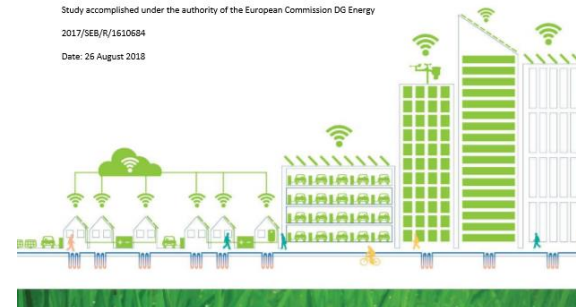
- ✓ Establishment thanks to:
  - A delegated act for **definition and calculation methodology** and;
  - an implementing act for **implementation modalities**
- ✓ The indicator is **developed by the Commission**, with the support of **technical studies**:
  - 1<sup>st</sup> technical study: March 2017 – August 2018
  - 2<sup>nd</sup> 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 Uszar, Judith Schulte

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# Thank you!

**Pau GARCIA AUDÍ**  
Energy Efficiency Unit  
DG ENER, European Commission

**#EnergyUnion**