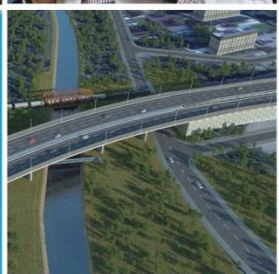
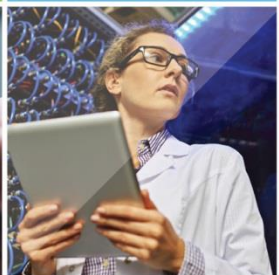




European  
Commission



# Revision of the EPBD and Smart Readiness Indicator

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# Clean Energy for All Europeans Package

## 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

- Binding 30% 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;

## 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.



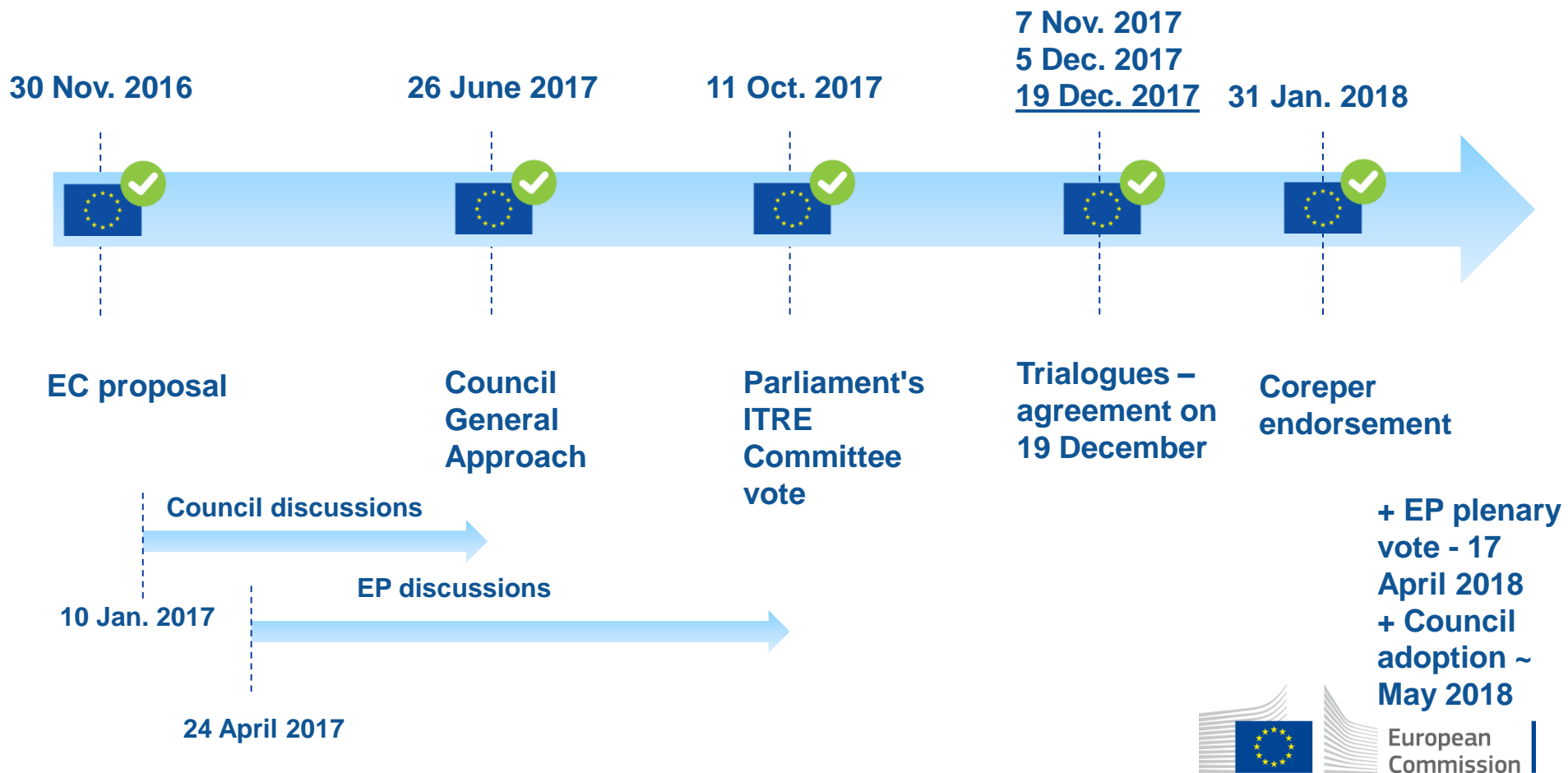
Need to accelerate and finance building renovation investments.



Tapping the potential of smart building technologies.

## EPBD review: the process

### FROM EC PROPOSAL TO FINAL TEXT



## Main outcomes of the revision (provisional agreement)

### A STRENGTHENED DIRECTIVE

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

## Smart Readiness Indicator (provisional agreement)

### RAISING AWARENESS ON SMART TECHNOLOGIES



**New provisions of the amended EPBD require the establishment of an optional European Smart Readiness Indicator (SRI) scheme for buildings.**

- ✓ The SRI would be established through legal acts for the definition and calculation methodology, and for the technical modalities of implementation, by 31 Dec. 2019.
- ✓ Motivation: recognition of progress towards smart building systems and their added value for building users, energy consumers and energy grids.
- ✓ The SRI shall support technology innovation in the building sector, raising awareness on benefits from ICT and smart technologies.
- ✓ The SRI would be a cost-effective measure that can lead to significant impacts on the energy efficiency of the EU building stock.

## Active and interactive buildings

### KEY ASPECTS



An indicator to highlight key functionalities or capabilities along three main aspects.

## Smart Readiness Indicator - SRI

Measure the technological readiness of your building



1



Readiness to

adapt in response to the needs of the occupant

2



Readiness to

facilitate maintenance and efficient operation

3



Readiness to

adapt in response to the situation of the energy grid

## Smart readiness indicator supporting study

ENER/C3/2016-554- "Support for setting up a Smart Readiness Indicator for Buildings and related impact assessment"

Website

<https://smartreadinessindicator.eu/>

Consortium



Waide Strategic Efficiency



Aim

Provide technical support to the DG Energy in order to feed the negotiations and decision process regarding potentially setting up a **'Smart Readiness Indicator for Buildings'** (SRI).



*Recognition + incentive for the integration of cutting edge ICT-based solutions for energy efficiency into buildings, which can assist in creating more healthy and comfortable buildings with a lower energy use and carbon impact, and facilitate the integration of renewable energy systems.*

Timeline

March 2017 – July 2018



## Smart readiness indicator supporting study

### STATUS

**TASK 1** 'Catalogue' of smart ready services: first version available

**TASK 2** Definition of smart ready indicator(s): first draft methodology available

**TASK 3** Stakeholder consultation: ongoing

**TASK 4** EU Impact assessment: started

- Public website <https://smartreadinessindicator.eu/>
- First stakeholder meeting Brussels 7 June 2017
- Consultation on background document and first progress report
- Workshops at EPBD Concerted Action
- Second stakeholder meeting Brussels 21 Dec 2017

## SRI: Proposition for a catalogue of smart ready services

### 11 SMART SERVICE DOMAINS

Domains	Services
Heating	12
Domestic Hot Water	5
Cooling	9
Mechanical ventilation	8
Lighting	3
Dynamic building envelope	3
Energy Generation	4
Demand Side Management	17
Electric Vehicle Charging	14
Monitoring and Control	11
Varia / Miscellanea	



86

3 services related to artificial lighting control



## SRI: Proposition for a calculation methodology

A flexible framework

### In progress: methodological development

- Select smart services to be included
- Determine cardinal or ordinal smartness performance metric
- Value the impact of smart services



**MULTI-CRITERIA ASSESSMENT,  
POTENTIALLY INCLUDING WEIGHTING INTO AGGREGATED INDICATOR**

### 8 impact fields were provisionally defined

- Energy savings on site
- Flexibility for the grid and storage
- Self generation
- Comfort
- Convenience
- Health
- Maintenance & fault prediction
- Information to occupants

## SRI: Next steps

### TOWARDS THE ESTABLISHMENT OF THE SRI



#### **A progressive and inclusive process towards adoption.**

- ✓ The deadline for adopting the legal acts establishing the SRI should be 31 December 2019.
- ✓ The development of these acts should be led by the European Commission services, with the support of dedicated technical studies.
- ✓ This process will be inclusive, involving extensive consultations of stakeholders (already started) and Member States.
- ✓ Your contributions are most welcome!

Consult the results from the ongoing technical study and register as a stakeholder:

<https://smartreadinessindicator.eu/>

Next stakeholder meeting: 29 May 2018 in Brussels.



**Thank you!**

**Sylvain Robert**  
**Buildings team**  
**Energy Efficiency Unit**  
**DG ENER, European Commission**

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