



# **De-risking and impacting on Building Renovation**

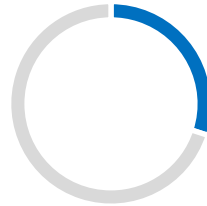
**EEMI Bauhaus 18.1.2021**

E. Piantoni

Sector Forum Energy Management CEN CENELEC

# The relevance of the Building sector worldwide

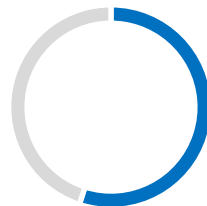
30%



3.100 Mtoe

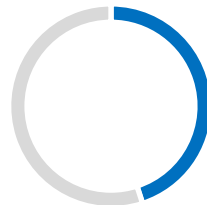
Final energy  
consumption

55 %



Electrical energy  
consumption

45 %



CO<sub>2</sub> emission  
(heating)

# Enhanced Transparency Framework



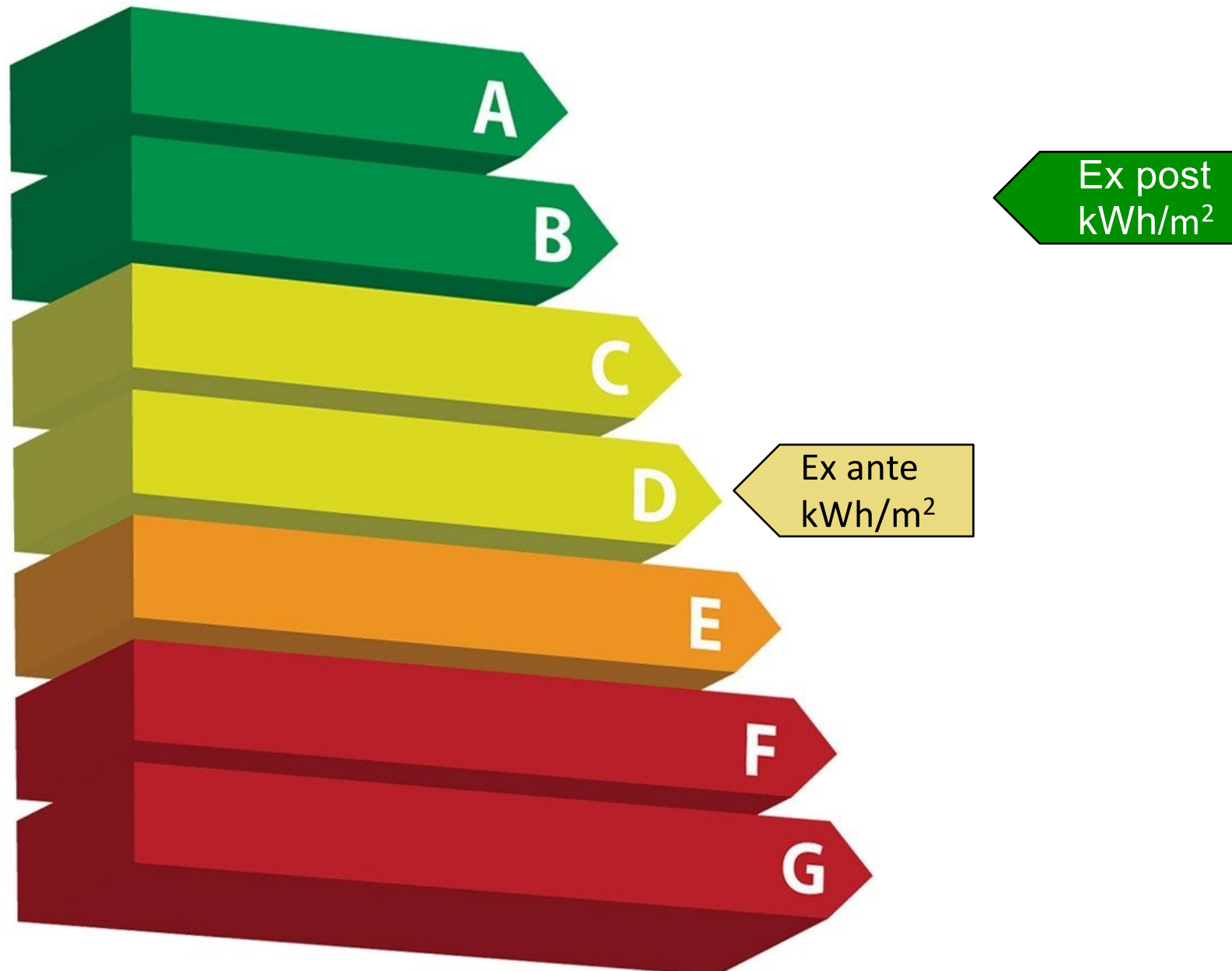
United Nations  
Climate Change Secretariat



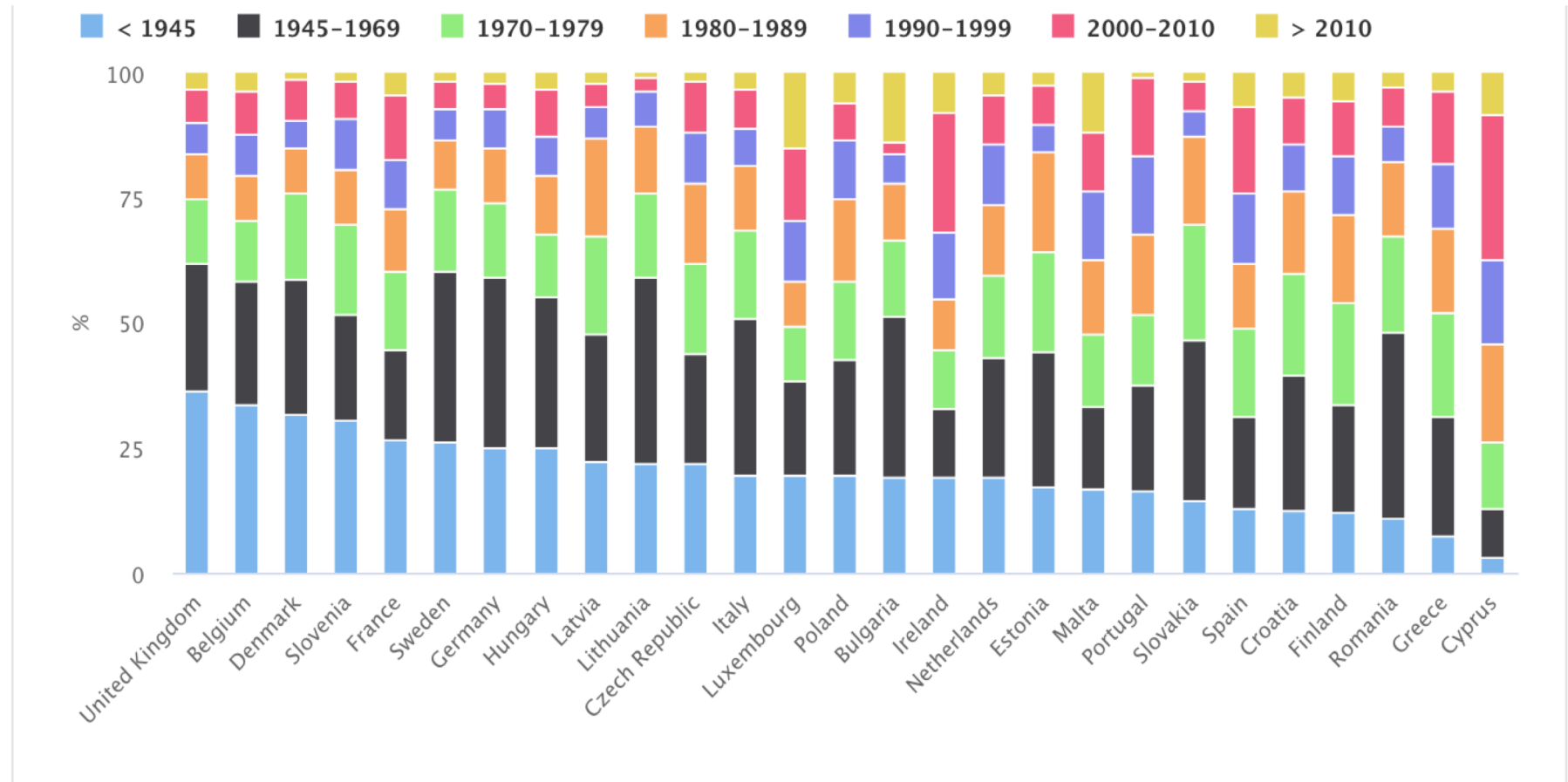
## **Joint IEA UNEP UNFCCC Workshop on Energy Data for Climate Policy**

*Strengthening energy data for an effective Enhanced Transparency Framework  
under the Paris Agreement*

# The success of climate policy depends on accurate and reliable data – Materiality is key



# 80% of the building stock was built before 2000 and will be there in 2050



Sources: CBS - CZSO - Cystat - DESTATIS - GUS - INE - INSEE - ISTAT - NIS - National Plan - Odyssee - REN - SCB - STATBELECON - STATEC - Statistical Yearbook - Statistics DK - Statistics EE - Statistics FI [Notes](#)

Source: [https://ec.europa.eu/energy/eu-buildings-factsheets\\_e](https://ec.europa.eu/energy/eu-buildings-factsheets_e)

# The unmet needs

- quality data availability, accessibility
- reduce bias to improve data quality on risk assessment
- from static to dynamic approach to further assess risk management
- transparency, accuracy, reliability, traceability, auditability

# EED 2012/27/EU provides additional guidance to correlate building energy performance and green mortgages default?

## Article 11

### Cost of access to metering and billing information

1. member States shall ensure that final customers receive all their bills and billing information for energy consumption free of charge and that final customers also have access to their consumption data in an appropriate way and free of charge.

## Annex V

### Paragraph 2 (c)

the activities of the obligated, participating or entrusted party must be demonstrably **material** to the achievement of the claimed savings

## Annex V

### Paragraph 4 (f)

calculation methodology, including how additionality and **materiality** are to be determined and which methodologies and benchmarks are used for engineering estimates

# Current data mining for default risk assessment

- Energy Performance Certificate
- Energy Efficiency
- Renewable Resources
- Energy Audit
- Guarantee of origin
- Energy Performance Contracting
- .....

CEN CENELEC - EN STANDARDS

- Accounting
- Reporting
- Disclosing

- Static Simulation analysis
- Static Financial Rating

- Building renovation improvement metric:**
- EPC
  - proxies

IASB FASB

PROPRIETARY TOOL

ICRE

IIRC – SASB- GRI- CDP

# Integrated data mining aligning metered energy and environmental pillars for default risk assessment

- Energy Performance Certificate
- Energy Efficiency
- Renewable Resources
- Energy Audit
- Guarantee of origin
- Energy Performance Contracting
- .....

Metered energy consumption and CO<sub>2</sub> emission

BRIDGE  
THE  
MISSING  
LINK TO  
DYNAMIC  
ASSESSMENT

- Automated Accounting
- Automated Reporting
- Automated Disclosing

- Dynamic Simulation analysis
- Dynamic Financial Rating on actual cash flow
- Standardized approach

**Building renovation improvement metric:**

- EPC
- proxies
- metered consumption

2nd EEMI Bauhaus event  
january 18th 2021

Energy Efficiency:  
providing a data-hub for consumers

Marco De Min

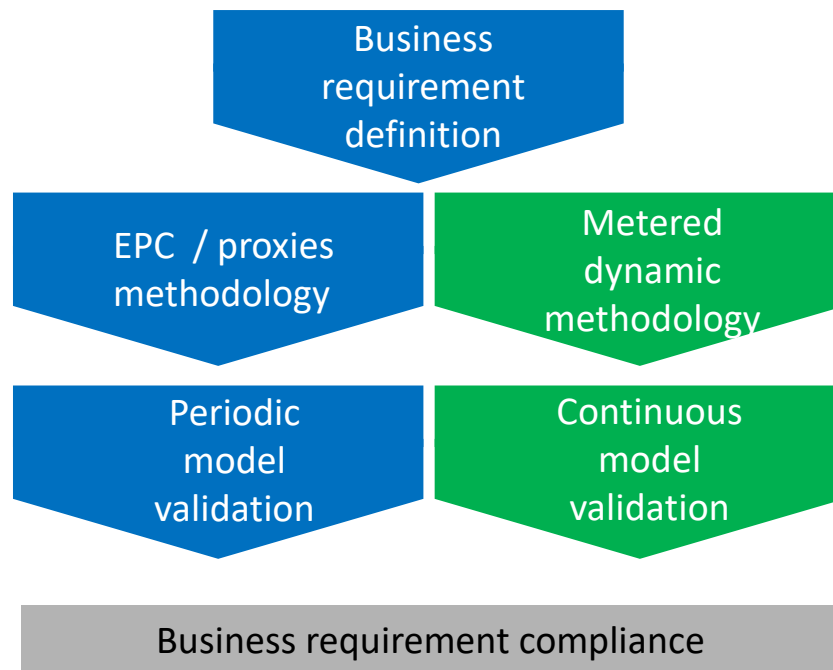
Italian Regulatory Authority for Energy and Water - ARERA  
Retail Market directorate

**Confidential!**

*Staff of the Regulatory Authority have the duty to disclaim in public that only personal opinions are presented when speaking in public at conferences, workshops and seminars.*

Ethical code of ARERA

# Proposal for Pilot test



## Benefits

- end to end automated risk assessment using metered high quality data
- dynamic financial and non financial accounting, reporting and disclosure
- transparency, traceability, reliability
- materiality



*Thank you*

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