De-risking and impacting on Building Renovation

EEMI Bauhaus 18.1.2021

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Sector Forum Energy Management CEN CENELEC
The relevance of the Building sector worldwide

- **Final energy consumption:** 30% of 3.100 Mtoe
- **Electrical energy consumption:** 55%
- **CO₂ emission (heating):** 45%

Source: IEA
Enhanced Transparency Framework

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

Source: 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.

Annev 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

Building renovation improvement metric:
- EPC
- proxies

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

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 CO₂ 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

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

Business requirement definition

EPC / proxies methodology

Metered dynamic methodology

Periodic model validation

Continuous model validation

Business requirement compliance
Thank you

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