ALDREN
Alliance for Deep RENovation in buildings.

European Common Voluntary Certification Scheme, the tool for harmonized comparability European wide

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Background
of the
„European Common Voluntary Certification Scheme for energy performance of non-residential buildings“ (EVCS)

Article 11 (9) of the EPBD

The Commission shall, in consultation with the relevant sectors, adopt a voluntary common European Union certification scheme for the energy performance of non-residential buildings ...
What does ALDREN EVCS offer?

- **Support for common language** - link of energy performance with different market actors:
  - ✓ financing
  - ✓ assets valuation
  - ✓ comfort and indoor air quality

- **Policy instrument** e.g. for subsidies (reliable certificate issued before and after renovation)

- **Create a business opportunity**
  - ✓ running the certification at the EU level
  - ✓ training of experts around EU
  - ✓ existing voluntary schemes operators (BREEAM, HQE, IVE, DGNB ...)

09:29
The main technical pillars for harmonized comparability European wide

- Calculation methodology
- Indicators
- Performance scale and reference
- Content and template of European Voluntary Certificate
CALCULATION METHODOLOGY

✓ **CEN standards 2017 (M/480)** = the reference methodology

✓ software (methodology) close to the CEN standards (the **hourly calculation step** and the **scope**)

✓ **typical use** (shows intrinsic potential of building)

✓ **climate of the specific location** instead of national standard climate (JRC hourly climate data)

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**Table — Summary of main modular structure of EPB set of standards**

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<th>Submodule</th>
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The modular structure of new CEN standards 2017

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**Advantage:**

✓ **all products taken into account in the same way**

✓ **Common EU market** for
  - software,
  - training of experts
THE ENERGY PERFORMANCE INDICATORS
holistic approach for the building classification (rating)

= non-renewable primary energy balance

with potential compensation by exported energy

THE ADDITIONAL INDICATORS
• total primary energy,
• final energy / delivered energy,
• share of renewables
• needs for heating and cooling
• CO₂ emissions (environment)
THE ENERGY PERFORMANCE SCALE

✓ one comparable scale for all countries

✓ one scale for all building categories

✓ identify and highlight the best buildings (Voluntary schemes are front runners)

✓ suitable for existing buildings - provide appropriate resolution to show improvements (shift to better class)
One reference point ≈ Cost optimal level (2013) located in the upper limit of class „D“.

Current minimum requirements ≈ class B-C

Class „A“ - approximation to the NZEB definition

Relative scale - the ratio to the „reference“

Reference = value expressed in kWh/(m².a)
Common template
Energy Performance class
Award (e.g. gold, silver, bronze)

Delivered energy per carrier (costs)
Wellbeing indicators
Description of constructions / systems
Recommendations for improvement with potential energy savings – link with the building renovation passport
EUROPEAN VOLUNTARY ENERGY PERFORMANCE CERTIFICATE

THE OPTIONS FOR MARKET UPTAKE

• **stand-alone voluntary** energy performance certification, compliant with the EPBD requirements

• energy module taken up by **existing environmental certification schemes** providers (i.e. BREEAM, IVE, HQE, DGNB)

• recognized by the **policy makers** at the European, national or regional level as an **complement to the national certificates** for some purposes (e.g. subsidies, compare buildings at the EU level)
The ALDREN project aims

Example of potential large scale impact

Identification of buildings with low energy performance (classes F-G).

ENERFUND tool http://app.enerfund.eu/

Focus on high impact (large buildings of poor quality, large renovation potential ...
Join us!

www.aldren.eu

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