

The ALDREN event in the EU Parliament

Grounding the Green Deal Implementation on European standards and tools

n the 22nd January the ALDREN project (www.aldren.eu) held an event in the European Parliament together with a host MEP Ljudmila Novak (EPP Group) on the topic "Encouraging investments and accelerating the movement towards a nearly *zero-energy non-residential building stock*". The event was also endorsed by the support and participation of several Members of the European Parliament (MEPs), and the European Commission. During the welcome speech, the host MEP Ljudmila Novak indicated that "In the EU, we can be proud on many proposals and decisions, such as "Clean Energy Package", "Paris agreement" and the most recent renewed commitments to act in the area with the European Green Deal, and following the objective of net-zero emissions by 2050". However, the host MEP highlighted that "Improving the energy efficiency of buildings is and must be at the heart of the EU actions and its role and potential to contribute to the EU environmental, energy and climate objectives is significant".



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Overall, representatives from the European Parliament and European Commission stated that we need to address climate and energy issues urgently. "Our house is burning and flooding" mentioned Pau Garcia Audi, the representative from DG Energy, EU Commission. The energy poverty, health & wellbeing, the coherent application of the ambitious EU policy targets in the Member States by the building professionals, reliable and technology neutral implementation of the "Clean Energy Package" were among the topics discussed during the event. The Green Deal will very likely open the Energy Performance of Building Directive (EPBD) again, informed MEP Miapetra Kumpula-Natri (S&D Group).

The market expectations for ALDREN, encouraging investment and how the building professionals could contribute to the "renovation wave" announced in the Green Deal were discussed in a round table session moderated by REHVA President **Frank Hovorka**. Property Owner (Allianz Real Estate), Real Estate Association (EPRA), Industrials (EUROACE), Building professionals (FEANI), Service providers (EFIEES) and Environmental Organisations (OID) were panellists of the round table session.



Host MEP Ljudmila Novak (EPP) opening the ALDREN event.



MEP Miapetra Kumpula-Natri (S&D) introducing her views on tackling challenges in renovation of buildings.

In the welcome speech ALDREN consortium leader **Mathieu Rivallain** (CSTB) explained that the ALDREN project is funded by the European Union's Horizon 2020 Research and Innovation Program. The ALDREN objectives are to achieve higher renovation rates and better renovation quality of buildings by overcoming market barriers. The back-bone along the whole deep renovation process in the ALDREN project is an improved European Common Voluntary Certification Scheme (EVCS).

He underlined that it is the **right time** and the **right place** to organise such an event to discuss with key actors from the top political level (EU Parliament, EU Commission) and professionals involved in the building renovations (financial institutions, major real estate companies, building professionals and industrials), the reasons why the building renovation rate and quality is behind target and to get feedback if the solutions proposed by the ALDREN project could help to improve the situation.



Pau Garcia Audi representing DG Energy, European Commission.



REHVA President Frank Hovorka moderation a roundtable with panellist from Property Owners (Allianz Real Estate), Real Estate Association (EPRA), Industrials (EUROACE), Building professionals (FEANI), Service providers (EFIEES) and Environmental Organisations (OID).

It was the **right time** because initiatives, as the EU Green Deal and other actions related to Climate Change especially in the Building sector, are taken now at the highest level in Europe: in the Parliament, in the Council and in the Commission. Building energy renovation is planned to be highly on political agenda as a flagship while tackling climate changes.

It was also the right place for this event because the successful implementation of the ambitious EU targets on Climate Change, requires that the whole implementation chain, from the legislative level (the EU Parliament), where the objectives are defined, to the implementation on field by qualified professionals, should be coherent, consistent, unambiguous.

But when it comes to deep renovations in buildings, the implementation chain is not coherent. Today in Europe there are at least 34 different national /regional implementations of the EU policy, leading to different results regarding energy performance for the same building. The ALDREN project showed that, according to the assumptions taken, the main numeric indicator of energy performance requested by the Energy Performance of Building Directive (EPBD) could vary from 73 kWh/m².year to -5 kWh/m².

Following the facts above, the following directions were discussed:

- How under such conditions a coherent policy could be defined?
- How under such conditions the building professionals can optimise building renovation by using the best EU practise?
- How under such conditions there could be a technologic neutral level playing field and fair competition for products and systems EU wide?

Besides coherent implementation, the participants underlined that deep renovation is a complex issue, intertwined, facing technological and non-technological barriers. MEP Ljudmila Novak mentioned the need for a common language to describe the quality of buildings, and the role of EPC's sharing best practise. MEP Miapetra Kumpala-Natri underlined the need to take care about health and well-being when renovating buildings. She reported about the experience made in Finland.

Mathieu Rivallain concluded that Energy performance (EP) assessment of buildings should:

- 1. be **comparable** all over Europe,
- 2. be **reliable** (expectation should be reach in reality),
- 3. improve health & wellbeing (indoor air quality, climate change resilient buildings),
- 4. **define roadmaps** to nearly Zero Energy Building
- 5. favour communication between all involved stakeholders
- 6. provide indicators to financial support to achieve EU climate targets.

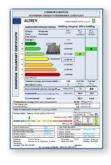
Johann Zirngibl (CSTB), former ALDREN Consortium Leader, presented how the ALDREN outcomes could provide answer to these market requests.



Presentation of ALDREN project and various inputs on buildings renovation presented by (left to right) Johann Zirngibl (CSTB), moderator Mathieu Rivallain (CSTB), Pau Garcia Audi (DG Energy, European Commission), host MEP Ljudmila Novak (EPP) and MEP Miapetra Kumpula-Natri (S&D).

1) EU Comparability: ALDREN Energy Performance Certificate (EPC)

Energy Performance Certificates (EPC) could play a key role as information to building owners to trigger renovation, for the assessment of improvements achieved by renovation and for quality benchmark for financial instruments. The ALDREN EPC:



- uses best practise, based on CEN and ISO standards.
- defines a common scale to be used EU wide, based on cost optimum,
- is **technology neutral** and consider the **newest innovative technologies** (e.g. on-site wind turbines)
- provides **underlying indicators** (energy needs, final energy, renewables, etc),
- takes into account the interaction between the building and the grid,
- integrates the resilience of the building to climate change.

2) Reliability and confidence – avoid a "Building gate"

The sad experience in the car industry shows that it is fundamental that the expected and promised results should be reach on field. The building sector should avoid a "building gate". Buildings should be designed for performance and not only for compliance. The energy bills should be lower, the Greenhouse gas emissions should be reduced in practice. The ALDREN procedure **verifies** the actual performance **by measurements**.

Preserving and improving health & wellbeing – building must be climate change resilient



People spend most of their lives in buildings. Fourteen Green Building certification schemes have been reviewed to analyse the parameters used to assess the Indoor Environmental Quality (IEQ). ALDREN classified them

into **four major IEQ components TAIL:** Thermal (T), Acoustic (A), Indoor air quality (I), visual environment (L). TAIL is "Levels" compatible. The ALDREN TAIL indicator allow to **communicate easily on IEQ**.

4) Building passport – Roadmap to nZEB – Green Deal compatible (2050 ready)

The Building Renovation Passport (BRP) is **complementary** to the Energy Performance Certificate (EPC). It provides a step by step **renovation** roadmap until the



nearly zero energy building level. The buildings renovated today must be EU Green Deal compatible, 2050 ready. ALDREN provides a renovation roadmap, without look-in effects and suboptimal renovation.

5) ALDREN Common language – from the boiler room to the board room

Nobody can trigger deep renovation alone. ALDREN indicators & outcomes facilitate the communication between the key market players, "**from the boiler room to the board room**". ALDREN **links** the **energy quality**

of buildings to three financial indicators as costs, risks and value and reduces risk for finance providers by resumed information.



6) Indicators for financial support to achieve EU climate targets – linking EU funding to EU tools

The financial sector will be the motor of the EU Green Deal and a fundamental leverage to trigger building renovation. Eligibility rules should be defined in a lending policy taxonomy where building professionals can build on when implementing the EU policy. The European Investment Bank (EIB) described in the document "EIB ENERGY LENDING POLICY Supporting the energy transformation <u>Draft</u> 24 July 2019" how such rules could look like. For example, the eligibility rules for building renovation define what will be funded: "All capital expenditure related to energy efficiency improvements to the building envelope and building systems. The expected energy savings can be estimated through an energy audit, comparison between the energy performance certificate before and after the works, or any other transparent and proportionate method acceptable to the Bank".



This definition is still quite general and should be detailed, taking into account the market request for a common, holistic and reliable approach. In some Member States, national funding is already linked to national standards. Therefore, when it comes to EU level, EU funding should be linked to European standards. The ALDREN project could contribute with the common Energy Performance Certificate, common indictors and best practise based on CEN and ISO standards to define precisely the requested building quality in lending rules.

The host MEP Ljudmila Novak closed the meeting with four main takeaways on how to possible boost buildings renovation. Firstly, encouraging the need for a common European scale and common digital tools for reliable assessment methodologies, taking into account different national conditions and implementations per each member state. Secondly, providing a common language of all included sectors and to make sure to take into account the needs of citizens and their role as they are crucial target group while designing renovation solutions. Thirdly, working together to encourage comparability of energy performance ratings across the EU and finally, highlighting the need for a clear financing rules in financial institutions, such as European Investment Bank. Investors should be informed well in advance about the eligibility rules of the bank's lending policy, like the minimum level of ambition of projects or that all technologies are properly deployed.



At the end of the event, participants expressed their wish that this event should be the starting point of fruitful future cooperation between all stakeholders supported at the highest political level.