The ‘Renovation Wave’ initiative

Dimitrios Athanasiou
Policy Officer “Energy Efficiency: Buildings and Products”
Directorate-General for Energy
European Commission
The European Green Deal

Transforming the EU’s economy for a sustainable future

- Mobilising research and fostering innovation
- A zero pollution ambition for a toxic-free environment
- Preserving and restoring ecosystems and biodiversity
- From ‘Farm to Fork’: a fair, healthy and environmentally friendly food system
- Accelerating the shift to sustainable and smart mobility

And leave No one behind

- Increasing the EU’s Climate ambition for 2030 and 2050
- Supplying clean, affordable and secure energy
- Mobilising industry for a clean and circular economy
- Building and renovating in an energy and resource efficient way

Financing the transition

Leave no one behind (Just Transition)

The EU as a global leader

A European Climate Pact
Why renovation: buildings in numbers

Total energy consumption... 40%

GHG emissions... 36%

... were built before 2001

85%

Annual Investment gap (-55% GHG @ 2030)

275bn

85-95%

... will be still standing by 2050

The current renovation rate (~1% per year) will need at least to double to reach the EU’s energy efficiency, renewables and climate objectives.
Where are we now?

An established framework ...
- Clean Energy for All Europeans Package 2018 and 2019
- A solid basis for energy market integration, renewables deployment and energy efficiency promotion
- Existing regulatory framework and funding instruments to promote energy efficiency, building renovation and renewables deployment at building, neighbourhood and district level

... but not enough impact
- Only 11% of existing building stock undergoes renovation each year
- Renovation works only rarely address energy performance of buildings
- Currently, renovation reduces energy consumption by 1% and uptake of renewable energy remains low
- Renovation is held back by barriers throughout the value chain

Crucial role of national long-term renovation strategies
The 2030 Climate Target Plan

- EU-wide, economy-wide greenhouse gas emissions reduction target of at least 55%, including emissions and removals, by 2030 compared to 1990

- Actions required across all sectors of the economy and launch of revisions of the key legislative instruments

- Public debate in autumn 2020 to increase the EU’s contribution to the Paris Agreement before the end of the year and set the stage for the Commission to make detailed legislative proposals by June 2021

https://ec.europa.eu/clima/policies/eu-climate-action/2030_ctp_en
The 2030 Climate Target Plan: energy and buildings

- Decarbonisation of the energy system is a priority (75% of EU greenhouse gas emissions)
- 60% emission reductions by 2030 or more compared to 2015 in buildings and power sector
- Renovation rate for buildings would need to at least double by 2030
- Use of fossil fuels will fall substantially. Coal for instance decreases by more than 70% compared to 2015
- By 2030, the share of renewable electricity production will double to 65% or more
- Industry and buildings can subsequently decarbonise, with heating and cooling reaching a 40% renewable share by 2030
Updating the legislative framework

The Proposal for the Climate Law describes the process to get to the new 2030 target.

Increasing role for emissions trading. **EU Emissions Trading System’s** to be strengthened. Possibility to extend its scope to construction and transport.

**Renewable Energy Directive** will be reinforced. Use of renewable energy would increase to reach 38% to 40% of gross final consumption.

**Energy Efficiency Directive** should incorporate more ambitious final and primary energy targets. Consumption would further reduce in 2030, achieving savings of 36-37% (FEC) and 39-41% (PEC).

What is the ‘Renovation Wave’?

- Major initiative by the European Commission in the framework of the European Green Deal
- Strategic communication published on 14 October 2020, containing an Action Plan for the years to come
- Concerted action at all levels, from the local to the regional, national and European
The Renovation Wave: a centerpiece of both the Green Deal and the Recovery Plan for Europe

Create

- **12-18** local jobs per million euro invested
- **160,000** green jobs in construction

Reduce

- **-60%** greenhouse gas emissions
- **-14%** energy consumption
- **-18%** heating and cooling

**Double** the renovation rate by 2030

Renovation of **35 million** buildings
A comprehensive vision on building renovation

‘Energy efficiency first’ principle

Life cycle thinking and circular economy principles
- Reduced pressure for natural resources and greenfield construction
- Adaptable buildings resilient to extreme natural events
- Reduce water consumption, remove hazardous materials
- Address fire safety
- Promote climate resilience and biodiversity

Integration of in-built and onsite renewables

Smart buildings
- Buildings producing energy, with recharging points for e-mobility and bike parking
- Smart buildings providing essential data for city planning and services

Neighbourhood and communities
- Healthier, greener & more accessible buildings
- Interconnected neighbourhood districts
- Energy communities

European Bauhaus: a new European aesthetic that combines performance with inventiveness
Remaining barriers to building renovation

- Lack of transparent information and “hassle” for consumers
- Hurdles to access financing
- Insufficient technical expertise (in local and regional authorities and financial institutions)
- Shortage of skilled workforce
- Too many “shallow” renovations

The Renovation Wave addressing barriers

- Better information tools
- Reinforced and more accessible EU funding
- More technical assistance
- Creating green jobs, upskilling workers and attracting new talent
- High quality renovations: smart and resource efficient buildings that integrate renewables better
The Renovation Wave - Four focus areas

1. Tackling worst-performing buildings and energy poverty
   ✓ Mandatory minimum energy performance requirements

2. Public buildings showing the way: focus on schools, hospitals and care facilities

3. Decarbonising heating and cooling

4. Mobilising neighbourhood approaches
Thank you!