



# Climate-neutral housing and #Housing2030 Decarbonizing the housing stock in an inclusive and affordable way

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## #Housing2030

an initiative of



# #Housing 2030



Report launched October 2021

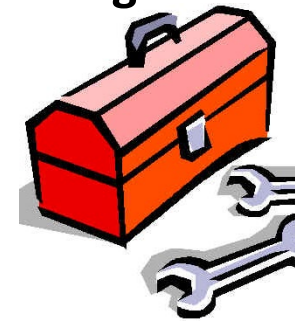
## #Housing2030: Effective policies for affordable housing in the UNECE region

A joint initiative of UNECE, Housing Europe and UN-Habitat

Focuses on solutions to the housing affordability crisis in the UNECE region, highlighting the need for strategic and coordinated policy reform to shape more effective housing systems.

Addresses four topics:

- (1) Housing governance and regulation
- (2) Access to finance and funding
- (3) Access and availability of land for housing construction
- (4) Climate-neutral housing construction and renovation



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# Climate-neutral and inclusive housing



## In developing countries

- we need to accommodate 2.4 billion new urban residents by 2050

## In the EU

- residential and commercial EU building stock account for around 36% of the total GHG emissions
- most buildings are older than 50 years and built before minimum energy efficiency standards were implemented

## In the UNECE region:

- More than 87 million people live in poor-quality dwellings
- Almost 42 million face arrears on their utility bills
- More than 52 million people cannot keep their home adequately warm
- The urban heat island effect will increase the energy demand for cooling
- Over 161 million face disproportionate housing expenditure

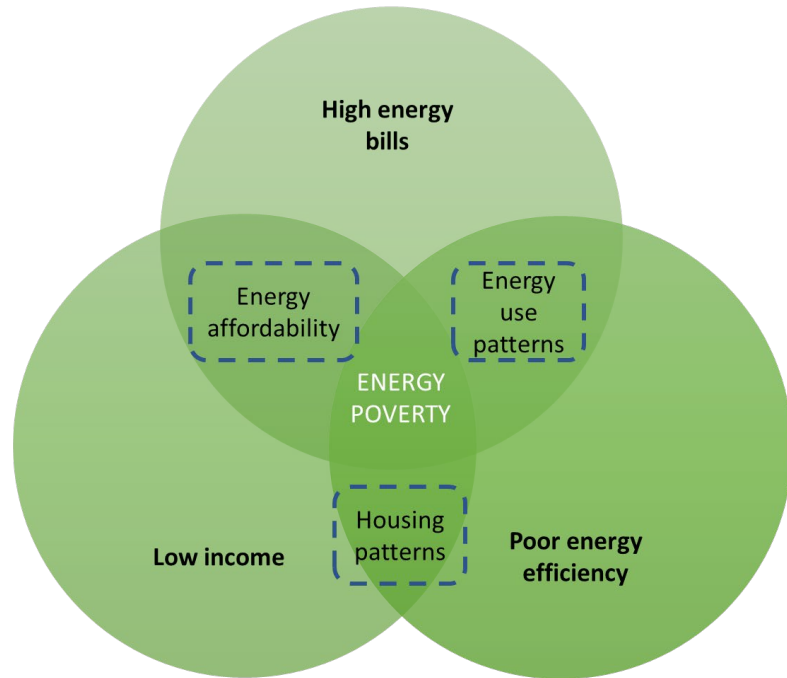


Source: United Nations Economic Commission for Europe. 2014. 'The Future of Social Housing Environmental and Social Challenges and the Way Forward'. Geneva, Switzerland.

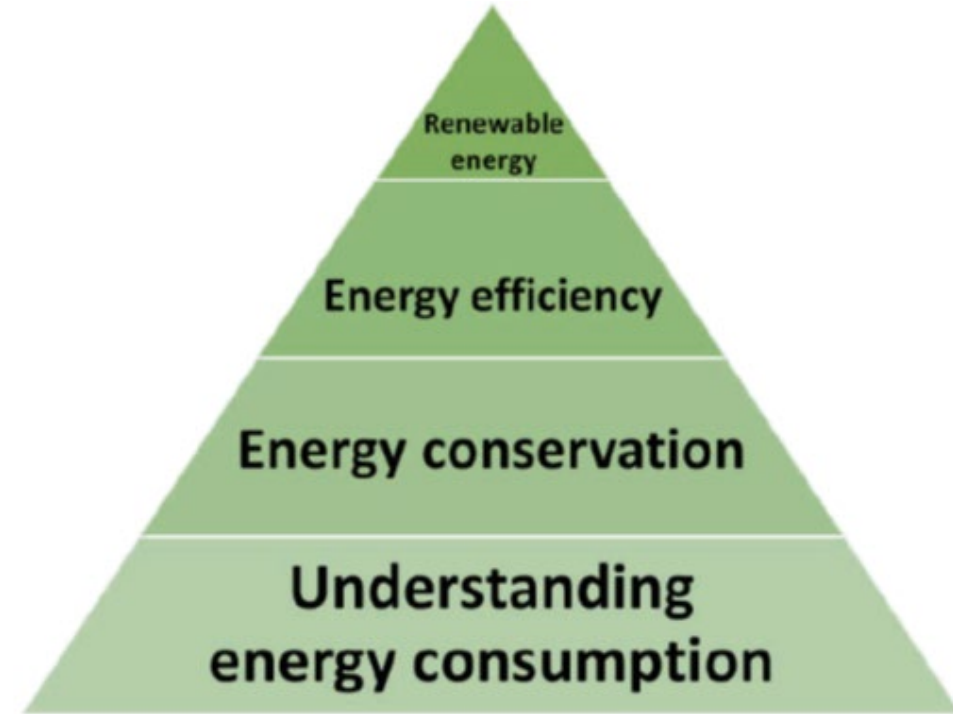


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# Understanding the drivers of energy poverty and designing appropriate tools addressing it



Source: Adapted figure from ASSIST Consortium. 2019. 'Vulnerable Consumers and Fuel Poverty Report'



Source: Buffington, D. E. (2010): The Energy Pyramid. In: Mushroom News. Volume 58, Number 5 – May 2010. In: (United Nations Economic Commission for Europe 2013)





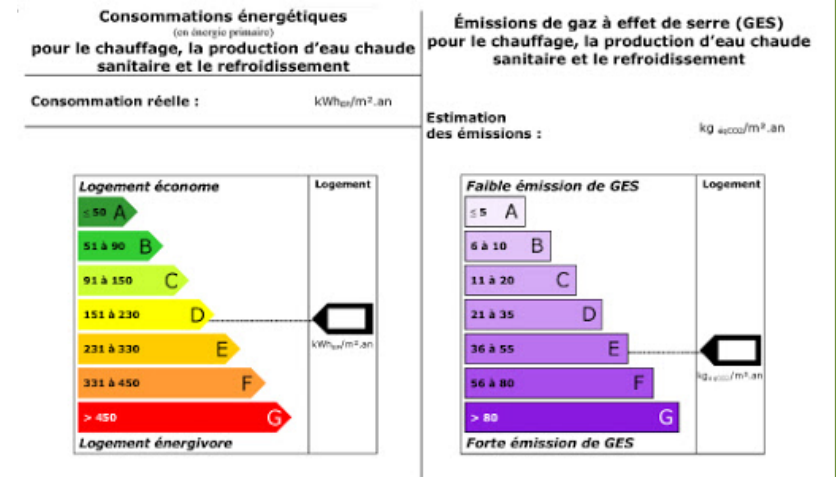
# What kind of tools are outlined and illustrated?

- National strategy, directions and agreements
- Spatial and mobility planning to promote energy-efficient homes, neighborhoods, cities, and regions
- Phasing out fossil fuel subsidies
- Procurement, incentives and support
- Regulation and certification
- Standardization and targets
- Building management and roadmaps
- Non-regulatory policy initiatives
- Capacity building and professional training
- Awareness raising amongst households



# Regulation & Standards

- **European Performance of Buildings Directive**
- **Performance based renovation targets and obligations (France).** The French Energy and Climate Act includes introducing mandatory audits as from 2022. May include a national obligation to renovate all buildings of the energy classes F and G by 2028.
- **German Building Code and Replacement of combustion units** that are older than 30 years (German Energy Conservation Act).
- **Klimat Aktiv (Austria) quality standards, building certification** concerning EE and emissions (exemplary role played by limited profit builders).
- Continuing development of **EU taxonomy** channeling investment towards **socially** sustainable renovation ensuring affordability, security and social inclusion for occupants.

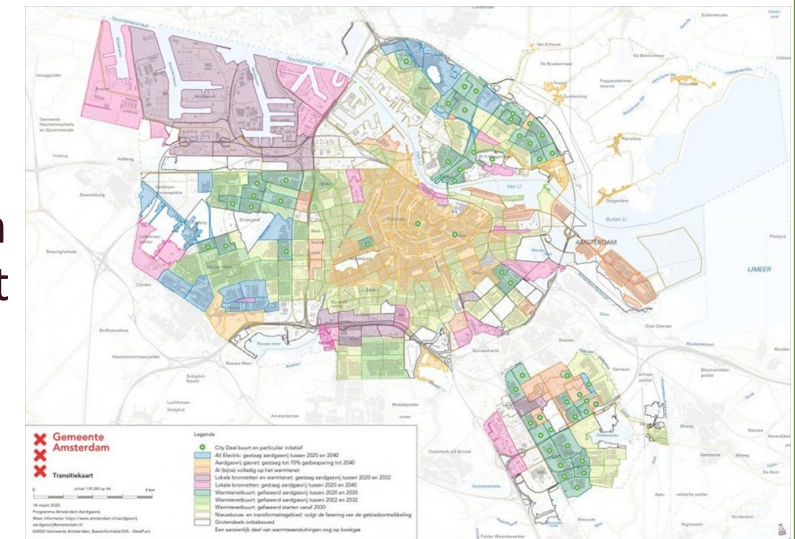




# Non-regulatory policy initiatives

Agreements and strategic plans ensure focused efforts, set targets, tailored to context

- In 2019, the Dutch established a long-term renovation agreement across sectors electricity, industry, built environment, traffic and transport, and agriculture to help achieve the climate goals. Includes phase out of natural gas as the main source of heat supply for over 7 million households in the Netherlands by 2050. As a first step, the Dutch government has set the goal to have 1.5 million households connected to a new heating system by 2030. Municipalities are in the lead to establish a **heat plan ('Warmteplan')** by 2021.
- Other countries have **tailored strategic plans**, as relevant to their housing system – e.g., Austria, Estonia, Germany, France, US and Russia.



# Financial incentives

Direct public investment provides a strong instrument: EU and State Housing Development Funds, also dedicated CO<sub>2</sub> auction proceeds, revolving loans funds and tax incentives

- Spain invests into **solar energy generation**.
- Slovenia Eco Fund uses both **non-repayable grants and favorable loans** in a revolving fund to improve the thermal insulation of residential buildings and apartments.
- The Danish National Building Foundation is investing its **revolving fund** in large renovation projects and social development plans in challenged housing areas.
- **Long-term low-interest public loans** with various conditions and target groups that differ across the provinces (SCOT, AUT, GER).
- The Housing Finance and Development Centre (ARA) in Finland provides **grants, subsidies and guarantees** to fund housing construction, purchase, and renovation.
- **Reduction of VAT or tax deduction on renovation activities**, mainly on labor costs, can be tied to affordability outcomes as in France.
- Continuing efforts to **change investment and building management culture and attitudes** – energy related renovation should not drive renovation.



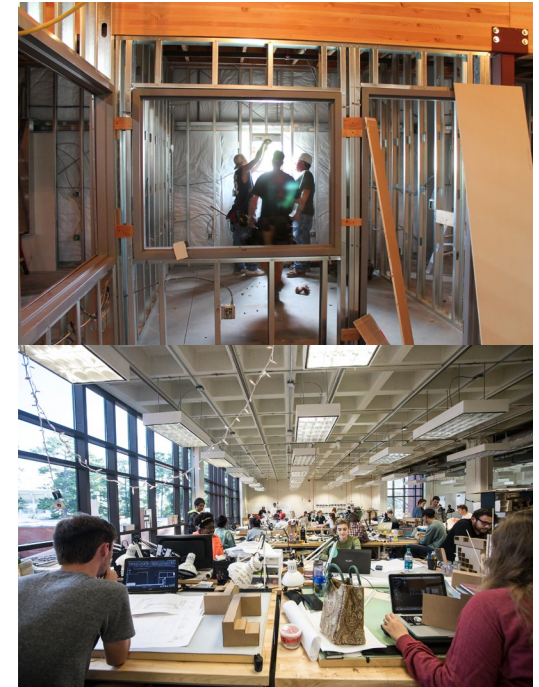


# Awareness raising and training



Ensure early and meaningful engagement of all occupiers

- **Awareness of the consequences for the inhabitants**, e.g., in terms of a bad indoor environmental (mold), structural damages and higher energy costs than theoretically necessary (heat bridges).
- **Industry training programs** ensure skills available, where needed in sufficient quality and quantity.
- **Specific master programs** on urban planning, housing design, renovation, design, life cycle costing, certification.
- **Renovation coaches , One Stop Shops and tenant councils** to guide all stakeholders to ensure they can make a difference.



# Conclusions on climate neutral policies

- Establish a national strategy to promote climate neutral, inclusive and affordable living environments.
- Coordinate spatial and mobility planning to promote energy-efficient homes, neighborhoods, cities, and regions.
- Use financing, fiscal and regulatory tools to accelerate and shape more effective, housing systems that deliver affordable, inclusive and energy-efficient housing.
- Use building resources efficiently, by balancing benefits of constructing new housing against re-use and renovation of existing housing.
- Ensure costs of renovation processes do not displace residents.
- Support the development and implementation of building standards, technologies, processes and supply-chains to promote climate-neutral and socially inclusive living environments.
- Improve knowledge of deep renovation possibilities among tenants, housing providers and private owners.

**“Place and Life in the UNECE: Regional Action Plan 2030” endorsed by  
UNECE member States October 2021**





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