



82nd session of the Committee on Urban Development,
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A broad toolkit to achieve affordable carbon-neutral and energy-efficient housing

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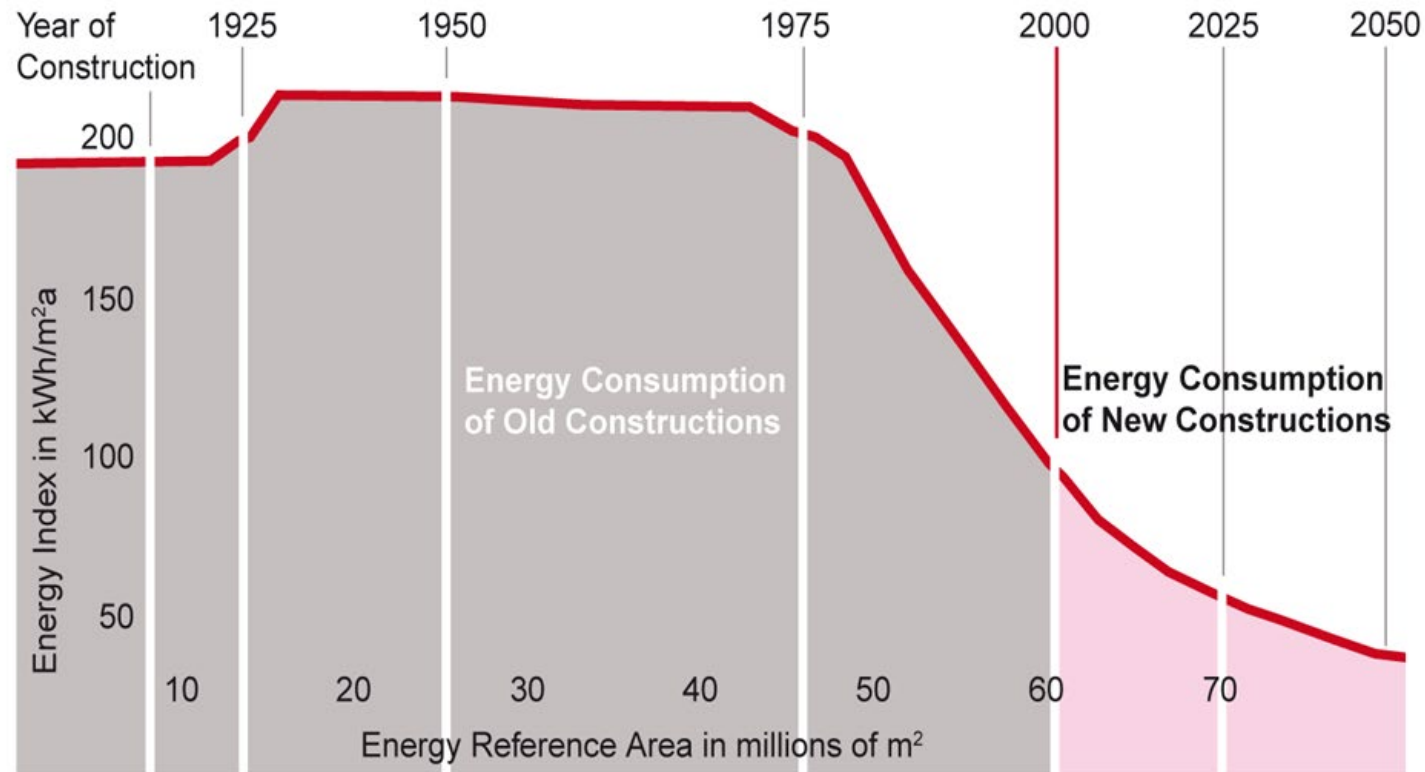
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Facts

- **In developing countries, we need to accommodate 2.4 billion new urban residents by 2050**
- **In Europe, most buildings are older than 50 years**
- **Built before minimum energy efficiency standards were implemented**



Existing buildings matter – Example of Switzerland



Facts

- In developing countries, we need to accommodate 2.4 billion new urban residents by 2050
- In Europe, most buildings are older than 50 years
- Built before minimum energy efficiency standards were implemented
- **These buildings are often equipped with fossil-based heating systems**



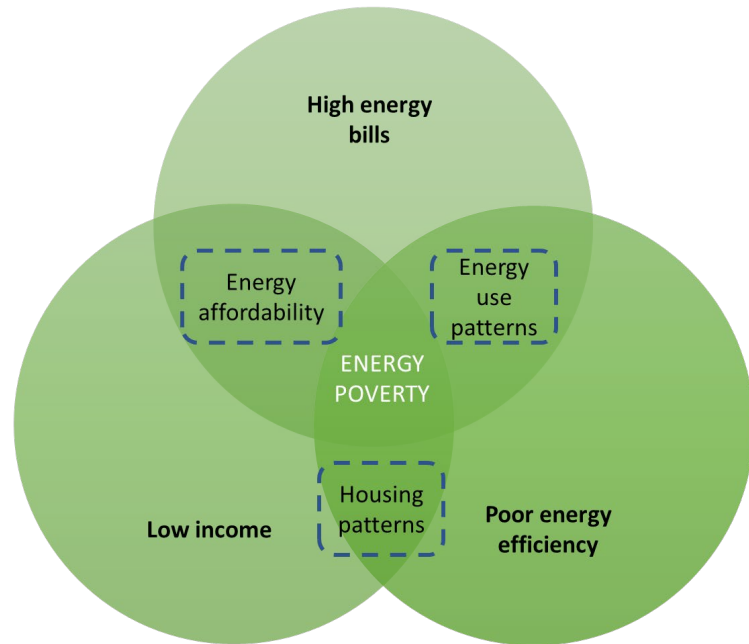
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Background

- **EU countries have committed to reducing domestic GHG emissions until 2030 by at least 55% compared to 1990**
- **The residential and commercial EU building stock account for around 36% of the total GHG emissions**
- **Two main decrees:**
(1) the Energy Performance of Buildings Directive, and
(2) the Energy Efficiency Directive including member states long-term renovation strategies.
- **Many different building technologies exist to lower energy demand and GHG emissions**



Drivers for Energy poverty



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



Energy poverty is affecting around 11% of Europeans

- 87 million people live-in poor-quality dwellings;
- 42 million face arrears on their utility bills;
- 54 million people cannot keep their home adequately warm;
- 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.





ENERGY

Gas price surges to a record high in Europe on supply concerns

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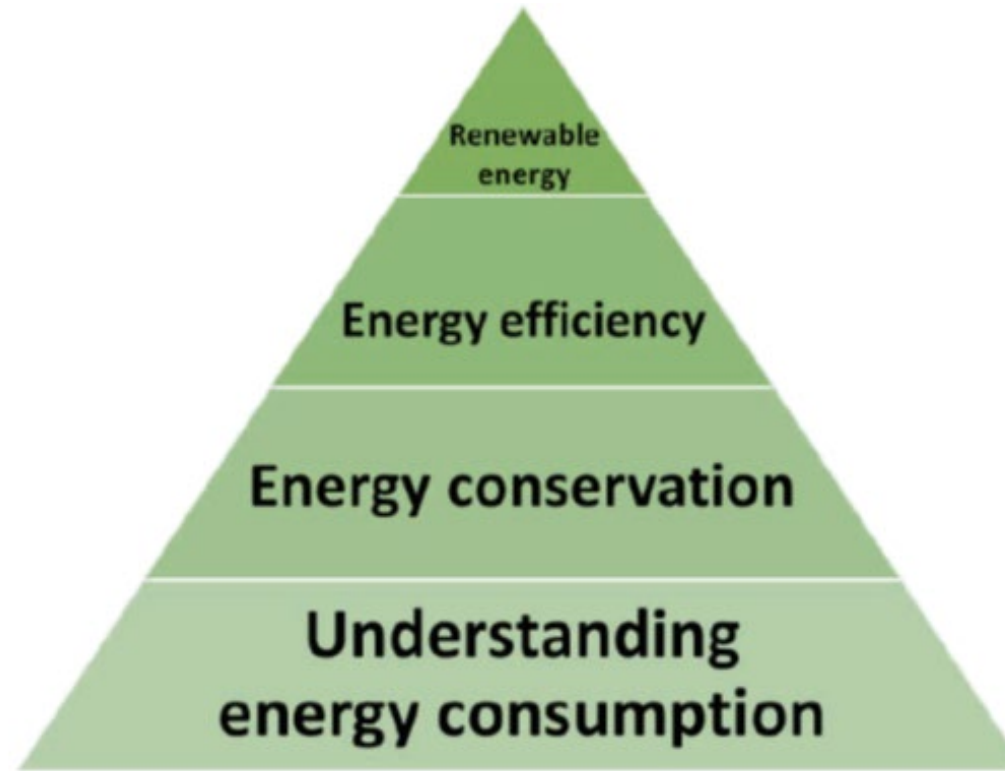
KEY POINTS

- November contracts at the Dutch TTF hub — a European benchmark for natural gas — were trading at around 118 euros per megawatt hour (MWH) just after midday in London.
- The front-month contract has risen almost 400% since the start of the year.
- Several British energy suppliers have collapsed amid the gas price crisis. September alone reportedly saw nine companies cease trading.



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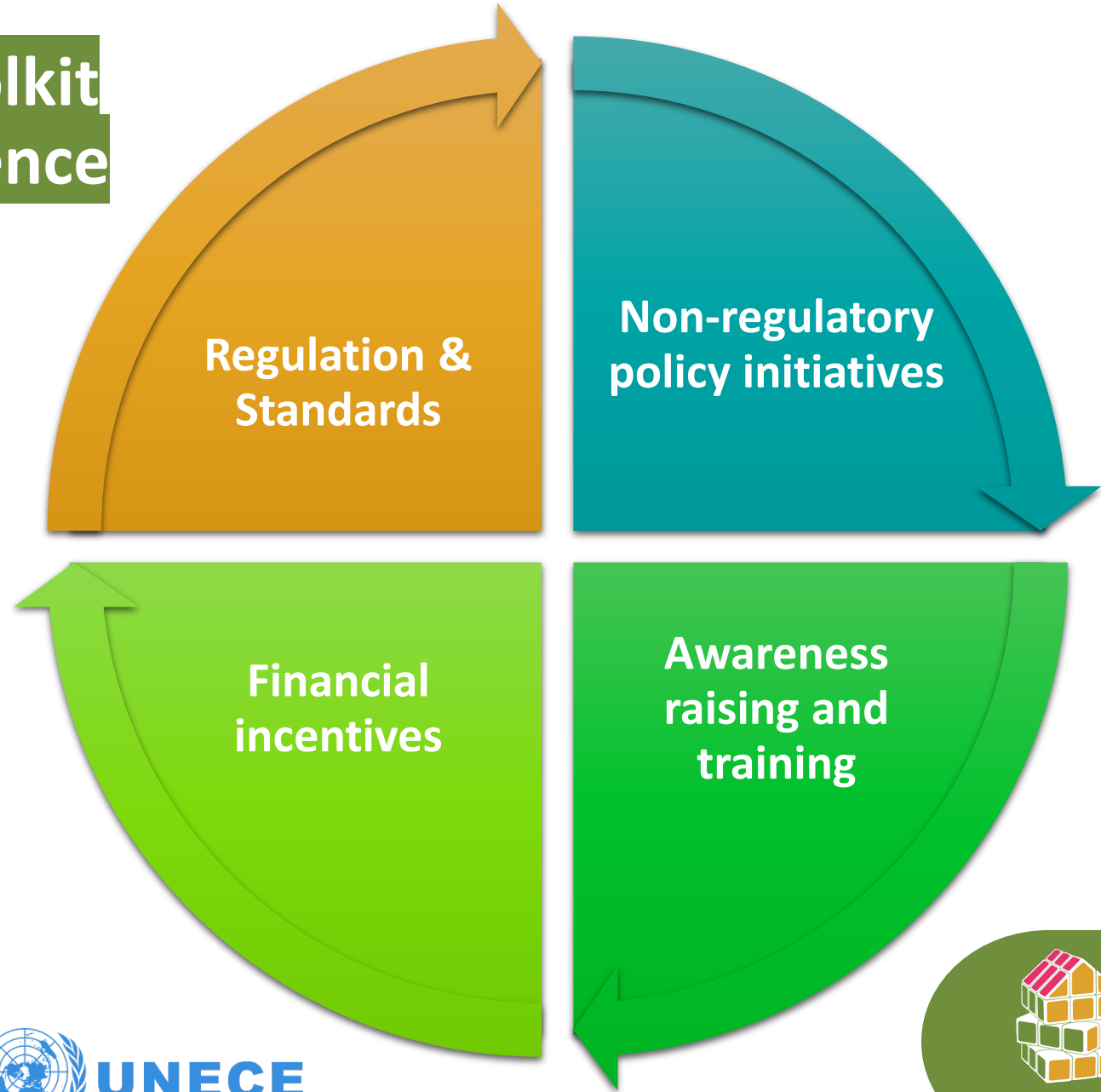
Energy Saving Pyramid



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)



A comprehensive policy toolkit is needed to make a difference



AFFORDABLE HOUSING: TIME TO THINK AND DO DIFFERENTLY

What does a successful policy tool kit need to consider?

- **Attractiveness of new built compared to renovation (floor plans, ROI, ...)**
- **Split incentive (Investor-tenant-dilemma)**
- **Labor costs are high**
- **Knowledge in the sector is very heterogenous**
- **Planned maintenance vs. reactive maintenance**
- **Lack of building related data**
- **Synergies of a multi-building scale approach not obvious and activated**





#Housing2030
Effective policies for affordable
housing in the UNECE region

The right to adequate housing is a fundamental human right, enshrined in Article 25 of the Universal Declaration of Human Rights and in Article 31 of the International Covenant on Economic, Social and Cultural Rights. It is also a key element of the Sustainable Development Goals (SDGs), in particular SDG 11 (Sustainable Cities and Communities) and SDG 1 (No Poverty). The UNECE region is home to a large and diverse population, many of whom are in need of affordable housing. This report provides a comprehensive overview of the current housing situation in the region, identifies key challenges, and offers practical policy recommendations to address them.

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Effective policies for affordable
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