Housing the Next Generation:

11 December 2023, Eric Huellen

Virtual Event
Key Challenges in 2023 and ahead

1. European residential dwellings must adapt to rapidly changing climate conditions and comply with new building energy performance requirements, to contribute towards meeting the EU’s climate goals.

2. The demographic changes in Europe, which depict different dynamics in different regions and cities.

3. Rising financing costs, driven by central banks’ efforts to counter rising inflationary pressure, puts pressure on the construction sector and the affordability of housing.
Demographic Challenges

Summary of Results
Homeowner Share & Mortgage Holders in 2022, in Percent

NOTE: countries with an asterisk * Refer to Latest Available Data, as There is no 2022 Data Available.
Source: Eurostat
Demographic Challenges

Power to build the long-term fundament to roof over the European society

- As demographics reshape the requirements from the building stock in very different ways across Europe, actual housing markets have the power to build the long-term fundament to roof over the European society and create stable assets for a united wealth and value house suited to regional needs.

- But aggregated house prices and population development showed a complex and diverse picture.

- Therefore, accurate and regional analysis is crucial for the industry.
Demographic Challenges

**EU 27 CONSTRUCTION COSTS INDICES 2015 = 100**

![Graph showing construction costs indices from 2011 to 2022.]

**TOTAL AND SHARE OF CONSTRUCTION EMPLOYEES IN EU27**

![Graph showing total and share of construction employees from 1999 to 2022.]

- **Construction Sector - Total Employment**
- **Share of Total EU Employment (Construction Sector)**
Demographic Challenges

BUILDING PERMITS AND HOUSING COMPLETIONS EVOLUTION

RESIDENTIAL TRANSACTIONS PER 1,000 ADULTS
Energy use in buildings is a significant source of greenhouse gas emissions.

Global warming and associated changes in climate will directly impact buildings.

Final energy consumption by sector, EU (% of total, based on terajoules)

- Households: 27.9%
- Industry: 25.6%
- Services: 13.8%
- Transport: 29.2%
- Other (*): 3.6%

Frequency of Natural Disasters, World (total amount)

- Drought
- Extreme temperature
- Flood
- Landslide
- Storm
- Wildfire

Eurostat, 2023

WMO, 2023
### Building Energy Performance

#### Residential energy use, EU (% of total)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space heating</td>
<td>64.4 %</td>
</tr>
<tr>
<td>Water heating</td>
<td>14.5 %</td>
</tr>
<tr>
<td>Cooking</td>
<td>6.0 %</td>
</tr>
<tr>
<td>Lighting and appliances</td>
<td>13.6 %</td>
</tr>
<tr>
<td>Other end uses</td>
<td>1.1 %</td>
</tr>
</tbody>
</table>

**Eurostat, 2023**

**Reduce heating loads:**

High-performance envelope (insulation, windows, air tightness) combined with heat-recovery ventilation

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**Catalyzing private funding for the qualitative upgrade of the energy profile of the building stock by a transparent quality label for consumers, lenders and investors**

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**Policy instrument**

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Overall effectiveness</th>
<th>Cost-effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliance standards</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Building codes</td>
<td>High</td>
<td>Medium/high</td>
</tr>
<tr>
<td>Procurement regulations</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Energy-efficiency obligations and quotas</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Demand-side management programmes</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Energy performance contracting/ESCO support</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Cooperative procurement</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Energy-efficiency certificate schemes</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Kyoto Protocol flexible mechanisms</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Taxation (on CO₂ or fuels)</td>
<td>Generally/low</td>
<td>Medium</td>
</tr>
<tr>
<td>Tax exemptions/reductions</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Public benefit charges</td>
<td>Medium/high</td>
<td>High</td>
</tr>
<tr>
<td>Capital subsidies, grants</td>
<td>Medium/high</td>
<td>High/Medium</td>
</tr>
<tr>
<td>Mandatory labelling and certification</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Voluntary labelling and certification</td>
<td>Medium/high</td>
<td>Medium</td>
</tr>
<tr>
<td>Voluntary and negotiated agreements</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Public leadership programmes</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Education and information programmes</td>
<td>Medium/high</td>
<td>High</td>
</tr>
<tr>
<td>Mandatory audit and energy management</td>
<td>High, but variable</td>
<td>Medium</td>
</tr>
<tr>
<td>Detailed billing and disclosure programmes</td>
<td>Medium</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**Note:** *Includes ease of implementation, feasibility and simplicity of enforcement, applicability in many locations, and other factors contributing to the overall magnitude of realized savings.

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**EMF|ECBC**

**Funding the Real Economy**

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**Ürge-Vorsatz et al., 2007**
Direct externalities

- The average retrofitting project saves 1,091 kWh/year
- Each retrofitting project saves 360 kgCO₂eq/year

Indirect externalities

- Each million invested in retrofitting creates 3.4 jobs
- Greater consumer interest as main market driver

Global green housing market expectations:

- Expected growth rate through 2027: 14.7%
- Expected market size by 2027: USD 240.19 Bn
- Asia-Pacific will grow to largest market

Business Research, 2023
The drop in gross residential lending was most significant in Continental and Eastern Europe.
Evolution of gross lending
Fixation periods

First increase in variable interest rates lending for ten years
While the markets are diverse – as Europe’s cultures, financial and social traditions and people are – our Industry is providing increasing funds to meet the needs of our societies around Europe:

- EUR 8.9 tn of outstanding mortgages in Europe
- An all time high
- 70% of EU 27 population are home-owners
- 25% of European’s are mortgage holders
- 3.6% y-o-y increase
- +0.8 pps y-o-y
In cooperation with Storied Data Inc., the EMF-ECBC developed three new Data Tools, representing the datasets of our key reports.
The new EMF-ECBC Data Hub

Transform our data into engagement

Share data convenient and automated

Influence by enabling the power of our data
The tools including the data tables and an interactive interface to display the data in several figures.
The new EMF-ECBC Data Hub

The tool provides the possibility to comprehensively filter for indicators, areas, countries and timeframes.

<table>
<thead>
<tr>
<th>Country</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage Market</td>
<td>Country</td>
</tr>
<tr>
<td>Total Outstanding Residential Loans</td>
<td>Finland</td>
</tr>
<tr>
<td>Change in Outstanding Residential Loans</td>
<td>France</td>
</tr>
<tr>
<td>Gross Residential Loans</td>
<td>Germany</td>
</tr>
<tr>
<td>Representative Interest Rates on New Residential Loans</td>
<td>Greece</td>
</tr>
<tr>
<td>Amount of gross lending with a variable interest rate</td>
<td>Hungary</td>
</tr>
<tr>
<td>Average amount of a Mortgage granted</td>
<td>Ireland</td>
</tr>
</tbody>
</table>
The Data Hub:
“For whom it may interest”

Strategical goal: Convince stakeholders to share their data with us, which can be translated in providing more insight for your members
THANK YOU FOR YOUR ATTENTION