

UNECE Eigthy-four session of the Committee on Urban Development, Housing and Land Management

6 (d) Activities of the Network ...
... future challenges of housing affordability in the ECE region...

5th October 2023

....the existing building stock must not be neglected, and which innovations have a perspective

Knut Höller, Housing Initiative for Eastern Europe (IWO e.V.), Berlin



Current IWO topics in Eastern Europe

- Training of administrators
- Establishment of management structures
- Training of facility managers
- Strengthening of homeowners
- Tackling energy poverty

Management of multifamily buildings

Energy efficiency in MFH

- Energy efficient refurbishment of MFH
- Serial refurbishment
- Climate manager

dena

Deutsche Energie-Agentur

- Training and know-how transfer
- Integrated neighborhood concepts

Urban and neighborhood development Development of housing markets

- Care@Home
- New construction of rental apartments - affordable housing
- Cooperatives
- Hybrid-timber construction



IWO's network and member structure



Team Energiesprong Germany



Energiesprong: NetZero retrofitting as an attractive product.

A realistic trend or just an expansive burden?

Powered by



Getördert durch;

Bundesministerium für Wirtschaft und Klimaschutz aufgrund eines Beschlusses des Doutschen Bundestages





EU building stock

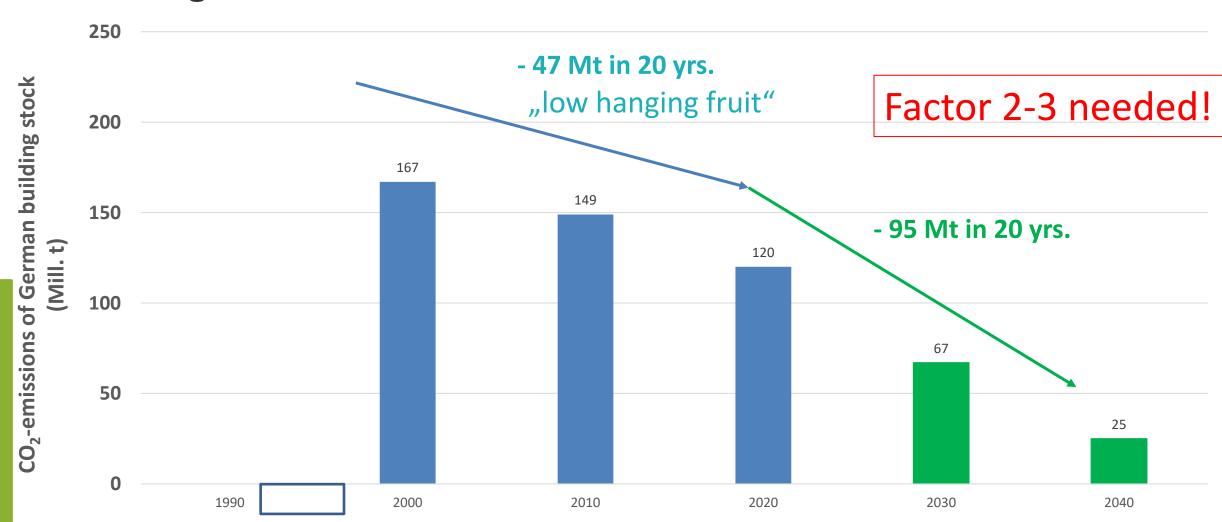
- 215 million homes
 + 11 million non-residential buildings
- 40% of energy consumption
- 36% of CO₂-emissions
- Market volume for refurbishment of about 300 Billion € / year

Sources: https://ec.europa.eu/info/news/focus-energy-efficiency-buildings-2020-lut-17_en https://ec.europa.eu/energy/eu-buildings-database_en





Problem: building stock in EU is **not at all** on track!





We cannot double our skilled workers

- Shortage of skilled labour = limiting factor!
- Few young people in construction jobs
- Qualifications takes a lot of time
- → Price increase with growing demand
- → Retrofit as a **luxury product?**





Fotos



Solution: Disruption







Prefab facades

Prefab roofs

Prefab energy modules



Energiesprong: retrofit as an attractive product

Easy



Scalable

Fast



Good



Affordable





Energiesprong: retrofit as an attractive product

Easy

Configurator



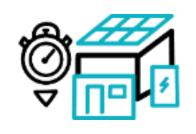
Scalable

Good





Fast



Few weeks instead of many months

Gigafactories to produce

Affordable



Savings pay for investment



The idea works



NL: >5.000 homes



UK: >15 homes



DE: >100 homes



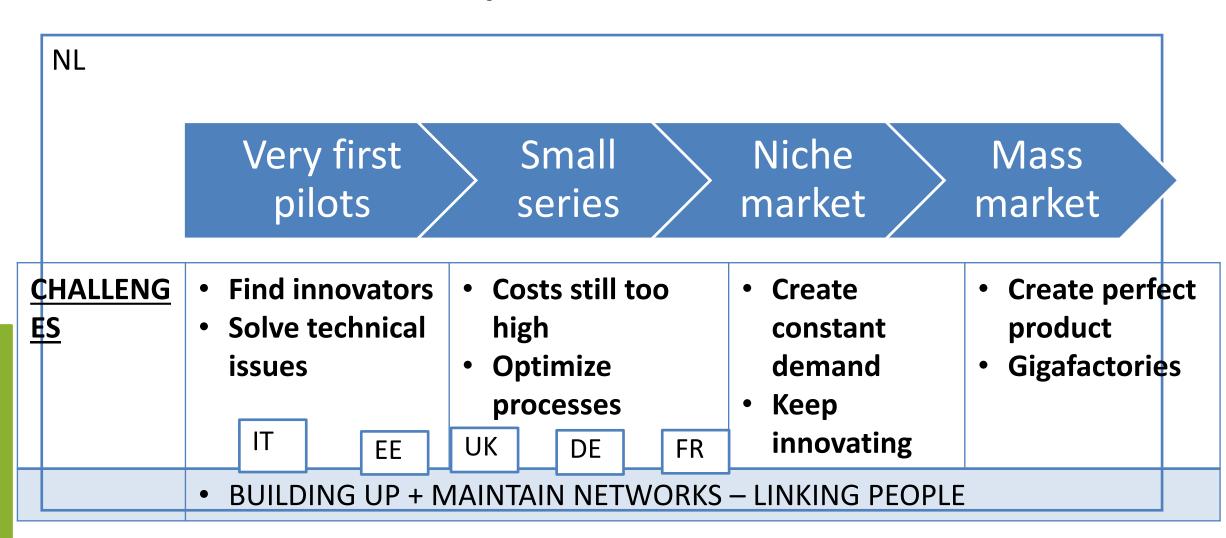
FR: >1.000 homes



EE: >100 homes



Phases of market development





Factors for succesful market development

• **People** 4 yrs. 7 yrs. >10 yrs.

Money for

Very first Small Niche Mass pilots series market market

Market Development Team to inspire

Innovators and visionaries to do the job

- Policy
- > Team
- > Pilots

INTERREG +H20207 LIFE

National funding for market development team and projects.

> Development Investors for companies and Gigafactories

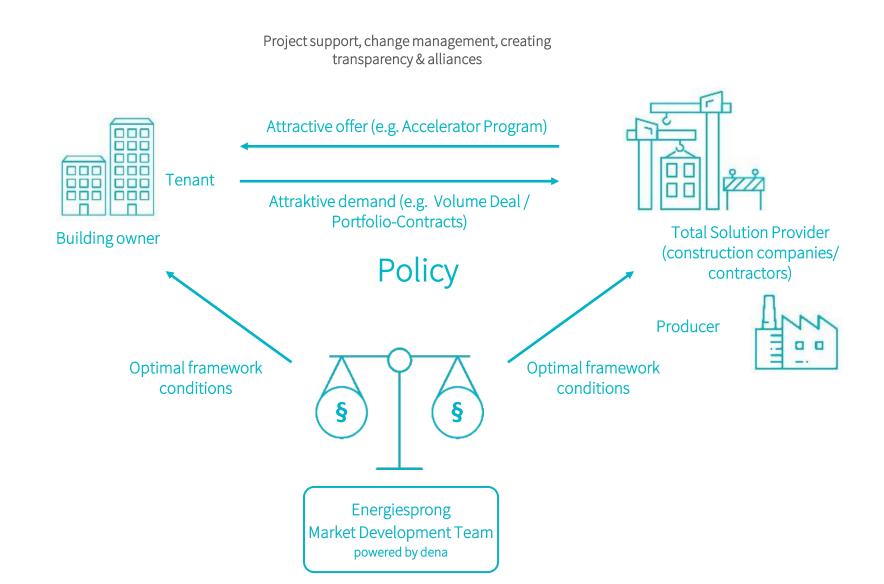
Public support

Remove obstacles in bureaucracy

Laws to improve business case



The role of Energiesprong in Germany





What the EU can do

- Create new ways to finance Market Development Teams over 10+ years in all MS
 - Many EU project networks die after 36 months...
- Financial Support for Prefab Retrofit Projects
 Marianne Kreuzig
 (e. g. first 10.000 units per country),
 technical development (Subsidies, Guarantees)
 and Gigafactories
- Legal and public support of Prefab Retrofit



→ Prefab retrofits ("standardised industrial solutions" in Renovation Wave) as IPCEI! (Important Project of Common European Interest)



LIFE-Project: COSME RENO New cooperation models for SMEs to scale up deep energy efficient renovations



The project COSME Reno is focused on

promoting and advancing energy renovation efforts, particularly in the small and medium-sized enterprise (SME) sector.

Its primary goals include accelerating the pace and effectiveness of energy renovations, ensuring higher-quality retrofit projects, minimizing the performance gap, and implementing industrialized solutions.

COSME Reno encompasses activities in several countries, namely France (FR), Netherlands (NL), Italy (IT), Lithuania (LT), Belgium (BE), and Germany (DE).

Project Start: 10/2023

Project End: 10/2026

Duration: 36 Months

Estimated Project Cost:

€1,980,494.03

Requested EU Contribution:

€1,881,469.32



LIFE STREET HP RENO

Developing street wide approach or housing for collective switch of energy systems to heat pumps packaged modules



The project aims to deploy collective purchasing approaches for energy systems replacement by **heat pumps for individual homes at the scale of entire streets**.

For this we want to work with all relevant stakeholders:

- Local authorities (cities), housing organizations and residents to convince them of the interest of the approach and to aggregate a maximum of demand and make heat pumps buy-in-schemes emerge
- Installers and solution providers, to develop adapted, packaged, prefabricated and industrialized solutions, less expensive, more qualitative, with possible new services fitted to the ecological transition

All of this should lead to a reduction in costs and the mass deployment of heat pumps in renovation, as a lever for decarbonizing heat in existing housing.

Project Start: 10/2023

Project End: 10/2026

Duration: 36 Months

Estimated Project Cost:

€2,250,734.3

Requested EU Contribution:

€2,138,197.59

Completed Energiesprong projects in Germany









Hameln | Am Kuckuck

Herford | Ulmenstraße

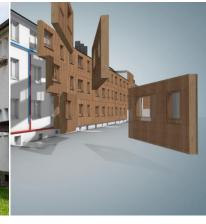
Bochum | Mörikestraße

Bochum | Katharinastraße

9 Energieprong-Projects in realisation









Köln | Schwalbacher Str 16 WE 992 m² Wfl.

Erlangen | Quartier Paul-Gossen-Str. Bauabschnitt 1: 122 WE 8182 m² Wfl. Mönchengladbach | Reallabor 111 WE Rd. 6000 m² Wfl.

Mönchengladbach | verschiedene Projekte 139 WE Rd. 7600 m² Wfl. Bochum | Wichernstraße 19 WE 1404 m² Wfl.

- > 15 Projects under preparation: 1.029 appartments, >16.000 m² living space,
- > 8 Housing companies



Cooperation works: First delivery of prefab-facades from an Estonian company to a German Energiesprong project in 2022







energie sprong de Housing Initiative for Eastern Europe (IWO e.V.)

Knut Höller

Alt-Moabit 101A 10559 Berlin Germany

E-Mail hoeller@iwoev.org