

## **Roundtable:**

# **What skills will be needed for the construction and renovation of affordable homes in the next decade?**



Pictures: Sulamith Sallmann, degewo

# Construction of new buildings

First issue and biggest challenge:  
construction or production costs

**2.650 EUR per m<sup>2</sup> living space** (rent will be > 10 EUR/m<sup>2</sup> without subsidies)

Actual average

including the building itself, technical building equipment, outdoor facilities, planning and 19 % VAT,  
excluding about 500 EUR/m<sup>2</sup> property

## How about skills?

- **Cost-reducing features**  
(compact, no underground parking, KfW 70, ventilation via window or exhaust air,...)
- **Value engineering**  
(i.e. organized approach to providing the necessities at the lowest cost)
- **Serial and modular construction**  
(practical floor plants, high quality architecture etc.)



Gewoba Bremer Punkt  
"Wohnungsbaukasten"

# Competition for serial and modular construction i.e. Europe-wide call for tender High quality residential construction - no “panel building”



Modulhaus 15² SBV eG Flensburg



Gartenhof Kiefholzstraße Berlin



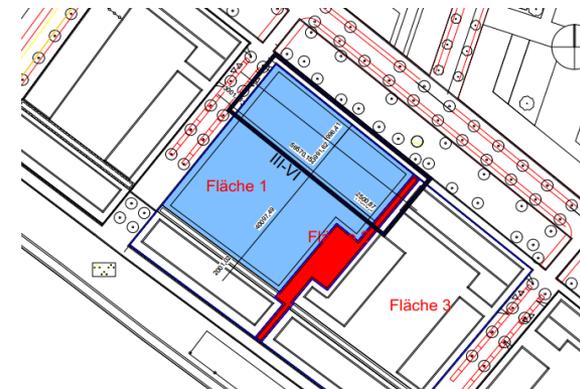
Vonovia, Bochum Hofstede



Expected benefits of the competition:

- Direct order for public housing companies (no extra call for tenders)
- Reduction of construction time
- Better quality assurance

Lower prices are questionable



Virtual property for the competition

# Potsdam Drewitz – best practise for affordable renovation, energy saving and climate protection



Fotos:  
Ulf Böttcher



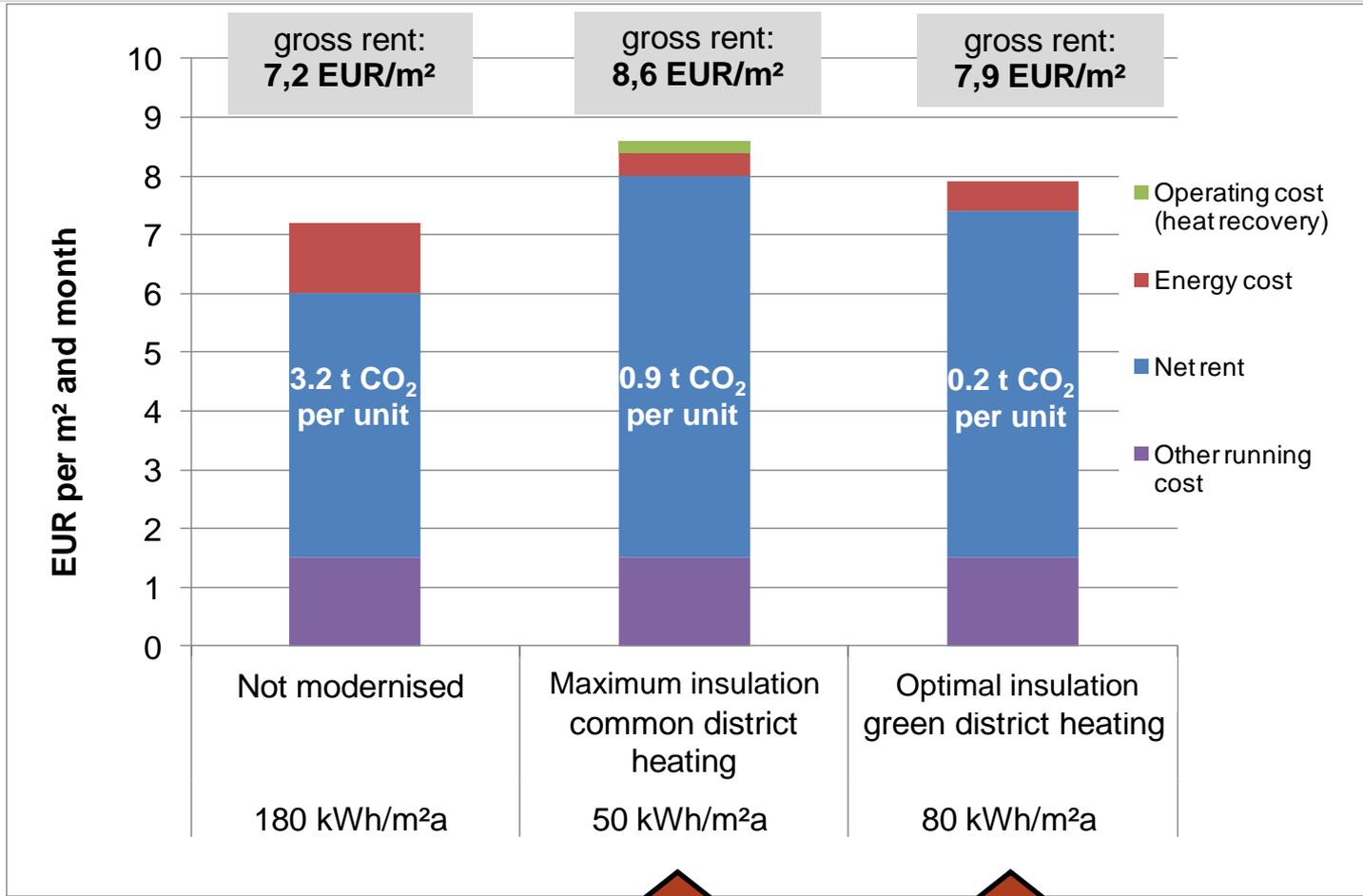
## **New EPBD - recital 6**

Member States should seek a cost-efficient equilibrium between decarbonising energy supplies and reducing final energy consumption.

## **New EPBD – Annex 1**

To express the energy performance of a building, Member States may define additional numeric indicators of ... greenhouse gas emission produced.

# Potsdam Drewitz Results and Conclusion



↑  
**EPBD way  
so far**

↑  
**New EPBD way  
possible**

# What skills will be needed for the construction and renovation of affordable homes in the next decade?

- **Achieving the optimum:**  
reducing CO<sub>2</sub> emissions by “average” insulation plus renewable energy sources supplied through the energy carrier and renewable energy sources that are generated and used on-site
- **Deep knowledge of cost drivers:**  
in planning of new buildings  
for running cost and maintenance  
for energy cost, weighted with investment cost