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**The refurbishment actions in the European
CONCERTO initiative: first impact analysis, barriers
and recommendations**

**Olivier Pol, Austrian Institute of Technology, for CONCERTO Plus
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Refurbishment measures planned and implemented in CONCERTO

Facts and figures on CONCERTO

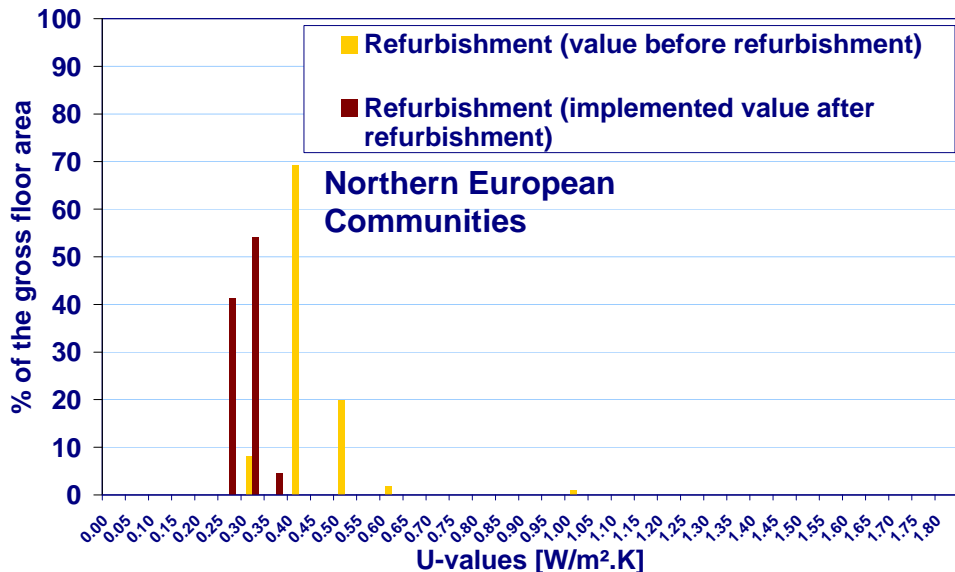
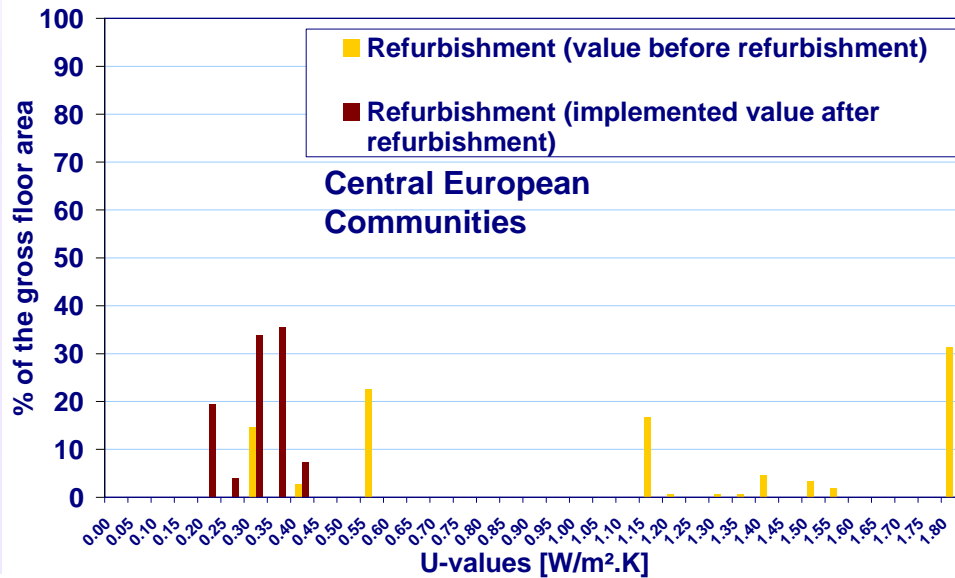
- **45** CONCERTO communities
- **18** member states
- ca. **500.000** people affected directly or indirectly
- ca. **222.000.000 €** eligible costs
- ca. **1.500.000 m²** of new eco-buildings and renovated buildings
- 100% of energy use covered by RES on average in CONCERTO

Renovation

- 65% of all planned refurbishment activities: residential sector
- approximately **190.000 m²** of buildings have already been refurbished (**half** of all renovation measures planned initially)
- Overview on renovation measures **planned initially** and **actually implemented** given in the poster
- Overview on distribution of U-values among CONCERTO projects



Distribution of U-values of external walls



□ **Ambitions** in terms of U-values reached after renovation are quite similar for Central and Northern European communities

□ The **effort** in insulating external walls has been **higher in the Central European** communities than in the Northern communities.

□ First experience shows that there was no particular difficulty to reach the insulation targets in terms of U-values of external walls (as **single measure**).



Observations and conclusions

- In few cases, **connection to district heating could not be implemented** because of too high costs in replacing old individual systems.
- The expected number of **individual homes renovated can not be reached** in many communities (substitution to apartment buildings).
- **Comprehensive refurbishment operations** targeting high quality standards are still rather rare as many barriers (such as financial aspects or opposition from the inhabitants) are faced.
- Comfort ventilation systems are still **rarely implemented** and in particular there is no supply and exhaust ventilation system with heat recovery in the assessed projects.
- First monitoring data is already available but is still insufficient to support a costs/benefits analysis based on the actual savings due to renovation measures

