



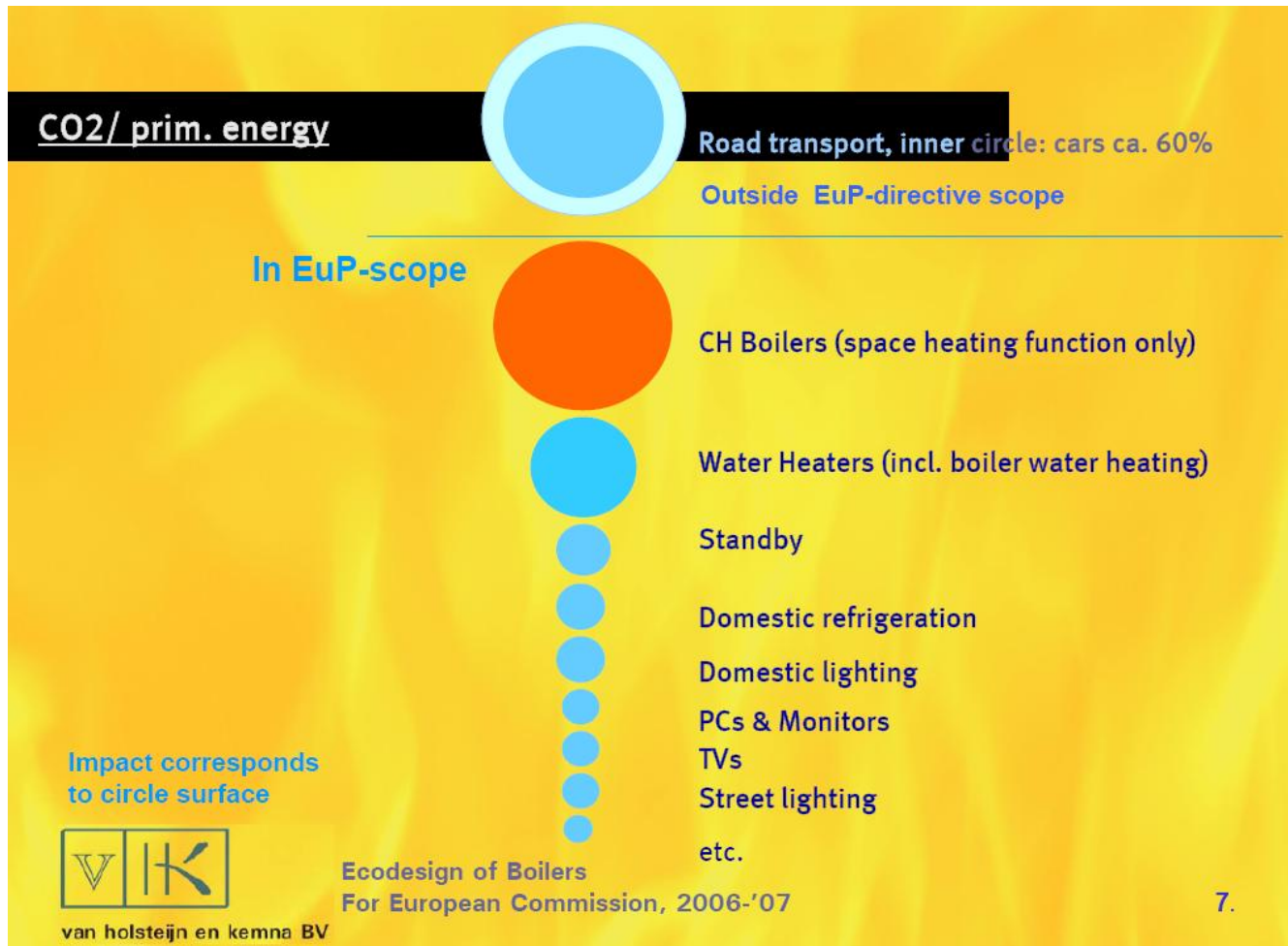
The HEAT4U Project under the EU's Seventh Framework Programme for Research

Luigi Tischer
Heat4U Project Coordinator

INTERNATIONAL CONFERENCE
HEAT4U PROJECT January 26th, 2012

Gas Absorption Heat Pump solution
for existing residential buildings

The European challenge



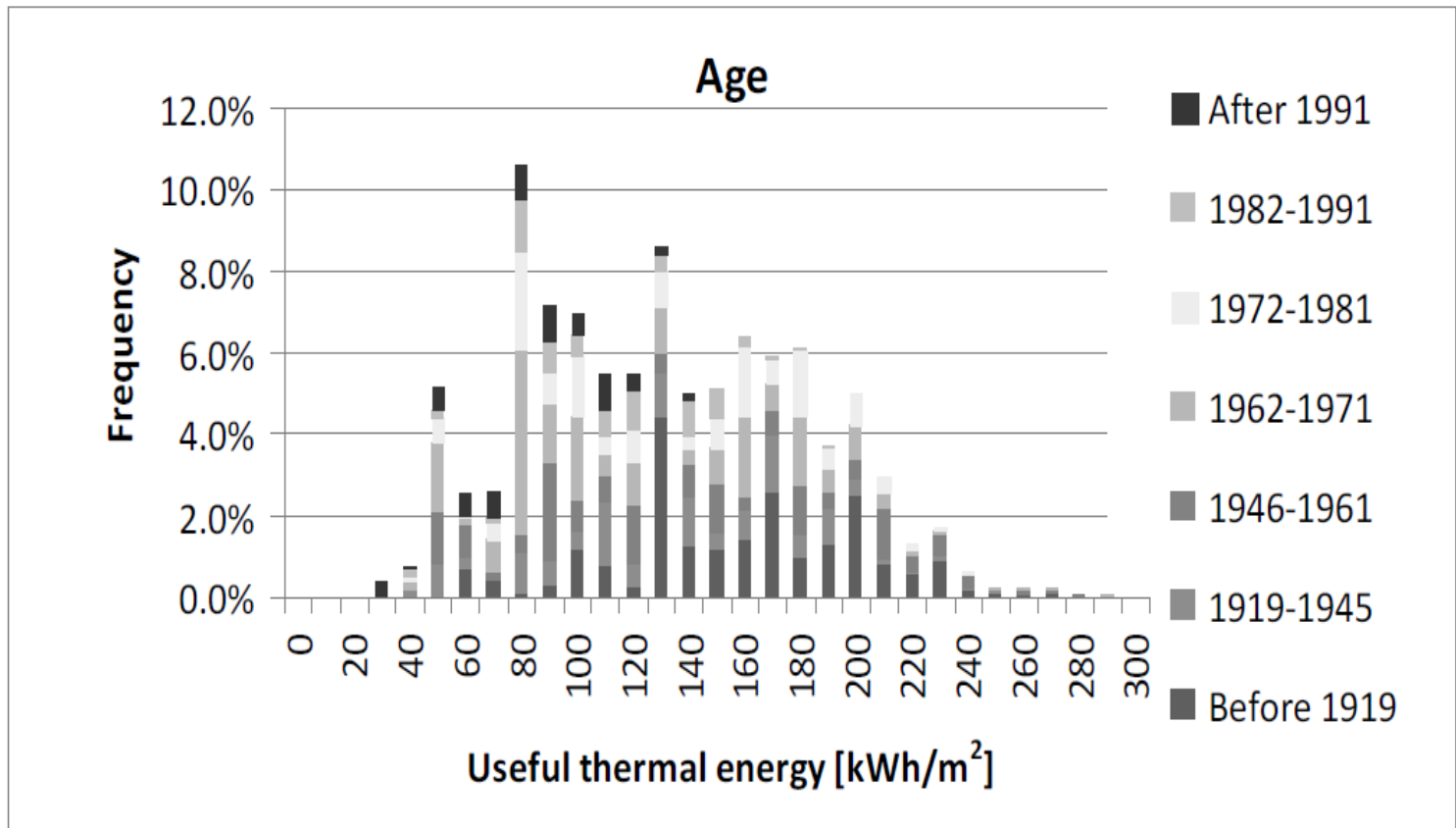
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Quality of the Existing Building Stock



The European Challenge: Existing Residential Buildings

Residential buildings =

Largest portion of the overall European building stock (60%)

Residential buildings =

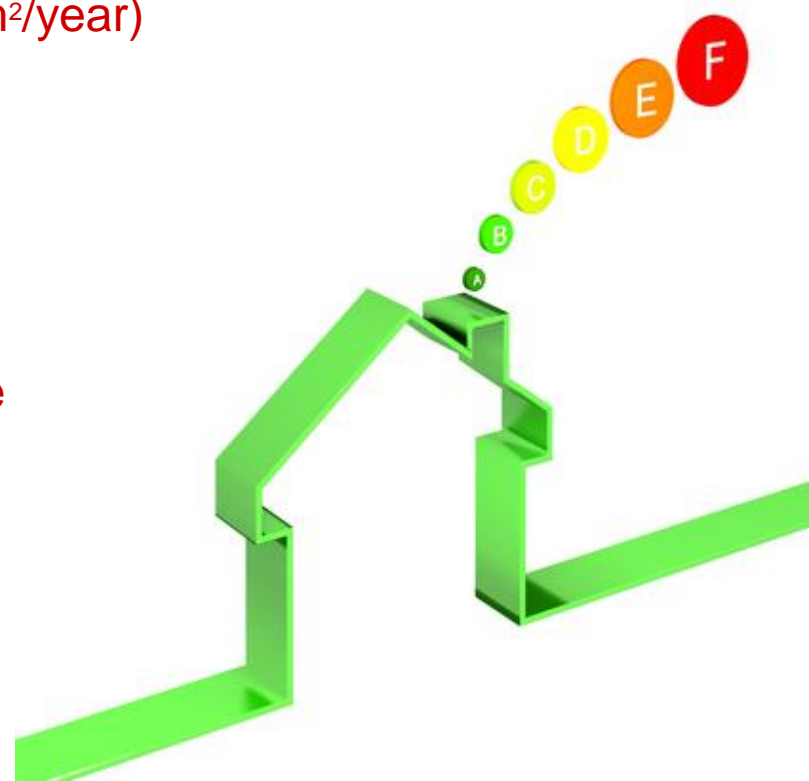
Largest specific consumption (kWh/m²/year)

Residential buildings =

Low refurbishment rate (2% a year)

Residential buildings =

Largest potential to drastically reduce energy use and CO₂ emissions



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7th Frame Program Call

“New efficient solutions for energy generation, storage and use related to space heating and domestic hot water in existing buildings”



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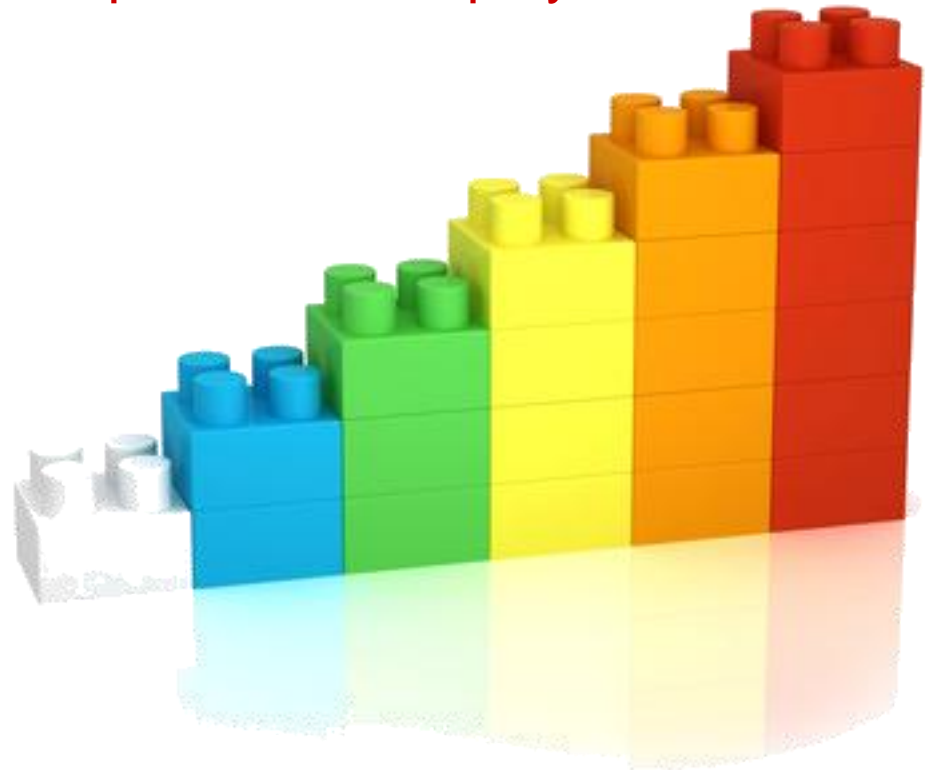
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7th Frame Program Call:

...an opportunity to coordinate across Europe
several initiatives concerning
GAHP technology development and deployment



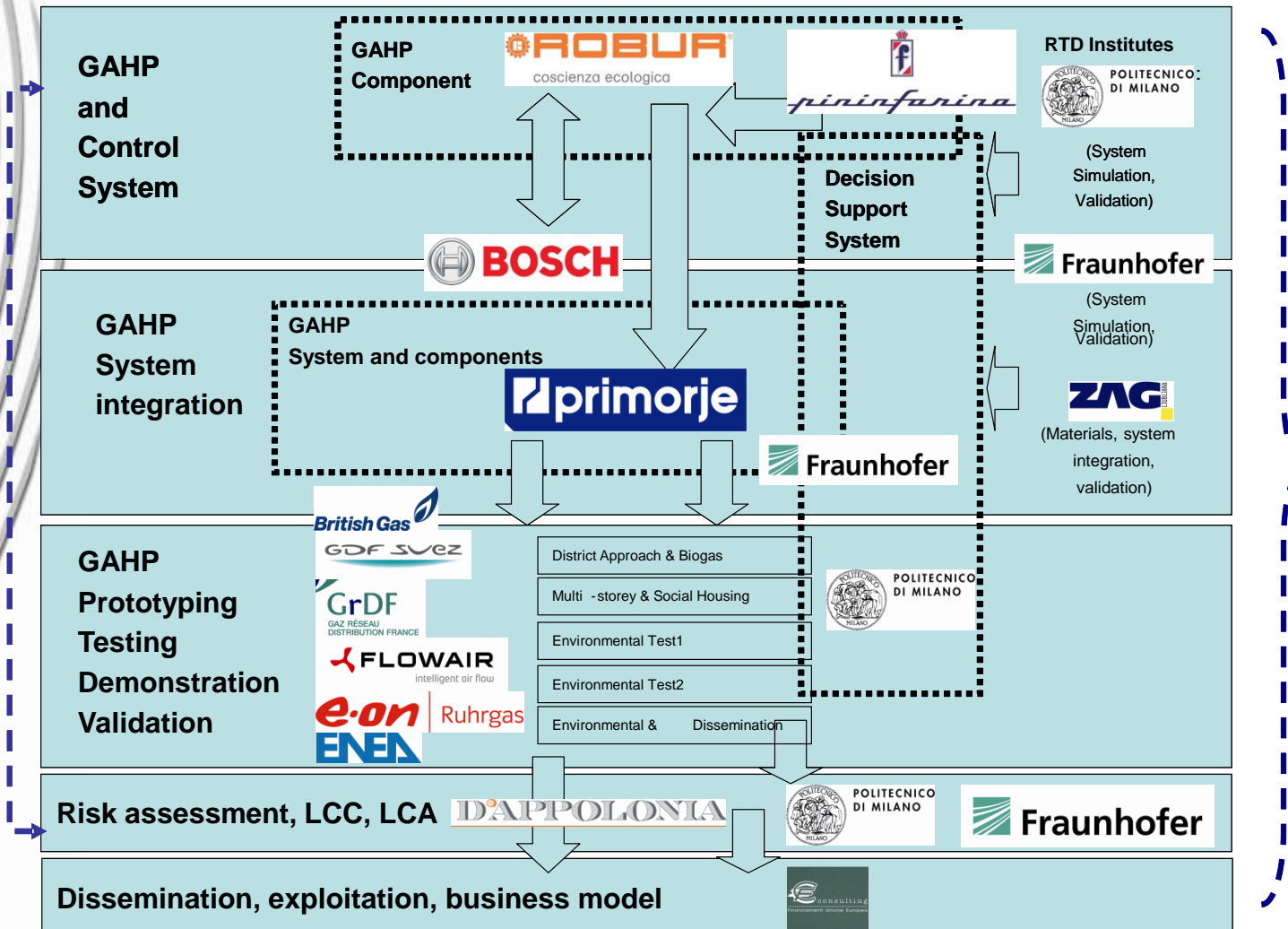
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HEAT4U Project: Macro Activities



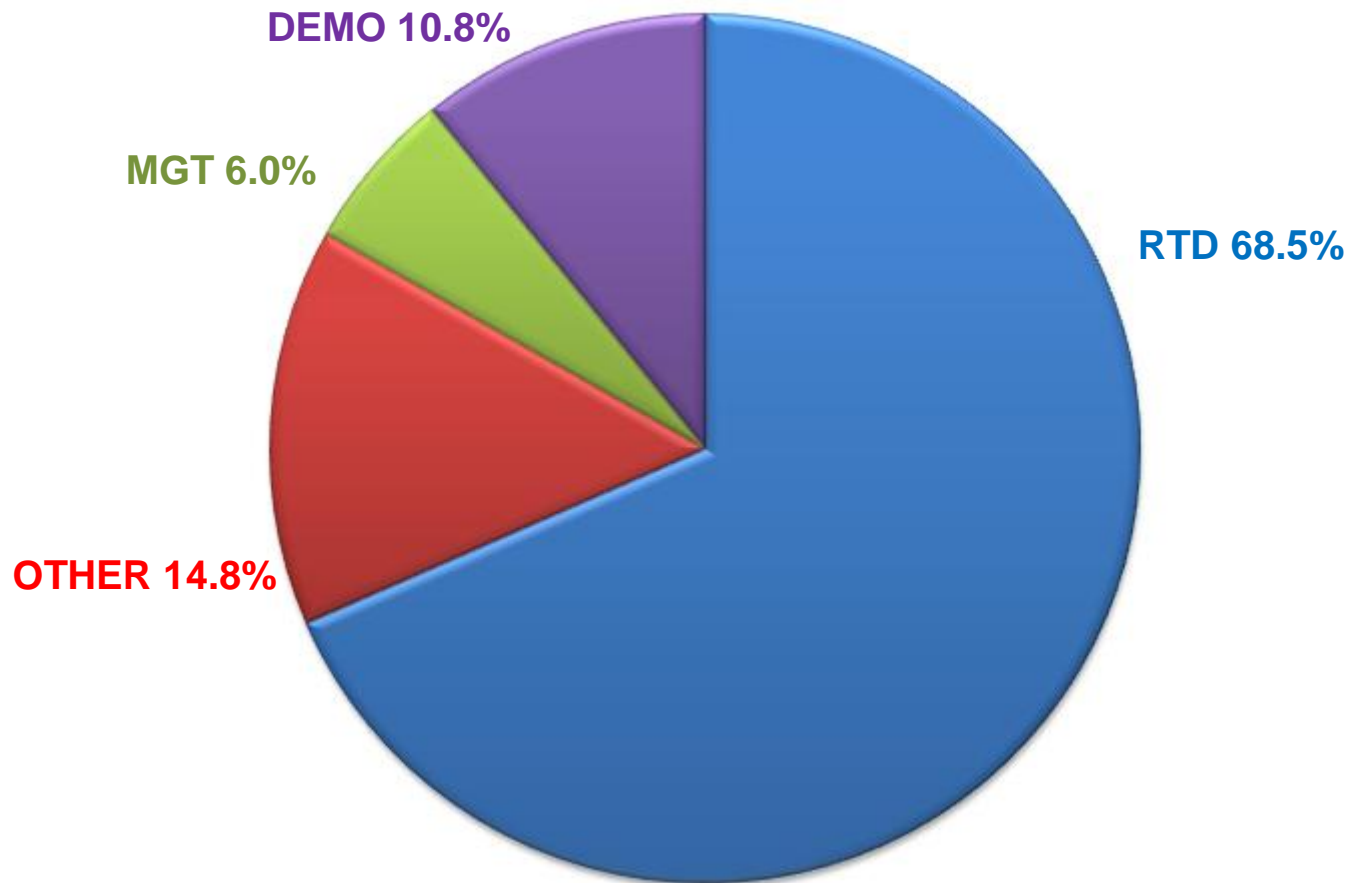
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HEAT4U Project: Costs Structure



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HEAT4U Project: Timeline

“...by fall 2013 multi-site and multi-purpose demonstration phase.”



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HEAT4U: European Commission's Ranking

CALL FP7-2011-NMP-ENV-ENERGY-ICT-EeB:

- 120 proposals submitted;
- 23 received approval.
- About topic “New efficient solutions for energy generation, storage and use related to space heating and domestic hot water in existing buildings”
 - HEAT4U has received the highest score during evaluation
 - HEAT4U has received a grant that is almost twice the average of the other projects approved

HEAT4U: European Commission's Evaluation

"The proposal addresses real needs in the sector for more efficient energy systems or heating and domestic hot water.

It shows clear impacts on competitiveness in terms of a new product in the market (GAHP).

The project supports many EU priorities such as reducing energy consumption, increasing Europe value chain and increasing market potential with export of technological products.

These impacts are expected to increase the competitiveness of EU industry.

It is quite convincing that the adoption of GAHP will provide large savings of primary energy in comparison to boilers. On the residential market electrical heat pumps are penetrating the market rapidly for replacing existing space heating systems; however electrical grid constraints may limit further penetration. GAHP does not have electrical network constraints; it is more efficient and consumes less gas than a gas boiler."