iNSPiRe
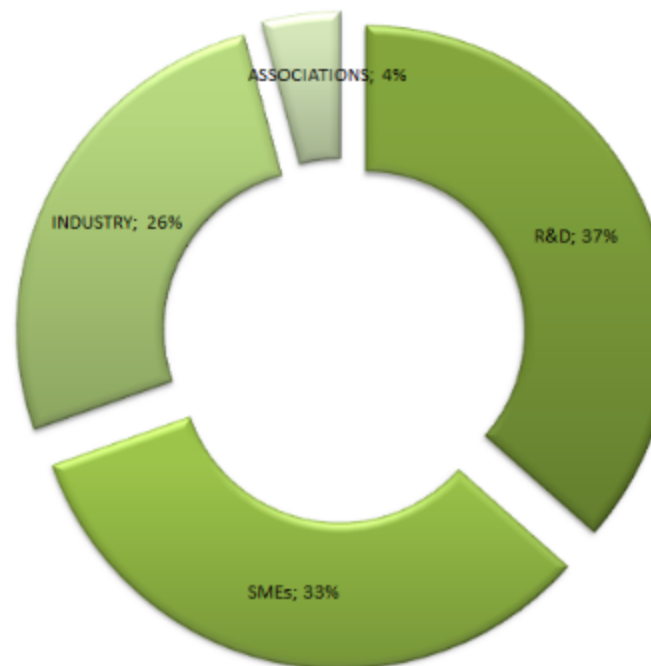
Roberto Fedrizzi – EURAC
ACE General Assembly 22nd April 2016 – Berlin

Consortium composition

Duration 4 years – 1115 Person Months

Budget 11 M€ – 70% R&D and 20% Demonstration activities

24 partners – 50% Industry

Objective

Renovation of existing buildings through an integrated approach that includes

- … envelope technologies,

- …energy generation systems integrating a large amount of Renewable Energy Sources (RES)

- …energy distribution and lighting systems.

aiming to …

- …reduce the HVAC energy consumption to less than 50 kWh/(m²year)

- … reduce the lighting energy consumption by at least 50%.

Three Milestones

1. To develop standardized systemic ***Renovation Packages***
   Approaches for renovating buildings through optimized combinations of envelope, energy generation and energy distribution system.
   Complex task requiring multiple competences

2. To develop multifunctional ***Renovation Kits***
   Industrial solutions allowing practical, fast and economic achievement of the renovation packages.
   To build value chains at industrial level, allowing prefabrication of plug&play solution

3. To demonstrate Packages and Kits

Renovation packages
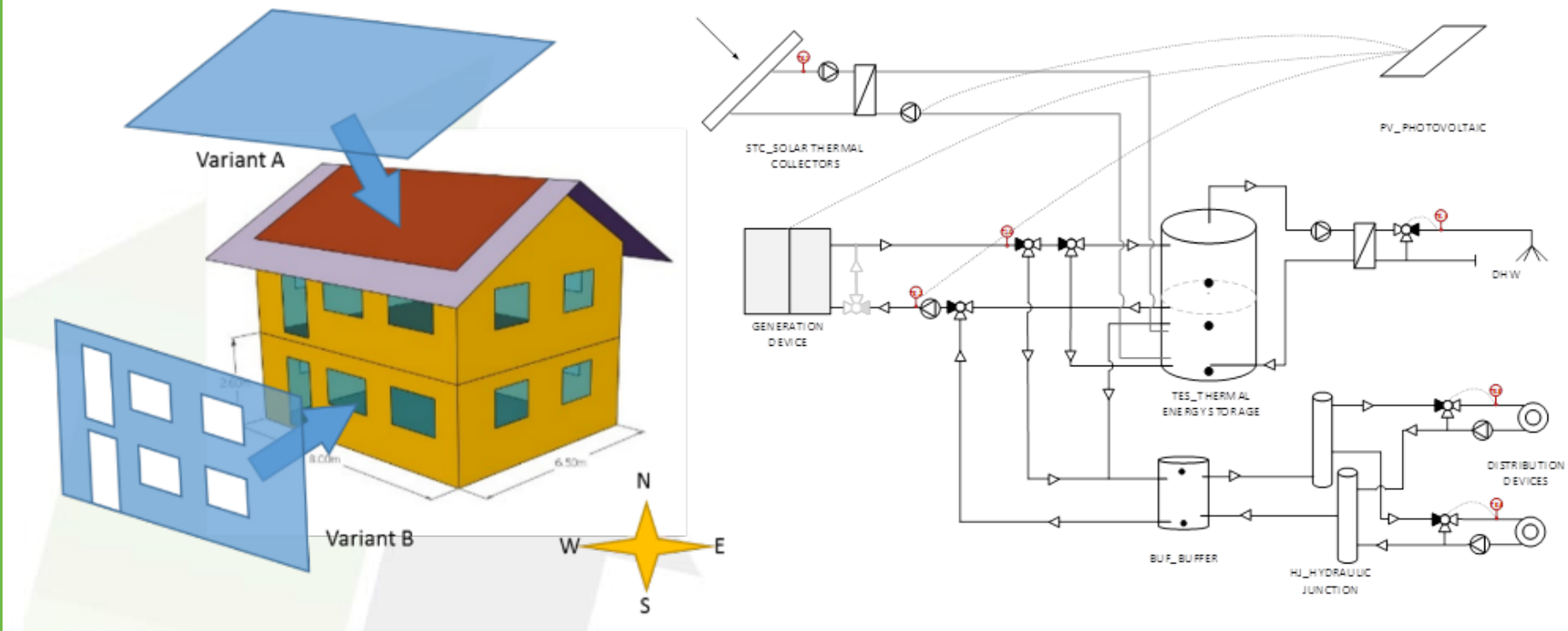
Building stock analysis

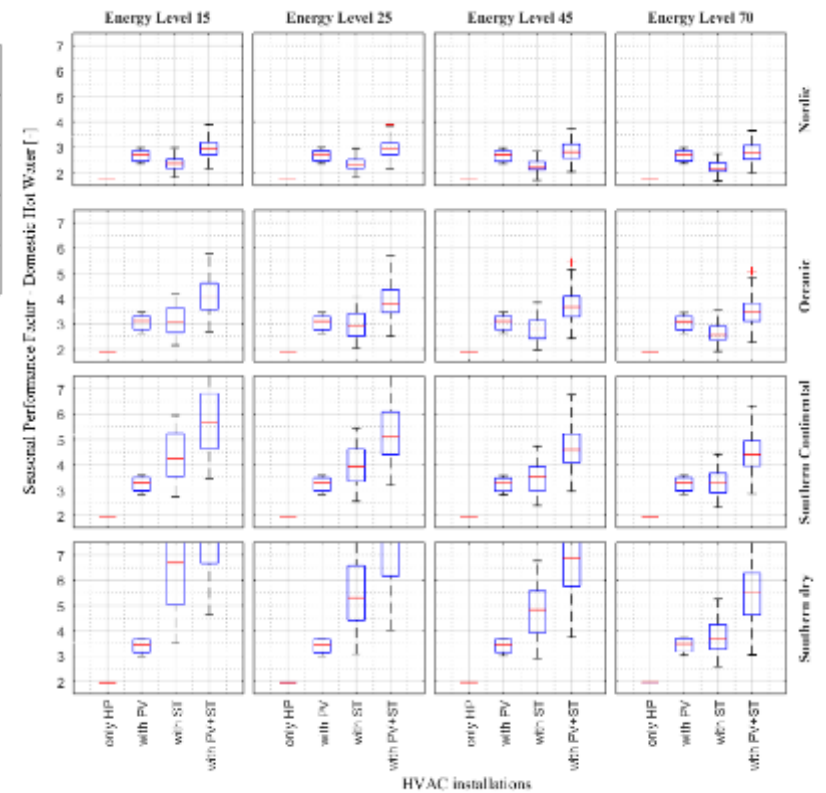# Renovation packages

Simulations of renovation measures
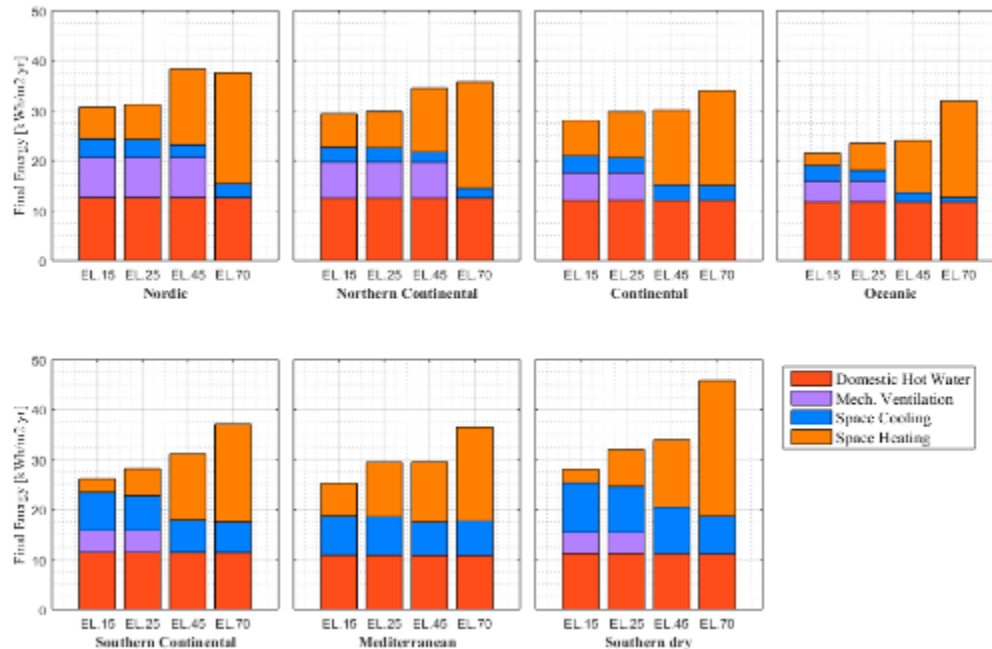
Based on building stock results, simulations of measures on different buildings typologies, climates and standards:

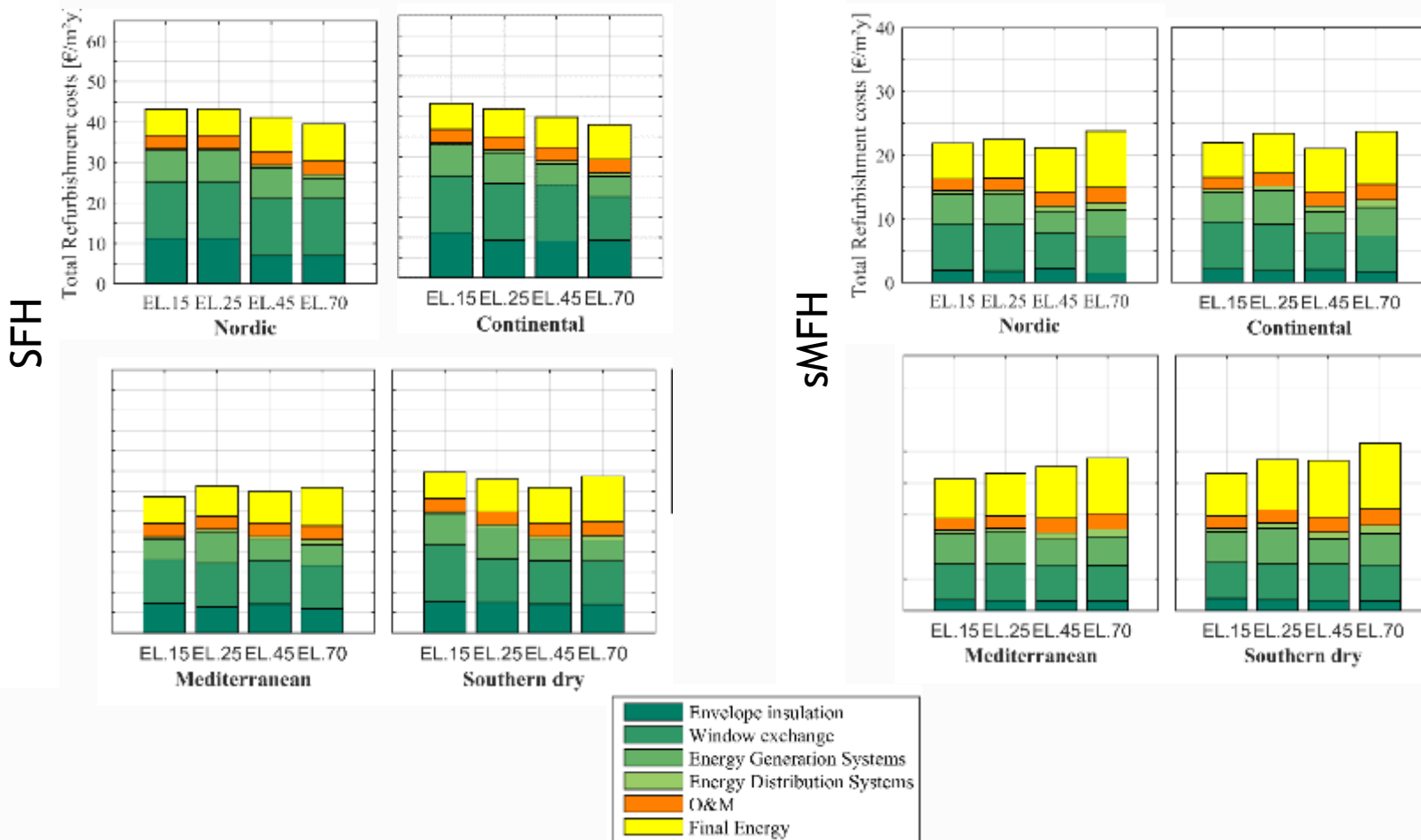15 – 25 - 40- 70 kWh/m2y heating demand

Renovation packages

Database of solutions: Energy + LCA

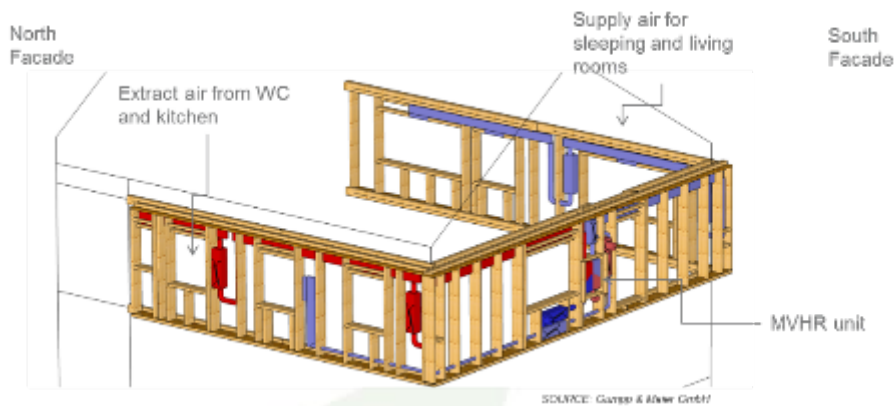# Renovation packages

Database of solutions: Economic evaluations

Renovation Kits

Envelope prefabricated solutions (Gumpp & Maier)

Renovation Kits

Generation prefabricated solutions (EURAC – Manens-Tifs)

Demonstration

Wohnungsbau Ludwigsburg

Demonstration

Madrid (EMVS - ACCIONA)

visit iNSPiRe website

http://inspirefp7.eu

roberto.fedrizzi@eurac.edu