Wall-ACE

Novel wall insulation systems

Workshop

Tina Oertel, t.oertel@quick-mix.de

Project Wall-ACE

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723574

- Grant Agreement number: 723574
- Project acronym: Wall-ACE
- Project title: Wall insulation novel nanomaterials efficient systems
- Project duration: 1 October 2016 – 30 September 2019

- Topic: Highly efficient insulation materials with improved properties

- Grant amount: EUR 4,289,785.00
- Estimated eligible costs: EUR 6,254,915.00

- Project coordinator: Quick-Mix
- Website: https://www.wall-ace.eu/

Concept

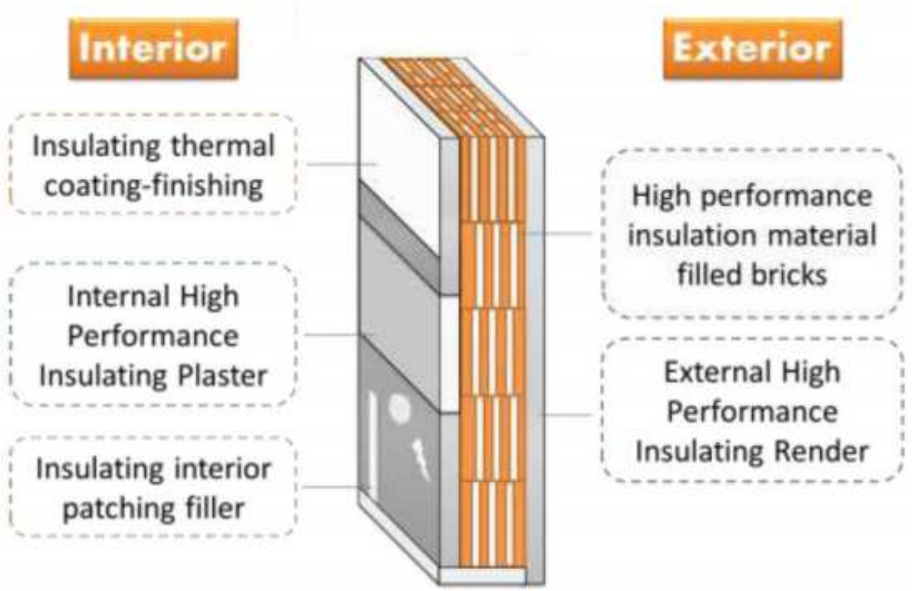
- A huge number of uninsulated buildings exists in Europe
- Up to 35% heat loss of a building is caused through un-insulated walls
- The Wall-ACE project aims to provide a complete mineral insulation solution for a wall
- Wall-ACE addresses new building sectors as well as the building retrofit
- 5 high performance insulation solutions based on silica-aerogel as light weight aggregate

Heat loses of a building

Project objectives

1. Develop high energy efficient mineral based materials
2. Strongly reduce the energy consumption and CO_2 emission
3. Improve indoor air quality
4. Improved durability and sustainability
5. Develop affordable and high replication potential for Europe
6. To test/asset the products and systems in real condition and at building scale
7. Certification and standardisation of high efficient new systems

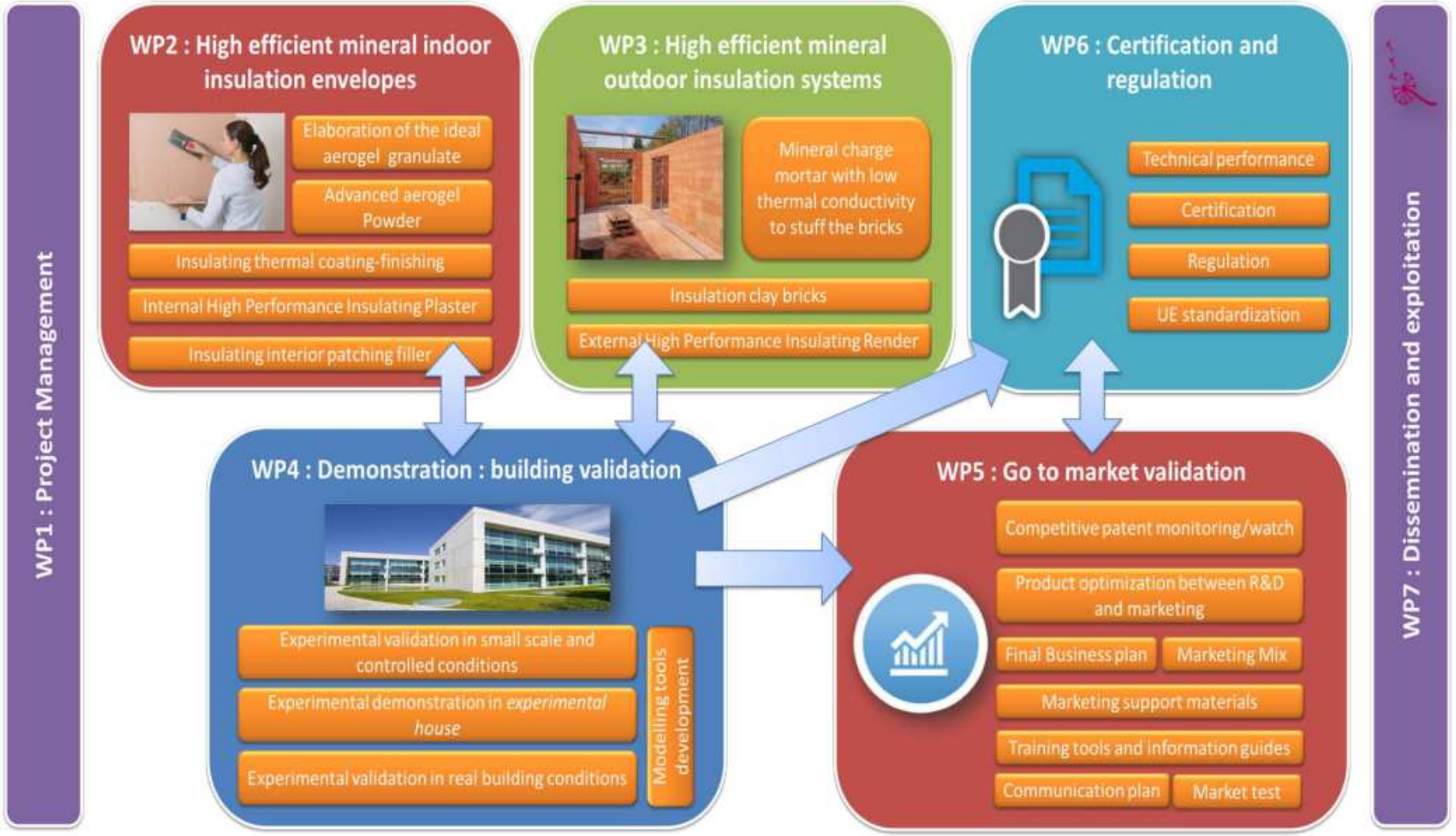
HONEST toolbox



Major steps

- These highly efficient products are achieved through the synergy between the different members of the consortium through combining the high performance, sustainable, and advanced nanotechnology of the silica aerogel, with existing, already approved, efficient products.
- The aerogel materials structure properties and cost will be optimised.
- The process of the five high efficient mineral insulation systems will be scaled-up to test replicability, processability and reach industrial scale.
- Then, these five systems will be fully characterised including an LCA assessment, along with certification and standardization activities.
- In addition, the project sets a major focus on the "go to market" validation of the five products. Business planning and a field market test will be carried out, along with performance assessments on real buildings, and training and communication tools design, in order to maximize use potentials and foster a wide replication throughout Europe.

EU Project Wall-ACE



Project consortium

No	Name	Short name	Country
1	QUICK-MIX PUTZTECHNIK GMBH & CO. KG	QUICK-MIX	Germany
2	ENERSENS SAS	ENERSENS	France
3	TOUPRET SA	TOUPRET	France
4	VIMARK SRL	VIMARK SRL	Italy
5	LEIPFINGER-BADER KG	LeipfingerBader	Germany
6	UNIVERSITAET STUTTGART	USTUTT	Germany
7	POLITECNICO DI TORINO	POLITO	Italy
8	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	CEA	France
9	EFFINART SARL	EffinArt	Switzerland
10	BUILDING RESEARCH ESTABLISHMENT LTD	BRE	United Kingdom
11	AGITEC AG	AGITEC AG	Switzerland
12	AGENZIA TERRITORIALE PER LA CASA DEL PIEMONTE CENTRALE	ATC Torino	Italy
13	WAVESTONE ADVISORS	Wavestone	France

Key manufacturers and the HONEST toolbox

ENERSENS
absolute insulation

KWARK®: SILICA Aerogel

Insulating thermal coating finishing

Internal high performance insulating plaster

Insulating interior patching filler

High performance insulating materials filled bricks

External high performance insulating render

Vimark
next to your job | vimark.com

TOUPRET

LEIPFINGER BADER Ziegelwerke

quick-mix