European Network on New Sensing Technologies for Air Pollution Control and Environmental Sustainability - *EuNetAir*

COST Action TD1105

WGs and MC Meeting at ISTANBUL, 3-5 December 2014

Action Start date: 01/07/2012 - Action End date: 30/06/2016

Year 3: 1 July 2014 - 30 June 2015 (***Ongoing Action***)

IEQ cluster. Technologies and materials for a healthier indoor environment

BAM

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COST is supported by the EU Framework Programme

ESF provides the COST Office through a European Commission contract

Projects cluster

On-going projects (2013-17)

Completed projects (2011-14)

S/T goals of the thematic area

Development of new **eco-innovative materials** for the building envelope and/or internal walls/partitions leading to healthier indoor environment

Call EeB.NMP.2013-2 "Safe, energy-efficient and affordable eco-innovative materials for building envelopes and/or partitions to provide a healthier indoor environment".

S/T goals of the projects. BRIMEE

Cost-effective and sustainable bio-renewable indoor materials with high potential for customisation and creative design in energy efficient buildings

Coordinator: D'Appolonia, IT

Duration: 4 years (07/2013 – 06/2017)

Consortium: 14 partners (9 WPs)

S/T goals of the projects. BRIMEE

Development of **insulation materials** to improve buildings energy performance based on a Nano-Cristalline Cellulose (NCC) foam, strengthened with a bio-based resin.

S/T goals of the projects. ECO-SEE

Eco-innovative, safe and energy efficient wall panels and materials for a healthier indoor environment

Coordinator: University of Bath, UK

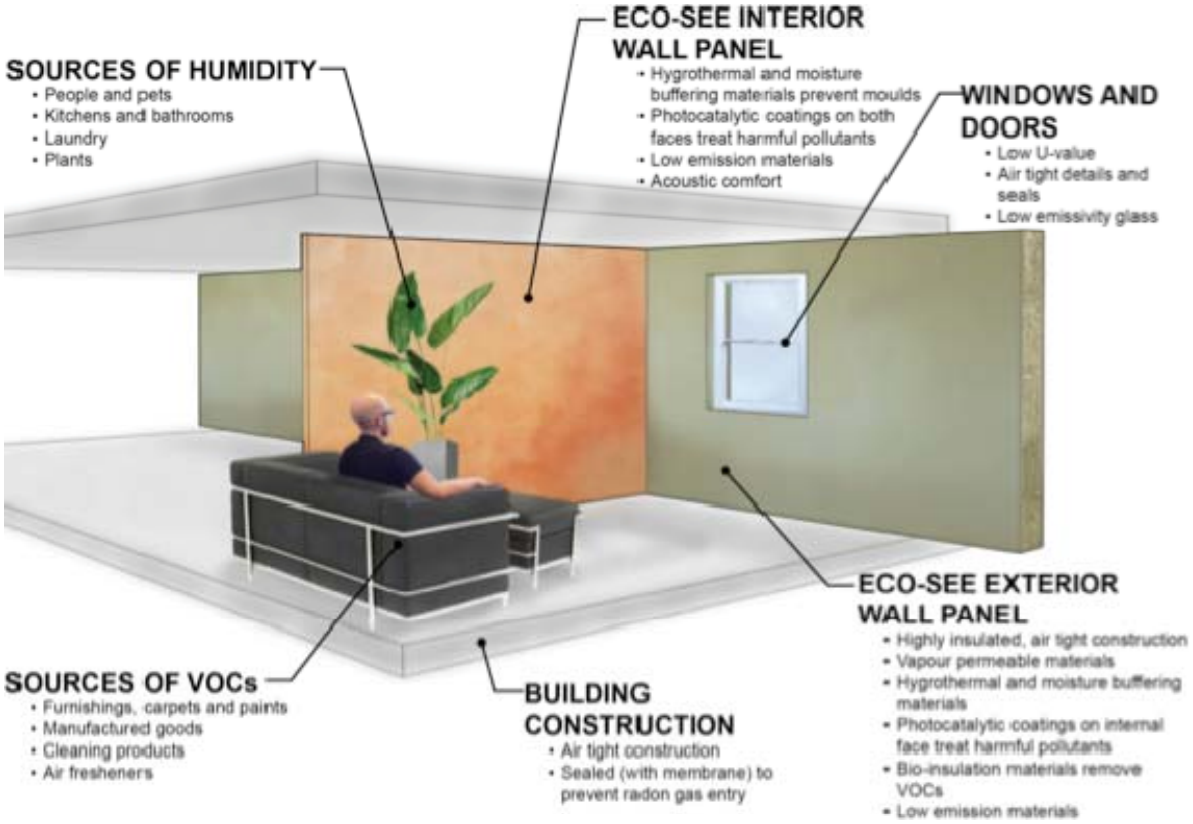
Duration: 4 years (09/2013 – 08/2017)

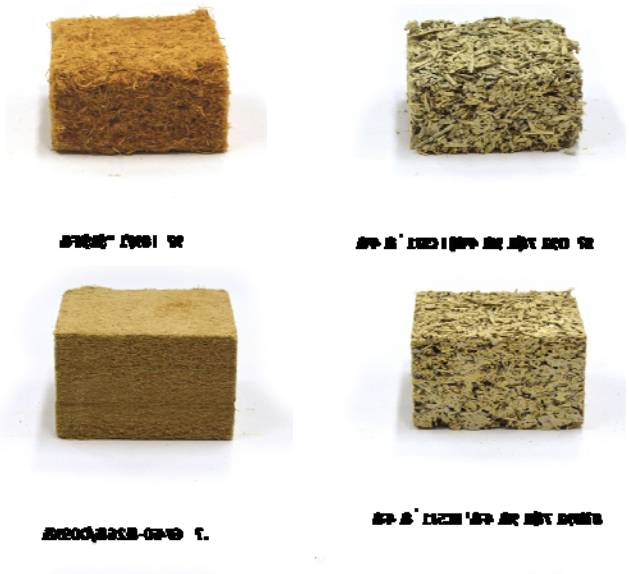
Consortium: 18 partners (11 WPs)

ECO-SEE

S/T goals of the projects. ECO-SEE

Develop new **eco-materials and components** for the purpose of creating both healthier and more energy efficient buildings.





ECO-SEE

S/T goals of the projects. H-HOUSE

Healthier life with eco-innovative components for housing constructions

Coordinator: CBI Swedish cement and concrete research instit., SE

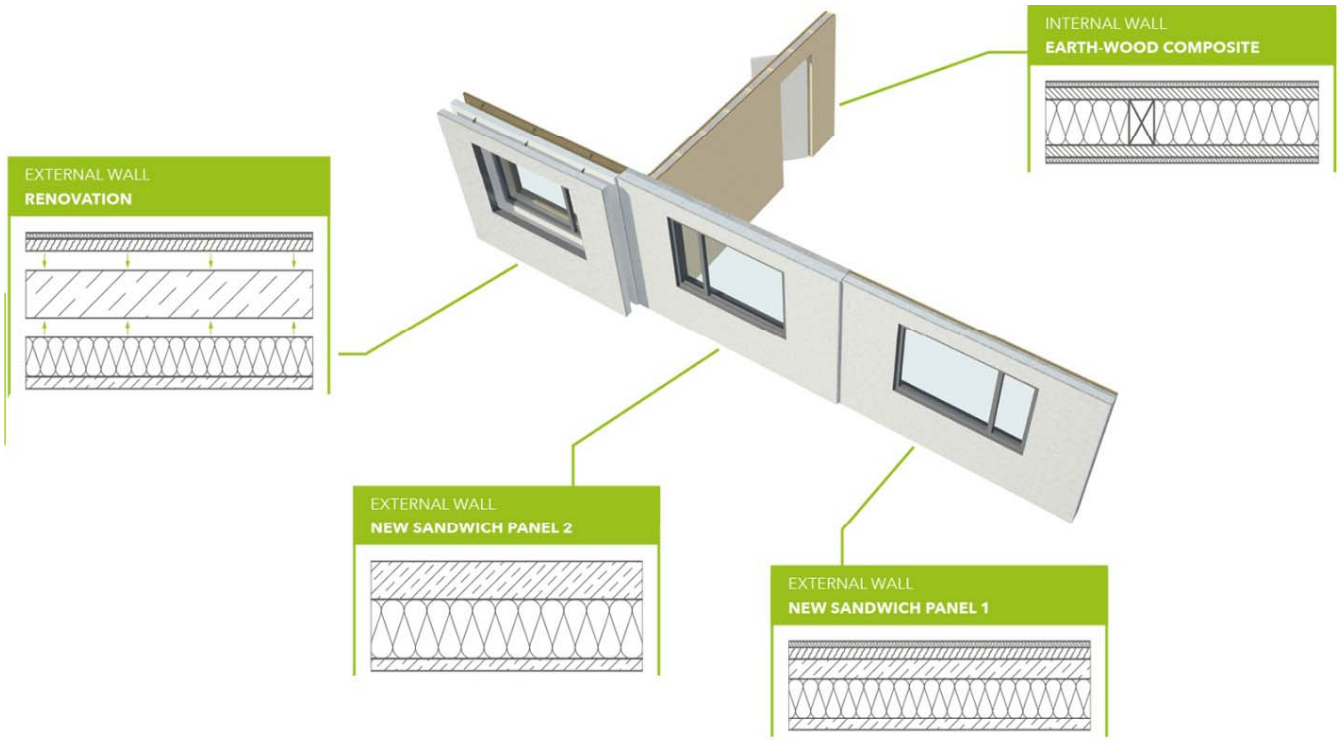
Duration: 4 years (09/2013 – 08/2017)

Consortium: 12 partners (7 WPs)

[H]house

S/T goals of the projects. H-HOUSE

Develop new building **components for external and internal walls** for new residential buildings and for renovation.



[H]house

S/T goals of the projects. OSYRIS

Forest based composites for facades and interior partitions to improve indoor air quality in new builds and restoration

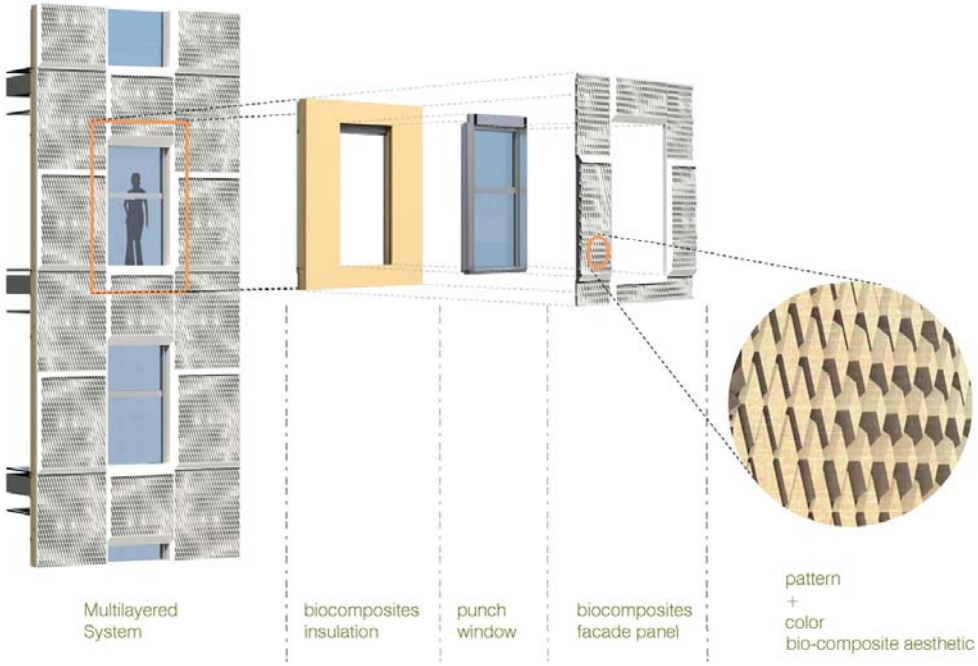
Coordinator: Tecnalia, ES

Duration: 4 years (06/2013 – 05/2017)

Consortium: 18 partners (9 WPs)

S/T goals of the projects. OSYRIS

Development of a holistic solution for **facades and interior partitions** to be applied in retrofitting and new buildings by developing biocomposite materials and products able to meet the requisites of the Technical Building Code.



OSIRYS

S/T goals of the thematic area

Development of technologies for ensuring, **monitoring** and/or **controlling** a high quality indoor environment (including comfort, health, safety, accessibility and positive stimulation)

Call EeB.ENV.2011.3.1.5-1 “Technologies for ensuring, monitoring and/or controlling a high quality indoor environment particularly in relation to energy efficient buildings”.

CETIEB

INTASENSE

S/T goals of the projects. CETIEB

Cost-Effective Tools for Better Indoor Environment in Retrofitted Energy Efficient Buildings

Coordinator: University of Stuttgart, DE

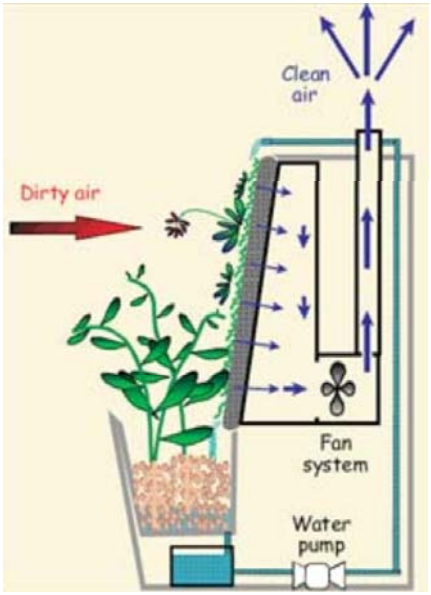
Duration: 3 years (10/2011 – 09/2014)

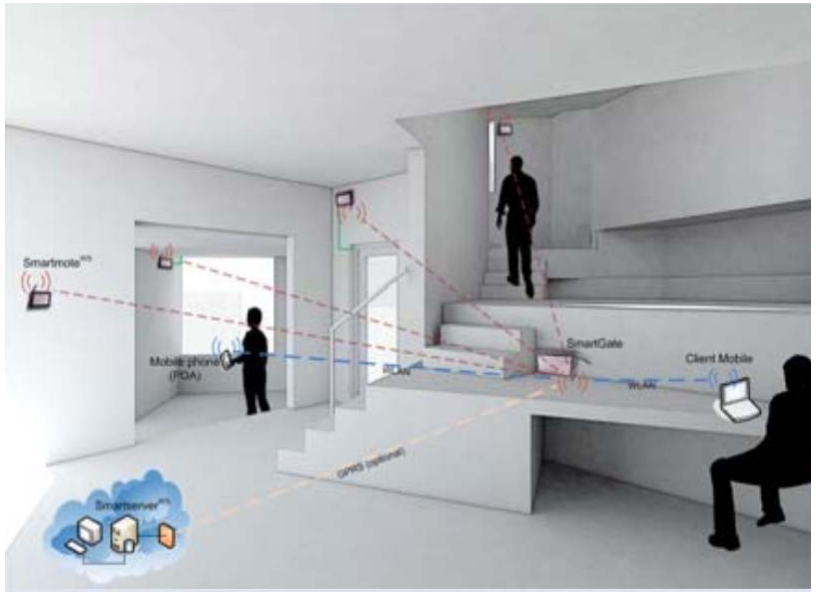
Consortium: 15 partners (8 WPs)

S/T goals of the projects. CETIEB

CETIEB develops cost-effective and innovative solutions for better **monitoring indoor environment quality**.

The project investigates active and passive systems for improving indoor environment quality.





S/T goals of the projects. INTASENSE

Integrated air quality sensor for energy efficient environmental control

Coordinator: C-Tech Innovation Ltd, UK

Duration: 3 years (10/2011 – 09/2014)

Consortium: 8 partners (9 WPs)

S/T goals of the projects. INTASENSE

To develop a low cost air quality **monitoring system**, to detect VOCs combustion gases and particulates and to control HVAC systems.

Cluster strategies: expectations from cluster

Actions to increase the impact/exploitation of project results:

- A combined approach maximises the efficiency of each project-partner.
- The combination of research projects attracts a wider audience.

Cluster strategies: increasing the impact

Within the cluster: SCIENTIFIC PRIORITIES

- Workshop of LCA experts from BRIMEE, ECO-SEE, H-HOUSE and OSIRYS to share experiences and establish common ground. *Completed (Brussels, October 2014)*

- Put in touch the partners specialised in fire issues for an internal workshop. *Organization of the AMANAC fire workshop in the framework of ICAE2015 "7th International Congress on Architectural Envelopes"*

Cluster strategies: increasing the impact

Within the cluster: SCIENTIFIC PRIORITIES

- Standardisation aspects: share info about regulations in different countries and discuss the standardisation of common products. *Started and on-going work*

- Share common data and statistics about renovation of buildings, case studies, etc. *Done*

Cluster strategies: increasing the impact

Within the cluster: NON-TECHNICAL PRIORITIES

- Creation of a website where the IEQ (indoor environmental quality) cluster will be a “microsite”.
- Share all public info and public foreground info.
- Create a LinkedIn group.

Cluster strategies: increasing the impact

Within the cluster: NON-TECHNICAL PRIORITIES

- Share website news between projects and publish them in all projects' websites.
- Circulate targeted fairs/congresses to attend together (i.e. Eco Build, BAU).

Cluster strategies: increasing the impact

Within the cluster: NON-TECHNICAL PRIORITIES

- Share info about associations and public authorities playing in the field. *On-going*
- Share workshop and SP meetings info. *On-going*

Cluster strategies: increasing the impact

Within the cluster: NON-TECHNICAL PRIORITIES

- Scheduling of quarterly cluster meetings (Skype meetings and every six months meetings in person for AMANAC members).
- Engagement in the AMANAC cluster. Interactions regarding safety in nanomaterials and market development.
- Participation in the scientific session related to the AMANAC cluster in the ICAE2015 “7th International Congress on Architectural Envelopes”.

Cluster strategies: LCA next steps

- Set up working group via email. *In hand*
- Plans for specific LCA activity – workshop planned for AMANAC cluster: *On-going*
- LCA work – system boundaries for database – cradle to gate in first instance: *On-going*
- 2 other IEQ projects INTERSENSE and CETIEB – active rather than passive air quality. Potential interest in joining this cluster. *Engagement to be confirmed (project funding completed)*

THANK YOU FOR YOUR ATTENTION