

CLUSTER INTERNATIONAL CONFERENCE

NEW DESIGN FOR A SUSTAINABLE BUILT ENVIRONMENT: INDUSTRIAL PROCESSES, INFRASTRUCTURES, BUILDINGS COMPONENTS, ENERGY MANAGEMENT IN RESEARCH AND INNOVATION ACTIONS

COORDINATOR: PROF.SSA ANNARITA FERRANTE

ORGANIZING COMMITTEE: ANASTASIA FOTOPOULOU AND CECILIA MAZZOLI

16TH DECEMBER

Aula Prodi

Dipartimento di Storia Culture Civiltà

Università di Bologna

Piazza San Giovanni in Monte 2, Bologna, Italy



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DIPARTIMENTO DI ARCHITETTURA
DIPARTIMENTO DI ECCELLENZA MIUR
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KEYWORDS

SMART FACADE
INDUSTRIAL PROCESSES FOR THE DEEP RENOVATION OF BUILDINGS
RECYCLABLE MATERIALS AND COMPONENTS FOR CIRCULAR ECONOMY
RENEWABLE ENERGY SYSTEMS
HVAC SYSTEMS
SMART GRID

The Department of Architecture of the University of Bologna is promoting a clustering event in relation to the most updated experiences connected to energy efficiency in **building's technological design**.

The clustering event is an important opportunity to focus on the scientific researches that have led to **major technological innovations**, as Plug & Play, high performance and energy saving solutions, new tools and strategies to encourage large scale deep renovation and major transformation of existing buildings and promote new energy efficient design in the EU.

For the full success of this initiative, Universities, Industries and Public Bodies that have participated as coordinators or partners in **Innovative Actions funded by European Research** projects (completed or in progress) are warmly invited to share and discuss the outcomes of the researches on the design and prototyping of innovative elements in the building sector.

These outcomes are intended to be representative of **new components and materials, new design processes, new industrial methods for manufacture and assembly building and infrastructural components, new design strategies**. They should be related to:

- reduction of environmental impact;
- control of energy consumption;
- renewable energy systems and smart grids;
- business model and exploitation;
- circular economy.

The scope of this initiative is to provide a comprehensive framework of the state of art related to existing or in progress **innovative technologies for energy efficiency and circularity in the building sector**.

Stakeholders such as building owners, local authorities, urban planners, investors, design firms and other supply and technological solution providers, as well as important industrial actors in Prefab Plug & Play systems will be invited as they have an important role in the implementation and dissemination of the project results.

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16th December 2019

09.30 – 10.00	<i>Welcome and Introduction (Prof. Annarita Ferrante)</i>
10.00 – 10.40	Keynotes from Module 1 – Smart Façade
10.00 – 10.20	“TES Energy Façade (Timber-based Element System for improving the energy efficiency of the building envelope)” TUM, Department of Architecture - Technical University of Munich Stephan Ott
10.20 – 10.40	“MORE-CONNECT (Development and advanced prefabrication of innovative, multifunctional building envelope elements for MODular RETrofitting and CON-NECTIONS)” Huygen Installatie Adviseurs - Simona D’Oca
10.40 – 11.20	Keynotes from Module 2 – Industrial processes for the deep renovation of buildings
10.40 – 11.00	“ReCo2ST - Residential Retrofit assessment platform and demonstrations for near zero energy and CO2 emissions with optimum cost, health, comfort and environmental quality” Technical University of Crete, School of Environmental Engineering - Angeliki Mavrigiannaki
11.00 – 11.20	“RenoZEB - Accelerating Energy renovation solutions for Zero Energy buildings and Neighbourhoods” RINA Consulting Spa
11.20 – 11.40	Coffee break
11.40 – 12.20	Keynotes from Module 3 – Construction processes and technology building blocks
11.40 – 12.00	“Insiter - Intuitive self-inspection techniques using augmented reality for energy-efficient buildings made of prefabricated components” DEMO Consultants B.V.

12.00 – 12.20	<p>“4RinEU - Robust and Reliable technology concepts and business models for triggering deep Renovation of Residential buildings in EU”</p> <p>EURAC Research, Institute for Renewable Energy - Roberto Lollini / Roberta Perneti</p>
12.20 – 14.00	Lunch
14.00 – 14.40	Keynotes from Module 4 – Renewable energy and HVAC systems
11.40 – 12.00	<p>“TESSe2b - Thermal Energy Storage Systems for Energy Efficient Buildings. An integrated solution for residential building energy storage by solar and geothermal resources”</p> <p>Polytechnic Institute of Setubal, Mechanical Engineering Department Luís Coelho</p>
12.00 – 12.20	<p>“ZERO-PLUS - Achieving near Zero and Positive Energy Settlements in Europe using Advanced Energy Technology”</p> <p>National and Kapodistrian University of Athens, Department of Physics Margarita Assimakopoulou</p>
14.40 – 15.20	Keynotes from Module 5 – Smart grid
14.40 – 15.00	<p>“SMART GEMS Energy Network”</p> <p>Technical University of Crete, School of Environmental Engineering Kostas Gobakis</p>
15.00 – 15.20	<p>“GridAbility”</p> <p>MANGROVIA Blockchain Solutions - Alex D’Elia</p>
15.20 – 15.40	Coffee break
15.40 – 17.40	Posters presentation and interdisciplinary focus
17.40 – 18.00	<i>Closing the conference</i>
18.00 – 19.00	<i>Farewell networking & Cocktail buffet</i>

JOIN OUR CLUSTER CONFERENCE!

The Web Conference will begin at 9.30 am on 16th December 2019.

Log in to <https://webconference.unibo.it/cluster2019/> and enter your name.

The online room will be accessible starting a few minutes before the beginning of the web conference.

Due to limited time, individual technical problems cannot be verified. We advise you to:

- make sure in advance that your device is equipped with the computer tools necessary to listen and see the materials that will be shown on video;
- verify that your device is equipped with Adobe Connect / Flash Player 11.2 or later. Adobe Connect requires the plug-in for Flash Player version 11.2 or later. Make sure you have downloaded and installed it in time for the start.

In case of problems, try switching browsers.

As an alternative to browsers we recommend the ANDROID and IOS smartphone app: <http://www.adobe.com/it/products/adobeconnect/feature-details/adobe-connectmobile.html>

Participation in the conference will entitle to 5 course credits (CFP) for Engineers and Architects.

For **Architects**: registration on the website <https://eventi.unibo.it/cluster-event-da>.

For **Engineers**: registration on the website <https://formazione.ordingbo.it/>.

In case of impossibility to participate, it is mandatory to cancel in order to allow the participation of other potential interested colleagues.

To obtain the CFP it is necessary to participate in the entire event.

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