### **CONGRESS SECRETARIAT**

AiCARR Educational Srl

Via Melchiorre Gioia,168

20125 - Milan, Italy

info@climaworldcongress.org

# **DEADLINES**

ABSTRACT SUBMISSION: 31/08/2024

FULL PAPERS SUBMISSION: 15/01/2025

REVIEW REPORT ON FULL PAPER: 20/02/2025

REVISED VERSION OF THE FULL PAPER: 01/04/2025

NOTIFICATION OF PAPER ACCEPTANCE: 15/04/2025

The information submitted for presentation at the Congress must be original, unpublished and not being considered for publication or presentation elsewhere. Authors will be notified as to whether or not their papers are accepted for presentation at the Congress.

Improvements in the paper content or layout can be requested, if necessary. At least one of the authors for each paper must be registered by April 20th, 2025. One registered author cannot support more than two multi-authored papers for presentation.

Link to the Congress "Virtual bag" containing the full papers presented will be distributed to the registered participants.

The Congress "Virtual bag" will include papers accepted for presentation, provided that at least one author has pre-registered by the deadline. A selection of best papers will be published in an indexed open-source international database. A further selection of papers (archival) will be invited for submission to Special Issues of well renowned international scientific journals. Visit the Congress website for detailed information.

The official language during the Congress for all presentations and discussions will be English. All papers must be written and presented in English.

### **CONGRESS FEES**

The registration fee includes the Congress "Virtual Bag", business lunches and coffee breaks during the Congress.

Reduced fees are available for members of REHVA Associations, REHVA and AiCARR MoU (Memorandum of Understand-

ing) partners or supporters, students and one-day participants. Different reduced fees are available for online-only participants.

Visit the Congress website for detailed information.

# INTERNATIONAL STEERING COMMITTEE

Francis Allard (Université La Rochelle, France)

Vikrant Aute (University of Maryland, USA)

Tim Dwyer (UCL, UK)

Jaap Hogeling (EPB Center, The Netherlands)

Min Soo Kim (Seoul National University, South Korea)

Catalin Lungu (Technical University of Civil Engineering of

Bucharest, Romania, REHVA President)

Akio Miyara (Saga University, Japan)

Bjarne Olesen (DTU, Denmark)

Jeffrey Spitler (Oklahoma State University, USA)

Ruhzu Wang (Shanghai Jiao Tong University, China)

Jörg Worlitschek (HSLU, Switzerland)

# **WORKSHOPS**

During the Congress it is possible to organize technical workshops like, for example, EU Research funded projects workshops and supporter workshops. If you are interested to host a Workshop, go to the relevant section in the Congress website.

### **SPONSORSHIP**

There are several Congress sponsorship opportunities. Relevant info is available in the Congress website.

Powered by







Clima 2025 will be a hybrid event both in presence and online.

www.climaworldcongress.org



Decarbonized, healthy and energy - conscious buildings in future climates

# **REHUA 15th HUAC World Congress**

4th - 6th 2025 June, Milan, Italy

Buildings for the climate of the future: the key role of the HUAC sector

> Politecnico di Milano Campus Milano Bovisa - La Masa





# **CONGRESS VENUE**

# The Congress will be a hybrid event both in person in Milan and online.

Milan is a wealthy and cosmopolitan city that is open to welcoming experts and those who will attend Clima 2025 and their accompanying people. Located in the North of Italy, it is the largest Italian industrial city and an inspiring international economic and financial hub.

Milan is art, fashion, design, quality food and great events.



The Milano Bovisa Campus is situated on the site of the former gasometer in Bovisa, a neighbourhood located north of Milan. The campus has significantly expanded as a result of an international competition announced in 1998 by Politecnico di Milano

in collaboration with other local entities such as the Municipality and Region, leading to a general renewal of the area.

The Congress will take place at the School of Industrial and Information Engineering, buildings BL27 and BL28, located in Via La Masa, Milan.

The Milano Bovisa campus is easily and quickly reachable from downtown Milan by local transportation.

### **ACCOMMODATION**

Milan has a wide range of accommodation, from luxury hotels to youth hostels.

The Organizing Committee will select a few hotels in Milan willing to apply special rates for Congresss participants. Visit the official Congress's website for the updated list of hotels.

# TRAVEL AND TRANSPORTATION TO MILAN

By plane: Milan has three international airports, Milano Malpensa (41 km), Milano Linate (6 km), and Orio al Serio (46 km), that connect the city with the rest of the world.

By train: Milan is served by numerous international high-speed trains. See Trenitalia.com website for info.

*By car:* Milan is linked by motorways to the rest of Italy and to the European network.

### **OBJECTIVES OF THE CONGRESS**

# Buildings for the climate of the future: the key role of the HVAC sector

The REHVA HVAC World Congress CLIMA is the leading international scientific congress in the field of heating, ventilation, and air conditioning (HVAC). After the great success of the 2022 edition, organized by the Dutch association TVVL, the baton now passes to AiCARR for the organization of CLIMA 2025: the theme of this Italian edition is "Decarbonized, healthy, and energy-conscious buildings in future climates", CLIMA 2025 will offer professionals, academics, and companies in the HVAC sector a unique opportunity for international discussion about these "hot" subjects.

# "DECARBONIZED, HEALTHY AND ENERGY CONSCIOUS BUILDINGS IN FUTURE CLIMATES": WHY THIS TITLE?

Decarbonization: achieving the decarbonization of the European building stock by 2050 requires deep energy renovation of buildings and neighbourhoods without compromising indoor health.

Health: As we spend more time indoors, we expose ourselves to multiple pollutant sources and microbes. The COVID-19 pandemic has revealed our lack of knowledge about the transmission of respiratory diseases in buildings. Conscious buildings: Increasing digitization opens new opportunities to optimize the design, operation, and indoor environmental quality (IEQ) of new or refurbished nearly zero-energy buildings (NZEBs). However, technically advanced sensor-based measurement and control pose numerous challenges. Future climate data: The climate is changing, and we need to consider its impact on building design and operation. For instance, will more cooling or heating capacity be needed? What energy conservation technologies will be most effective in the future? At present, there are no standardized methods for estimating future climate impacts on building systems.

## **TOPICS**

New HVAC components and systems.

HVAC impact on comfort and health of occupants and operators.

Environmental impact of the new technologies, economic and social consequences.

Breakthrough design approaches for minimization of HVAC carbon footprint.

Renewable energy communities plus energy districts.

Short and long-term energy storages for the decarbonization of heating and cooling in buildings and districts.

Zero Emission Buildings.

Adaptive and integrated technologies for the building envelope.

Options for mitigating the impact of building energy consumption on future climate changes.

Smart Buildings.

## **CONGRESS CHAIRS**

Claudio Zilio, AiCARR President, Chair

Filippo Busato, Università Mercatorum, Co-Chair

# SCIENTIFIC PROGRAMME COMMITTEE

Claudio Zilio (AiCARR President)

Filippo Busato (Università Mercatorum, Vice President)

Fabrizio Ascione (Università degli Studi di Napoli Federico II)

Umberto Berardi (Politecnico di Bari)

Lada Hensen Centnerová (REHVA – Eindhoven University of Technology)

Michele De Carli (Università degli Studi di Padova)

Marco dell'Isola (Università degli Studi di Cassino e del Lazio Meridionale)

Enrico Fabrizio (Politecnico di Torino)

Andrea Gasparella (Libera Università di Bolzano)

Marco Imperadori (Politecnico di Milano)

Simone Mancin (Università degli Studi di Padova)

Alfonso William Mauro (Università degli Studi di Napoli Federico II)

Livio Mazzarella (REHVA – Politecnico di Milano)

Gian Luca Morini (Università degli Studi di Bologna)

Marco Noro (President of AiCARR Culture Commission)

Fabio Polonara (Università Politecnica delle Marche)

# ORGANIZING COMMITTEE

# Local Organizing Committee

Luca Doretti

Livio Mazzarella

Fabio Minchio

Marco Noro

Luca Alberto Piterà

# REHVA

Lada Hensen Centnerová

Marie Joannes