



**venticool**  
the platform for resilient ventilative cooling



**webinar**  
2021.06.01

## Resilient Ventilative Cooling in Practice



Hilde Breesch –  
KU Leuven,  
Belgium



Peter Holzer –  
Operating Agent EBC  
Annex 80



Ivan Pollet –  
Renson,  
Belgium



Nick Hopper –  
Monodraught,  
United Kingdom



Peter Foldbjerg  
– Velux,  
Denmark



Jannick Roth –  
WindowMaster,  
Denmark

### Webinar management



Maria Kapsalaki  
(INIVE, BE)



Valérie Leprince  
(INIVE, BE)

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## Resilient Ventilative Cooling in Practice

### AGENDA

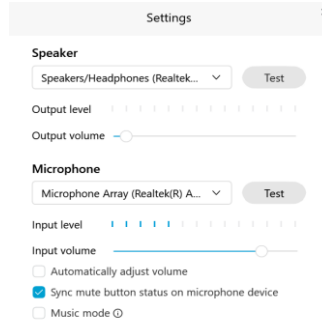
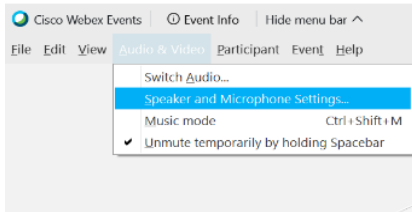
- 15:00 | **Introduction to resilient ventilative cooling and venticool**, Hilde Breesch – KU Leuven, Belgium
- 15:10 | **Ventilative cooling components: an overview**, Peter Holzer – Operating Agent EBC Annex 80, Institute of Building Research & Innovation, Austria
- 15:25 | **Application of louvres to support ventilative cooling**, Ivan Pollet – Renson, Belgium
- 15:40 | *Questions & Answers*
- 15:50 | **Examples of air flow enhancing and natural cooling components**, Nick Hopper – Monodraught, United Kingdom
- 16:05 | **Controlled windows for ventilative cooling**, Peter Foldbjerg – Velux, Denmark
- 16:20 | **Ventilative cooling integrated design**, Jannick Roth – WindowMaster, Denmark
- 16:35 | *Questions & Answers*
- 16:45 | End of webinar

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### If you can't hear the webinar sound

Make sure that Audio Connection is on by clicking on Audio & Video / Speaker and Microphone Settings



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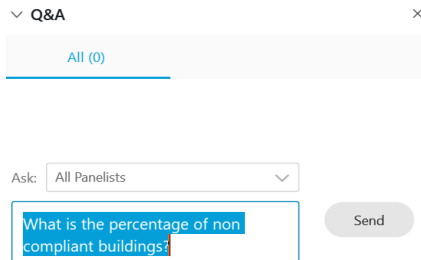


### How to ask questions during the webinar

Locate the Q&A box

Select All Panelists | Type your question | Click on Send

**Note: Please DO NOT use the chat box to ask your questions!**



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Organized by: **INIVE**

With support from:

- venticool platform ([www.venticool.eu](http://www.venticool.eu))
- IEA EBC Annex 80 Resilient Cooling of Buildings (<https://annex80.iea-ebc.org/>)
- IEA-EBC Annex 62 Ventilative Cooling (<https://venticool.eu/annex-62-home/>)
- the Air Infiltration and Ventilation Centre ([www.aivc.org](http://www.aivc.org))

**NOTES:**

- The webinar will be recorded and published at [www.venticool.eu](http://www.venticool.eu) & [www.aivc.org](http://www.aivc.org) within a couple of days, along with the presentation slides.
- After the end of the webinar you will be redirected to our post event survey. Your feedback is valuable so take some minutes of your time to fill it in.

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# Resilient ventilative cooling & **venticool** the platform for resilient ventilative cooling

Hilde Breesch, KU Leuven

Peter Wouters, INIVE

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**venticool**  
the platform for resilient ventilative cooling

<https://venticool.eu>

IEA EBC Annex 62  
The IEA project on ventilative cooling

IEA EBC Annex 80  
The IEA project on resilient cooling

Information on Venticool ▼ | Information on Annex 62 ▼ | Information on Annex 80 ▼ | FAQs

### WELCOME

Dear visitor, Welcome to this combined website of the venticool platform and of IEA EBC Annex 62 – Ventilative Cooling & IEA EBC Annex 80 – Resilient Cooling

**[POSTPONED] 41st AIVC – ASHRAE – IAQ – 7th venticool & 9th TightVent joint Conference**

[COVID-19 update] Because of COVID-19 uncertainty of conditions to hold a face-to-face conference in Athens in September 2021, ASHRAE and AIVC decided to postpone the conference and reschedule it for 2022. The conference “IAQ 2020: Indoor Environmental Quality Performance Approaches Transitioning

### Newsletters

venticool Newsletter  
Foreword  
11-13 September 2021 - 4th AIVC & 9th ASHRAE IAQ joint conference in Athens, Greece  
In this issue

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## Context

- Heat waves: severity & duration
- Global energy demand cooling

Heatwaves in London

Maximum daily mean Temperature [°C]

Duration (number of days)

Legend:  
 - Historical (2001-2020)  
 - MidTerm (2041-2060)  
 - LongTerm (2081-2100)

Source: IEA EBC Annex 80 preliminary results

million units

Projections

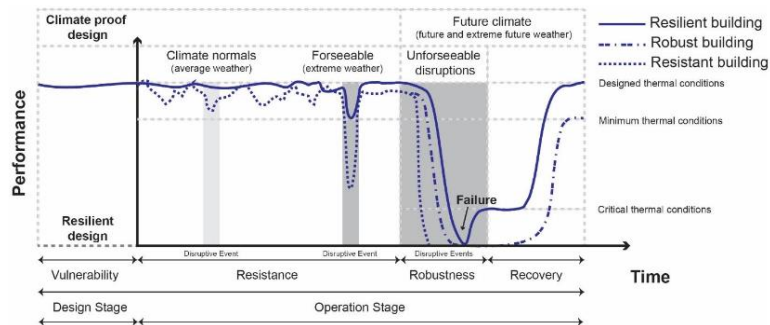
India  
China  
United States

Source: IEA (2018) The Future of Cooling

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## Ventilative cooling part of resilient cooling strategy

- Ventilative cooling performance
  - prevent overheating combined with building design & solar control
  - Satisfactory performance, but fail to function in extraordinary scenarios
- Resilience = ability of building/system
  - withstand disruptions
  - maintain capacity to adapt, learn, transform



Source: Attia et al: Annex 80:  
Resilient cooling

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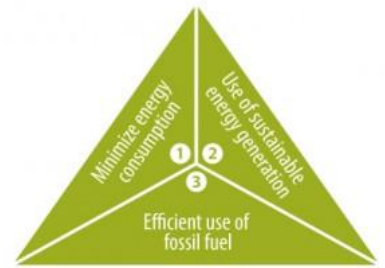
## Ventilative cooling in standards, legislation & energy performance calculations

- Energy performance regulations
  - key market drivers
  - Ventilative cooling: mature assessment thermal comfort & ventilation losses
- Standards, legislation & energy performance calculation need to include
  - Assessment of overheating
  - Assessment of resilient natural & mechanical ventilative cooling
  - Design calculation methods
- venticool's concern = international (CEN, ISO) but also national

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# venticool's position

- Ventilative cooling -> reduce cooling energy need
- Implementation of ventilative cooling is limited
- venticool
  - Asks standards & legislation writers: fair & easy evaluation ventilative cooling performance
  - Provides knowledge & tools for designers to assess potential & limitations
- Focus on resilient cooling -> stimulate uptake of ventilative cooling



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## Diamond partners:

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NATURAL VENTILATION ASSOCIATION

**R** Reynaers  
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Master®**  
Fresh Air. Fresh People.

## Associate partners:

  
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