

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

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venticool
the platform for resilient ventilative cooling

<https://venticool.eu>

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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**

★ **Energy Efficiency and Indoor Climate in Buildings is out! Edition of October 2020**

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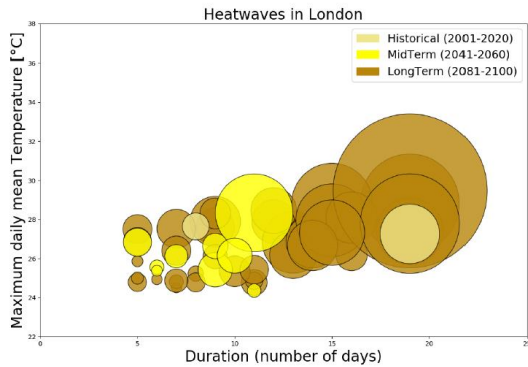
Recent updates

- Energy Efficiency and Indoor Climate in Buildings is out! Edition of October 2020
- 41st AIVC – ASHRAE – IAQ – 9th TightVent & 7th venticool

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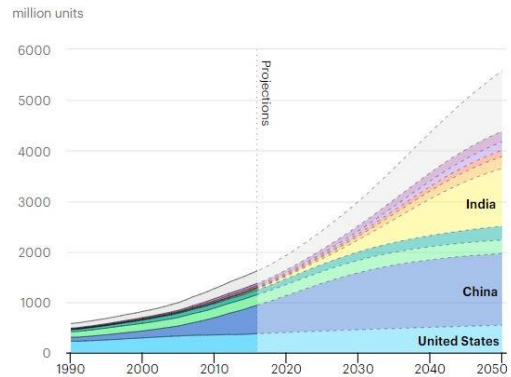
Context

- Heat waves: severity & duration



Source: IEA EBC Annex 80 preliminary results

- Global energy demand cooling

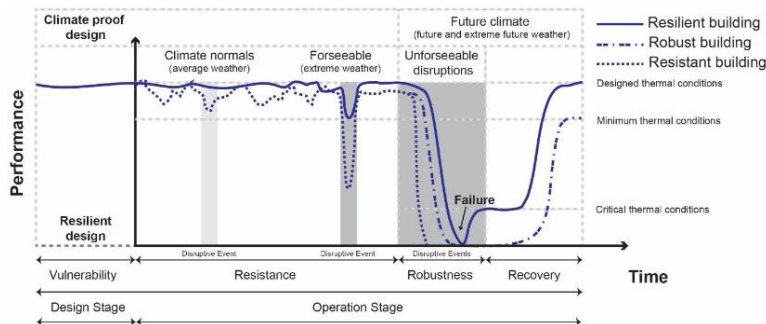


Source: IEA (2018) The Future of Cooling

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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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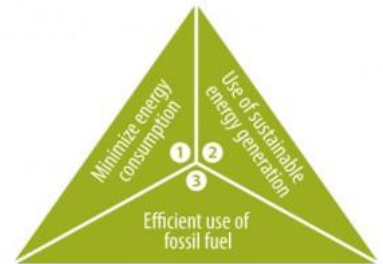
Ventilative cooling in standards, legislation & energy performance calculations

- 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
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 - 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:



Gold partners:



Associate partners:



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