

Overheating Mitigation Policy: Current Trends & Future Outlook

Paul D. O'Sullivan*, Adam O' Donovan

*Department of Process, Energy & Transport Engineering
Munster Technological University
Rossa Avenue, Bishopstown, Cork, Ireland
Corresponding author: paul.osullivan@mtu.ie

SUMMARY

Project RESILIENCE set out to examine overheating risk in a variety of non-residential building archetypes, but also examined several aspects of both overheating risk metrics and indoor thermal resilience evaluation criteria. Assessing the future risk of overheating in new and retrofitted buildings is usually undertaken by applying national regulations and buildings codes where minimum criteria is typically published. The challenge for regulators is to ensure the adopted approaches are robust and ensure reliable evaluations of how a building will perform in the future under a range of different scenarios. Recent research work on resilient cooling and resilient indoor thermal environments has attempted to move beyond assessing the vulnerability of an indoor environment in isolation and instead include how the environment might adapt and recover from extreme events and failures in its basic functioning. In this workshop we intend to explore how regulatory approaches might evolve to incorporate new metrics in this regard. In particular the focus will look at the early stages of design and what regulatory or design based checks are in place to address vulnerability lock-in in future designs, i.e. are there planning stage checkpoints for stress testing building designs prior to detailed design stage. The work will also leverage results and insights from Project RESILIENCE, particularly regarding how different building designs performed in practice.

KEYWORDS

Overheating, summary, occupants, designers, modelling, future planning

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