

Chartered Institution of Building Services Engineers Republic of Ireland Region

CIBSE Ireland Mechanical Competition – Student & Young Engineers Network 14-10-24

CIBSE Ireland is seeking submissions for a competition aimed at student and young engineers (in their first 10 years of employment). The top prize is a €500 voucher for first place, with a €250 voucher for the runner-up. Winners will also be invited as guests of CIBSE Ireland to the premier Building Services Industry Networking event—the CIBSE Ireland Annual Lunch—taking place on Friday, 29th November at Croke Park. In addition, the CIBSE Ireland Award will be presented at a separate event.

Title for submission is "The integration of heat pumps into existing buildings".

Submissions should be between 750 and 1500 words and demonstrate the best practice guidance of CIBSE AM17 Heat Pumps for Large Non-Domestic Buildings.

Key areas to explore include the design considerations as follows

- A comfortable environment for building occupants and reliable provision of services (heating, cooling, DHW, process heat) Specify use (space heating and/or domestic hot water) and working temperatures
- Reliability of heat supply, ease of use and ease of maintenance
- Low energy use in operation
- Safe operation
- Future-proofed and resilient
- As cost-effective as possible in terms of capital and life-cycle costs.

We welcome any provision or use of thermal analysis software, drawings, schematic/topologies, CIBSE Report on <u>Building Performance Reimagined</u> to support your design process.

Submissions to be sent to <u>cibseirelandchair@gmail.com</u> by Monday 11th November. Winner will be announced on Friday 22nd November.

Notes:

1. All entrants must be current CIBSE Members and resident in Rep. of Ireland. Student membership is free and we would encourage all to join for the multiple benefits

around training and guides available. https://www.cibse.org/membership-registration/join-cibse/student

- 2. CIBSE Ireland have nominated two judges for review of all entries.
 - a. Ryan Loney MCIBSE CEng CIBSE Ireland YEN Chair
 - b. Debo Adeduntan MCIBSE CEng CIBSE Ireland Committee Member

Other resources

CIBSE TM51: Ground source heat pumps (2013) (1999)

CIBSE Guide M: Maintenance engineering and management (2014)

CIBSE TM65: Embodied carbon in building services: A calculation method (2021)

CIBSE TM56: Resource efficiency of building services (2014)

CIBSE CP2: Surface water source heat pumps: Code of Practice for the UK (2016)

CIBSE CP3: Open-loop groundwater source heat pumps: Code of Practice for the UK (2016)

BESA TR30: Guide to good practice — Heat pumps (2021) BSRIA BG7: A guidance document for designers (2009)