
TEM-M „Cool buildings for all“

Meeting cooling needs through cooling design

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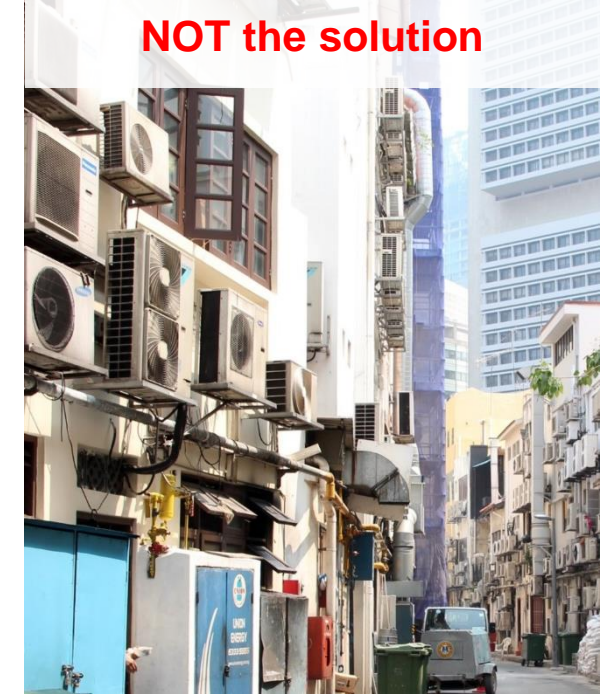
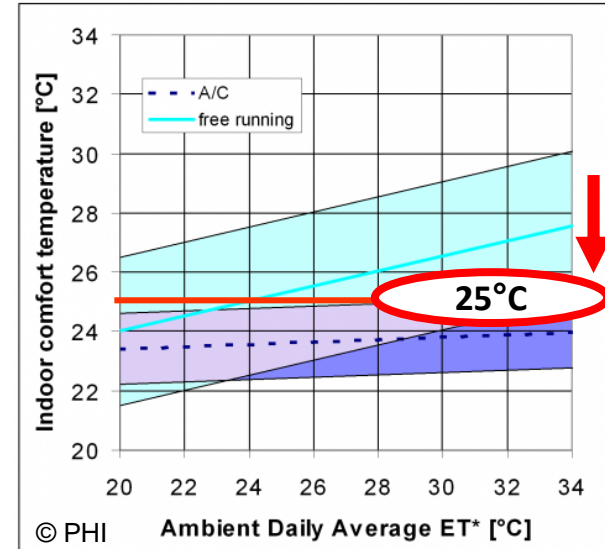
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Cool buildings for all – Where we stand

Cooling demand on the rise

- Warming climate
- Population growth & urbanisation
- Increase in living standards



More people in dense urban living conditions with limited potential for free-cooling

More and more people can afford and expect active cooling to high comfort levels

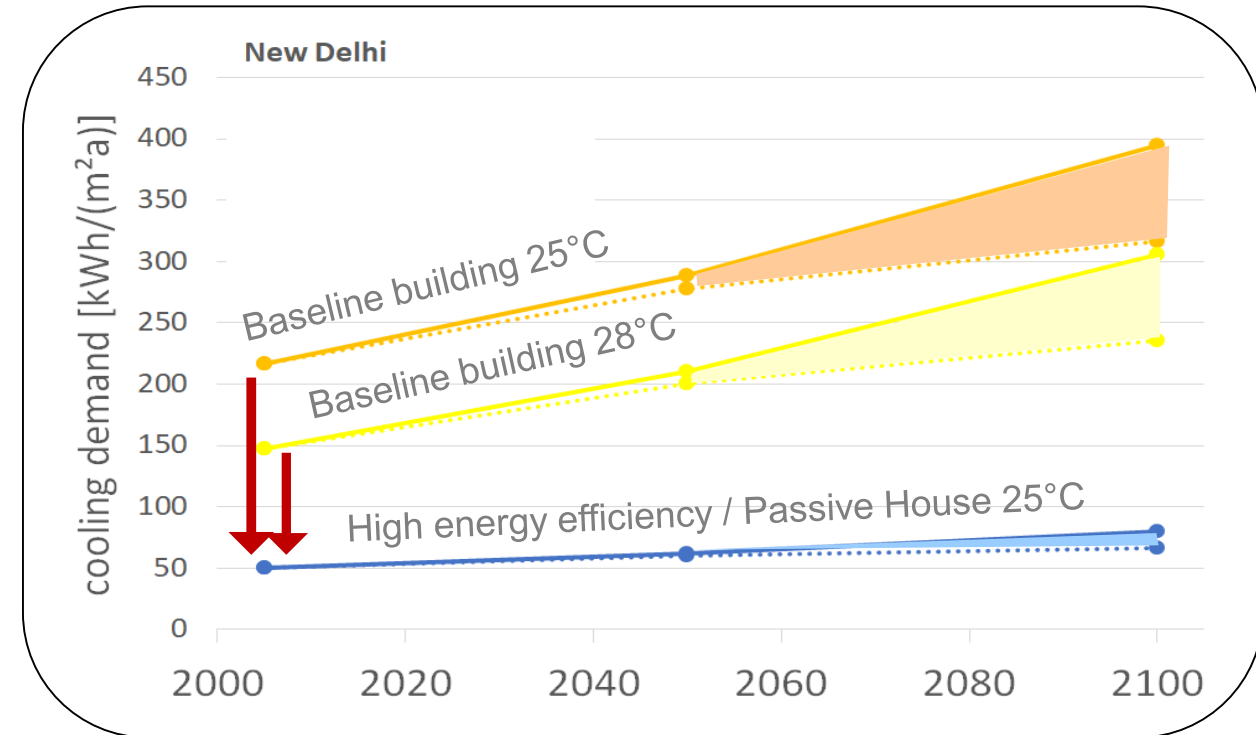
Cool buildings for all – Where we need to go

Design buildings for resilience.

Design buildings for high efficiency active cooling from the start.



https://passivehouse-database.org/index.php?lang=en#d_5065
Photo courtesy of Mauro Bonotto



Heat and humidity control

- ✓ *Shading & cool colors*
- ✓ *Appropriate windows & glazing*
- ✓ *Insulation*
- ✓ *Mechanical ventilation with energy recovery (ERV)*
- ✓ *Airtightness*

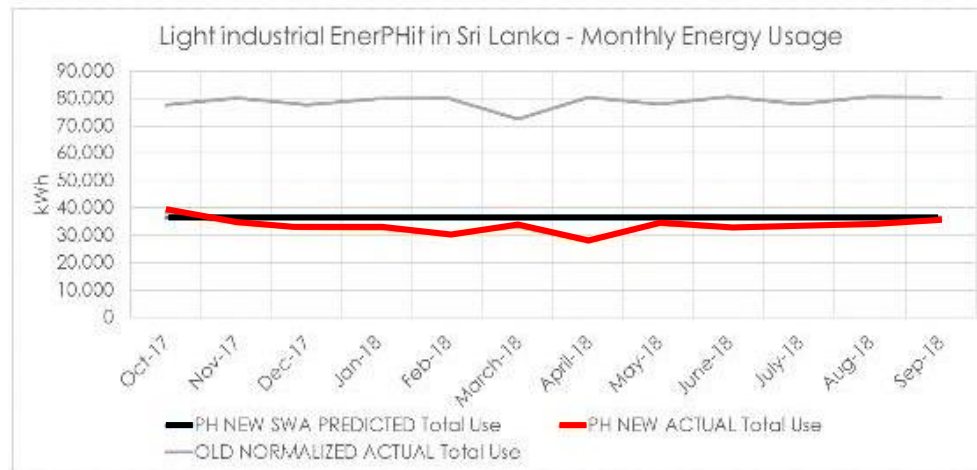
Cool buildings for all – How we get there

Technology & concepts exist.

Projects show proof of concept with **>50% reduced cooling needs**

Next steps, urgently needed:

- Incentives to drive more projects & regional market development
- Low load cooling technologies that efficiently address cooling + dehumidification



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