

Publications and Reports

Better Design for Cool Buildings - How Improved Building Design Can Reduce the Massive Need for Space Cooling in Hot Climates

Description

This report describes, in a non-technical language and with the support of infographics, how improving building designs can significantly curb the energy demand for space cooling. Although the report focuses on tropical and equatorial regions, the technical solutions proposed can be relevant to Southern Europe as well.

According to the report, there is clear scope for implementing these space cooling design solutions, as high-performance building envelopes can reduce the cooling demand by 30% to 50%.

The overall approach fostered in the report entails three main pillars:

- Avoid - buildings should be adapted by design to local climate conditions in order to limit cooling demand
- Shift - replacing fossil-fuel-based energy with renewables; and
- Improve - install efficient systems and appliances to further reduce energy demand for cooling.

The report interestingly distinguishes between building solutions that work in hot and humid climates and pin study descriptions of buildings where the solutions under scrutiny have actually been implemented.

Finally, the report puts forward the following of policy recommendations:

1. Integrate building design into cooling strategies and NDC targets;
2. Adopt and enforce ambitious building energy codes for new buildings and renovations;



Cooling Strategies and NDC Targets

China, Singapore

Intergrating building design into cooling strategies and NDC targets can make a good policy.

Climate action plan

Cooling activities

Saving energy

Cooling strategies

NDC targets

13 CLIMATE ACTION

