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Session 4: Accelerating Policy Implementation for Resilience, Affordability and Climate International Experience on «what works and what hasn't»

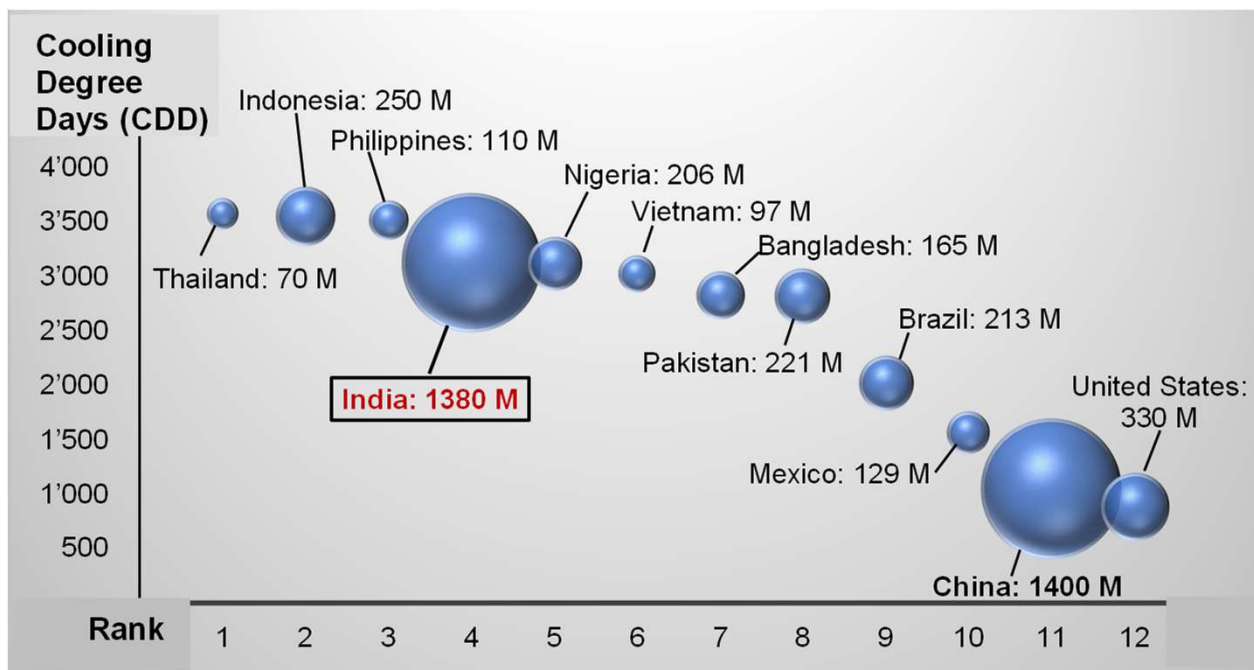
Delhi, 15 September 2022

ENERGY EFFICIENT AND THERMALLY COMFORTABLE BUILDING



The importance of India in cooling

Top 12 countries by air-conditioning potential measured in cooling degree days (CDD); the surface of the bubbles correspond to population size



Source: Davis and Gertler, PNAS, 2015

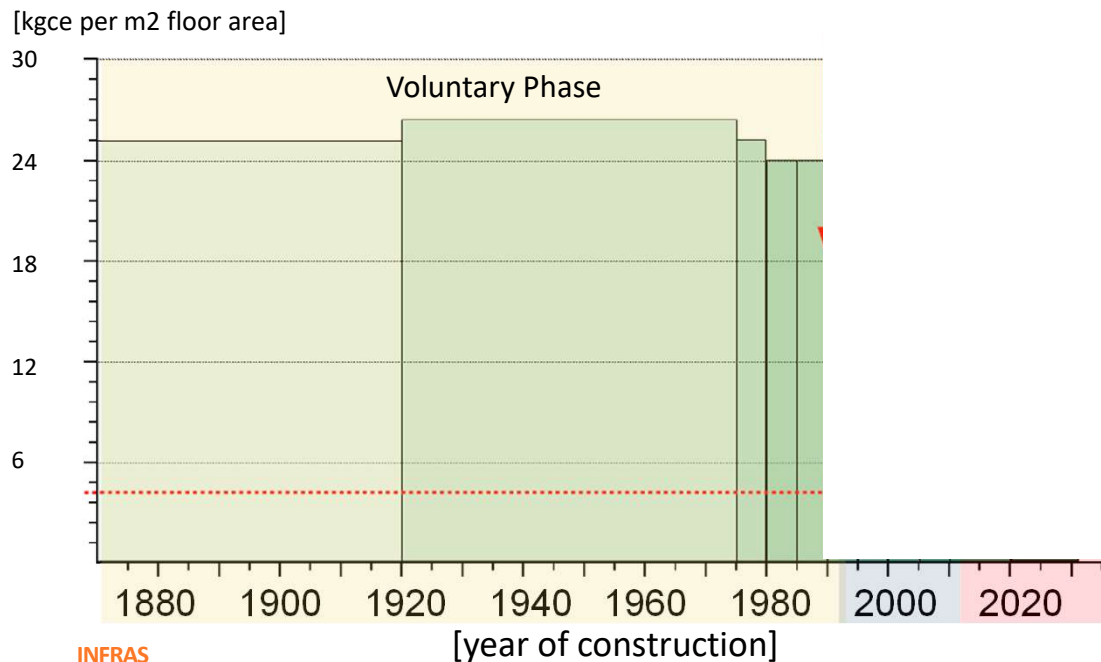
India has globally the largest potential cooling demand:

- **3'120 Annual cooling degree days**
- **>1.4 billion population**

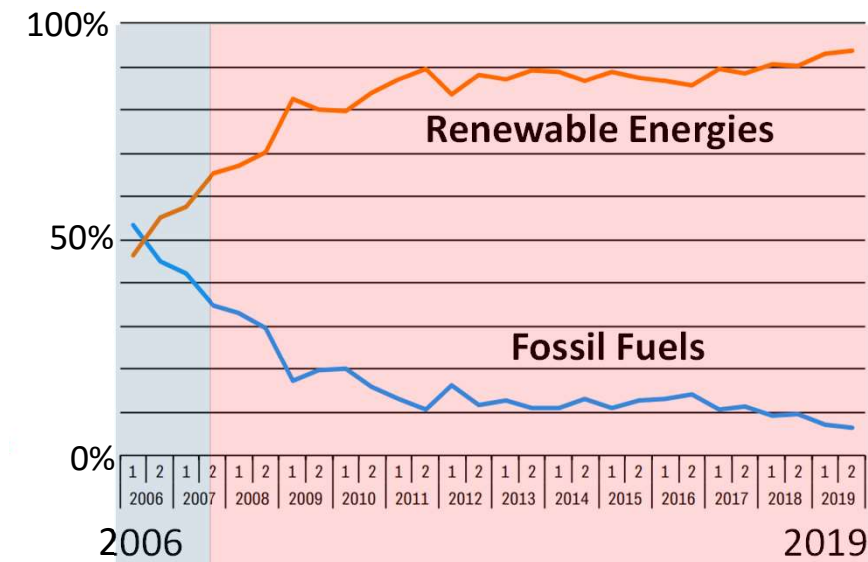
The importance of mandatory building codes

Mandatory building codes were the key for significant progress in energy efficiency and greenhouse gas emissions of the building stock: In Switzerland, Europe and elsewhere

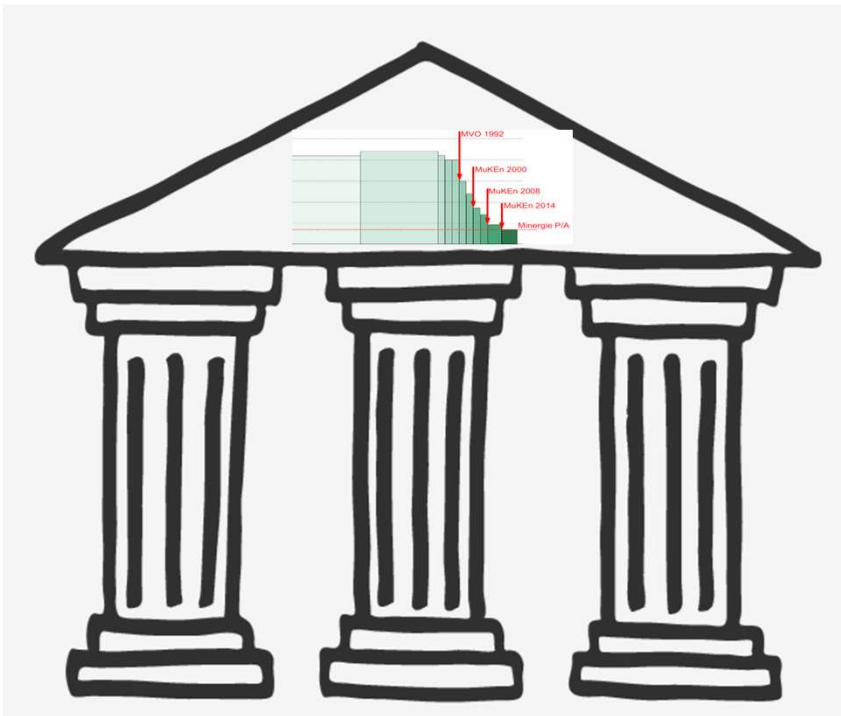
Evolution of heating energy demand in new residential buildings in Switzerland
(room heating and domestic hot water)



Energy Source in new residential buildings



The importance of combining building regulation with voluntary instruments



THREE PILLARS FOR SUCCESSFUL IMPLEMENTATION

- Norms, legislation and enforcement
- Information, education and capacity building
- Incentives, leadership and motivation

Window to wall ratio in combination with effective shading is crucial for cooling load!

