# A COOL WORLD
# DEFINING THE ENERGY CONUNDRUM OF COOLING FOR ALL

- Cooling is the back-bone of our society
- At the same time hundreds of millions of people suffer the consequences daily of no access to cooling for basic needs.
- Global demand for cooling is already straining electricity grids and causing high levels of greenhouse gas (GHG) emissions. Double that of aviation and maritime combined.
- Cooling is a sector that can simultaneously impact health, nutrition, workplace productivity, rural incomes, climate change and urban air quality, but to date it has been in a clean tech blind spot.

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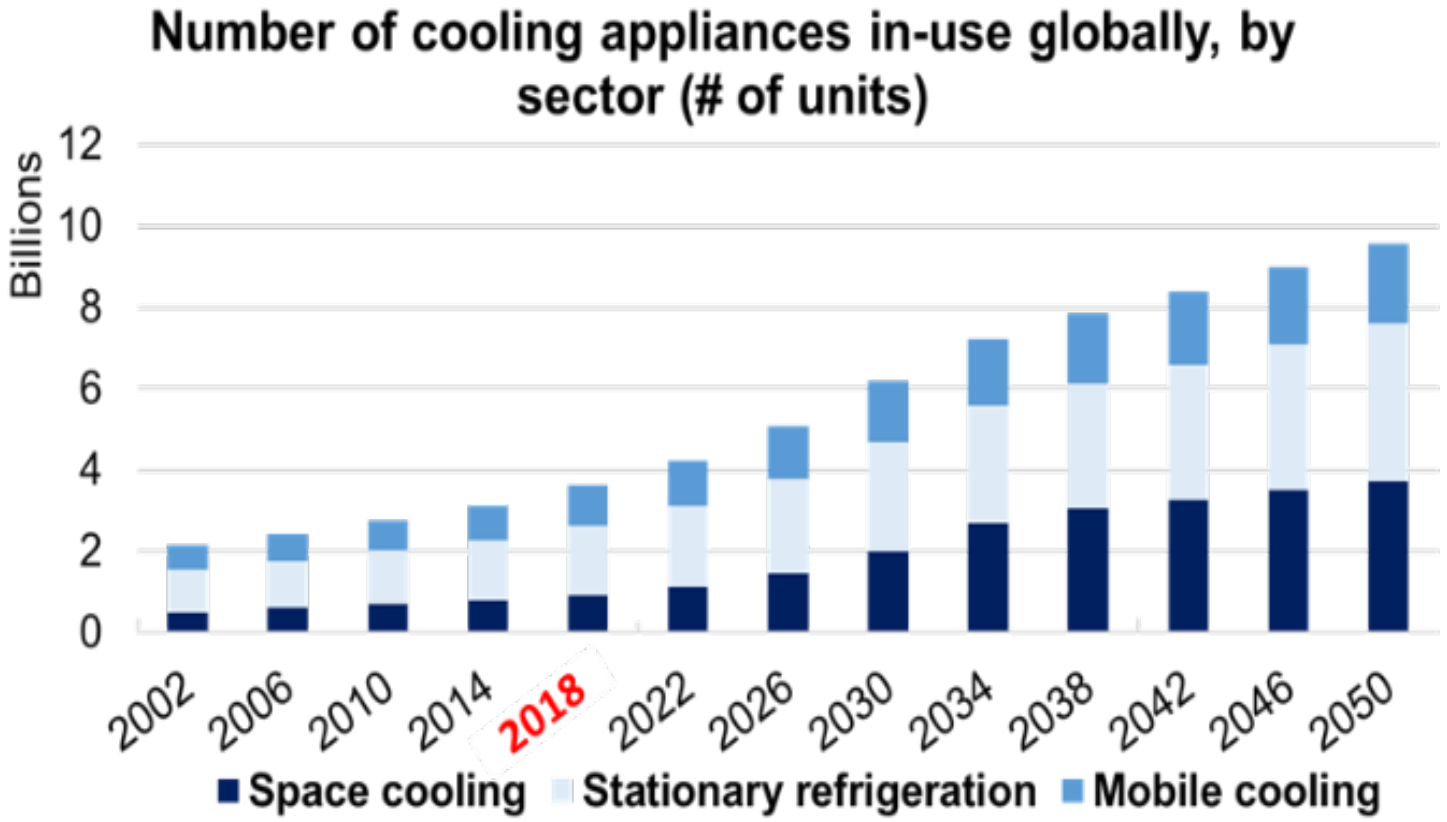
Markets grow from 3.6bn pieces of equipment to 9.5bn by 2050 – **19 added per second for next 30 years**.

Energy consumption grows to 9,500 TWh by 2050.

80% of the RAC market will be located in developing countries by 2030.

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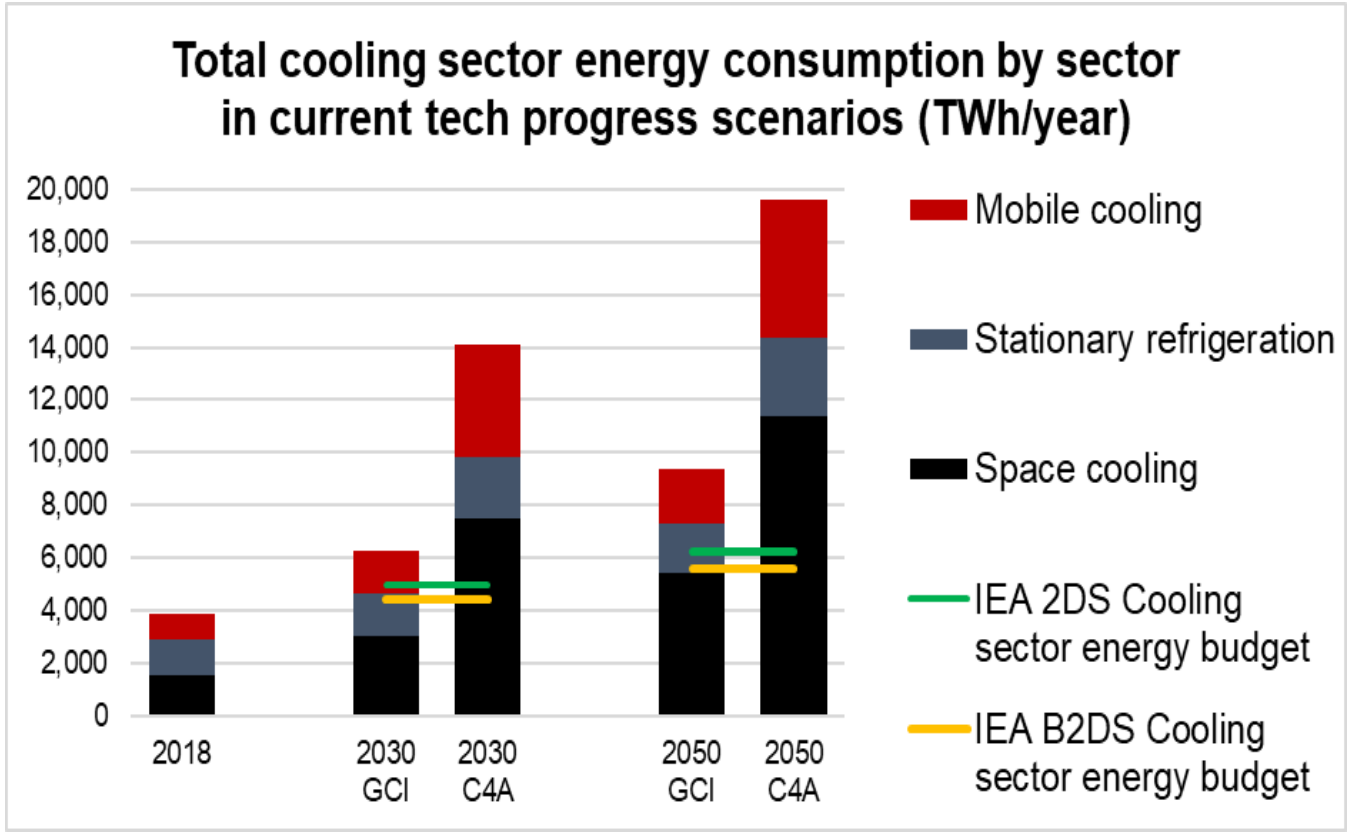
14bn appliances consuming 19,000TWh

3 times the 6,300 TWh maximum sector allocation envisaged by the IEA 2 degrees scenario.

**Need to see a 70% reduction in electricity usage for cooling**.




GCI – projected growth using GCI data

C4A – Cooling for All

2DS – 2 Degree Scenario

B2DS – Beyond 2 Degree Scenario

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Increase efficiency

NOW

Ensuring lowest GWP and highest energy efficiency of current technologies – maintenance, best in class adoption

Active steps to reduce demand for cooling. (building design, passive cooling, behavioural changes

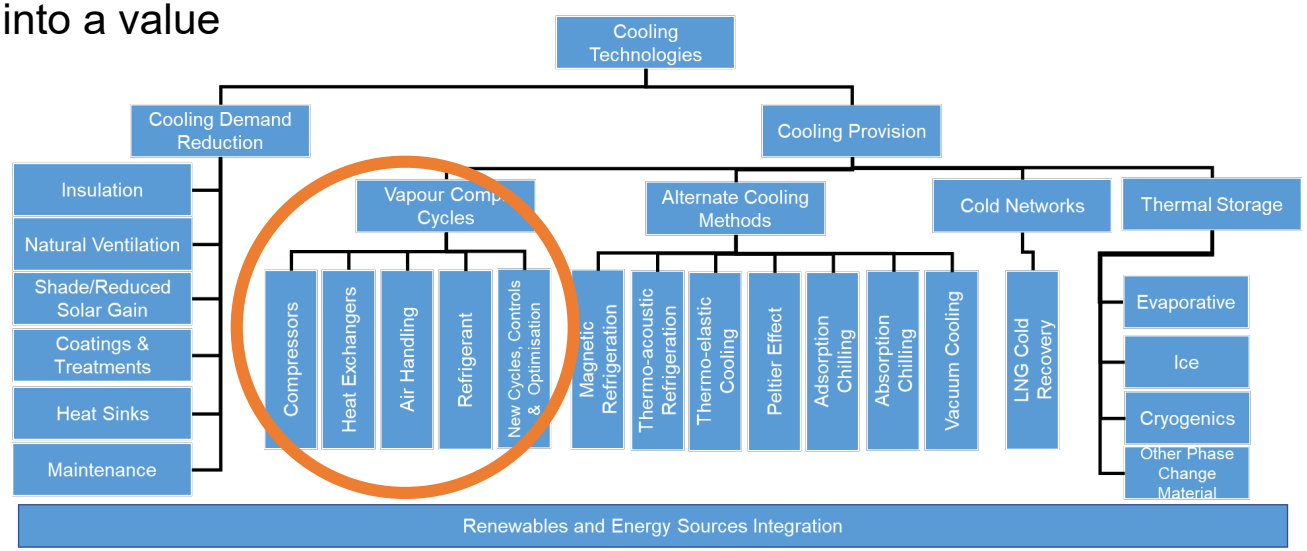
Think thermally, rather than default to electricity – turn waste heat and cold into a value

Think system and how to create integrated trading platforms

DEVELOP

Needs-driven leapfrog new technologies

Disruptive Innovation, energy systems and new business Models

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