

the NEWS

THE FUTURE OF COOLING

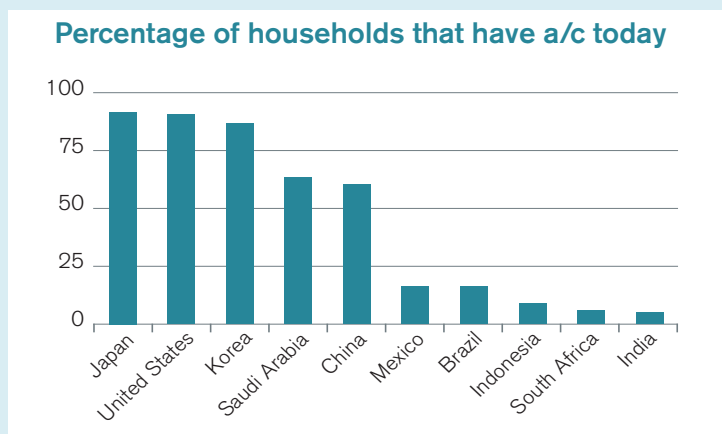
OPPORTUNITIES FOR ENERGY-EFFICIENT AIR CONDITIONING

Cooling down is catching on. As incomes rise and populations grow, especially in the world's hotter regions, the use of air conditioners is becoming increasingly common. In fact, the use of air conditioners and electric fans already accounts for about a fifth of the total electricity in buildings around the world – or 10 percent of all global electricity consumption.

Over the next three decades, the use of a/c units is set to soar, becoming one of the top drivers of global electricity demand. A new analysis by the International Energy Agency shows how new standards can help the world avoid facing such a “cold crunch” by helping improve efficiency while also staying cool.

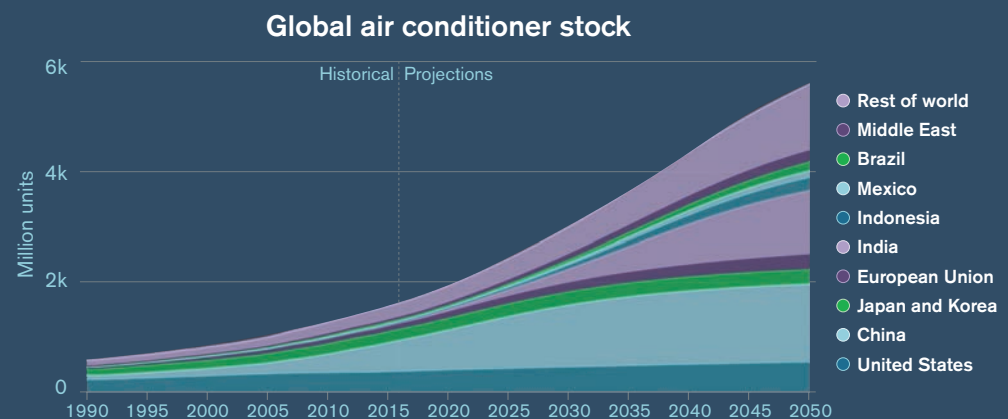
Most homes in hot countries have not yet purchased their first a/c unit

Air conditioning today is concentrated in a small number of countries, but a/c sales are rising rapidly in emerging economies.



The world faces a 'cold crunch'

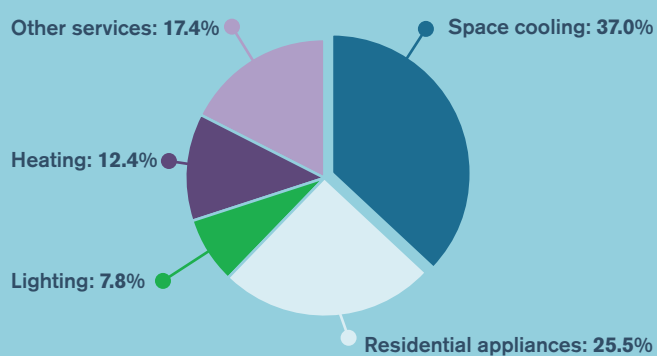
By 2050, around two-thirds of the world's households could have an a/c. China, India, and Indonesia will together account for half of the total number.



Cooling is the fastest growing use of energy in buildings

Without action to address energy efficiency, energy demand for space cooling will more than triple by 2050 – consuming as much electricity as all of China and India today.

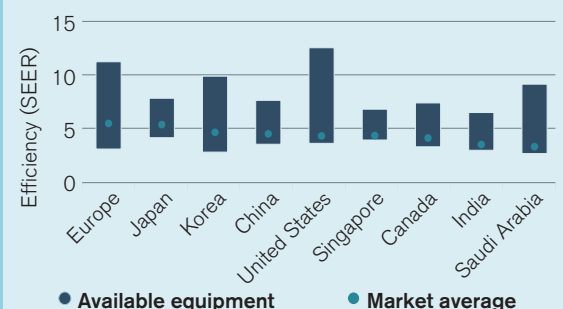
Share of final electricity demand growth to 2050



The problem is, today's consumers are not buying the most efficient a/c units

The average efficiency of air conditioners sold today is less than half of what is typically available on the shelves – and one-third of best available technology.

Energy performance of air conditioners available today

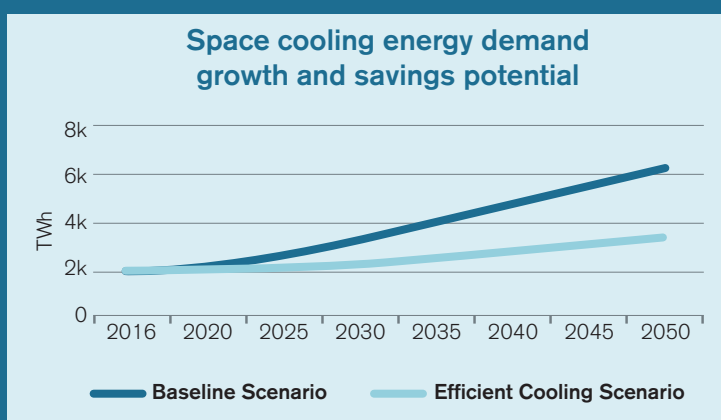


INTRODUCING THE EFFICIENT COOLING SCENARIO

The Efficient Cooling Scenario describes an energy pathway based on strong policy action to limit energy needs for space cooling. First and foremost, it considers the implications of much tighter minimum energy performance standards (MEPS) for air-conditioning equipment. The scenario does not assume any need for further technological advances, even though they will undoubtedly occur and help push up the average efficiency of new models. The Efficient Cooling Scenario is compatible with the ambitious climate goals under the Paris Agreement.

Investing in more efficient a/c units could cut future energy demand in half

Our Efficient Cooling Scenario shows that effective policies can double average a/c efficiency and reduce cooling energy demand by 45 percent compared to the Reference Scenario.



Cooling will drive peak electricity demand, especially in hot countries

More efficient a/c units can reduce the need for new power plants to meet peak power demand, especially at night.

