Access to Affordable Cooling

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Conserving Now, Preserving Future
Landscape of Cooling and Refrigeration

• Current penetration of room AC in India is at 4-5%.

• Current growth rate of Room AC is at 10-12% indicating huge potential for the energy efficient product market

• Projections for the energy demand from refrigeration and cooling in the year 2030 indicate a 70 GW connected load requirement and therefore large potential to reduce energy consumption from this segment.

Efficiency improvement of ACs along with refrigerant transition roughly doubles the emissions benefit of either policy undertaken in isolation.
The Business Case for Energy Efficiency

• Over 50% of the Buildings that would exist in developing countries in 2030 are yet to be built

• Building energy consumption accounts for over 30 percent of electrical energy consumption in developing where the penetration of ACs is very small (its just 6% in India!)

• Air Conditioning accounts for over 30% of energy end use in a typical building

• Energy Efficient buildings while being cheaper over its lifetime also limit the GHG emissions into the atmosphere

This makes a strong business case to plan and implement energy efficiency measures during the early stages of growth.
Benefits of Energy Efficiency Improvements

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1) GHG emissions reduction
   • For India alone (according to U4E analysis) almost $17 billion can be saved cumulatively for consumers through 2030 by improving air conditioner energy efficiency policies
   • Improve energy productivity of the economy thereby reducing emissions (60 – 70%)

2) National Benefits
   • Peak Demand reductions
   • Reduced Energy Demand
   • Meeting international obligations
   • Creation of additional jobs
   • Affordable access to cooling

3) Market opportunities
   • HAT conditions prevalent in the developing countries provide opportunity for efficient ACs in these countries.
   • Profitability & Market expansion for industries

New Delhi: The soaring mercury level has pushed Delhi’s power demand to an all-time high. The capital's peak consumption demand at 3.06pm on Monday touched 6,361MW, the highest ever recorded in any city of India. The last time Delhi set an all-time record was on June 30, 2016 when the electricity demand shot up to 6,261MW.
Price sensitivity plays a major role

What matters the most...

• Price Sensitivity
• Consumer Attractiveness
• Implementation Models

All of this has to be done through an integrated approach