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SHAKTI SUSTAINABLE ENERGY FOUNDATION

COP28 UAE SIDE EVENT

Promoting Green Cooling in India and the Global South

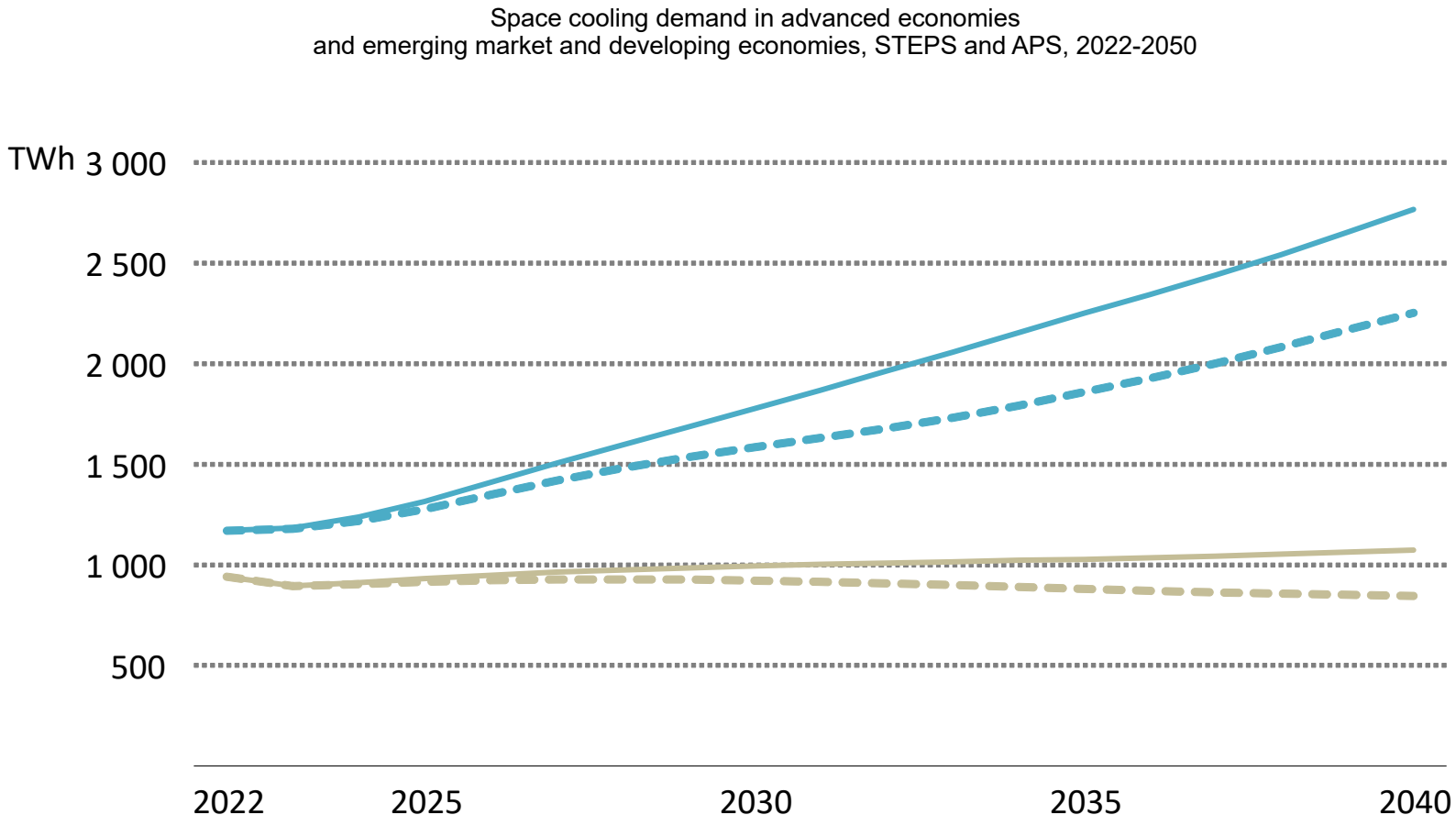
Saturday, 9th December 2023
5:00 PM to 6:30 PM (GST)

International Energy Agency

Promoting Green Cooling in India and the Global South

Thomas Spencer, IEA

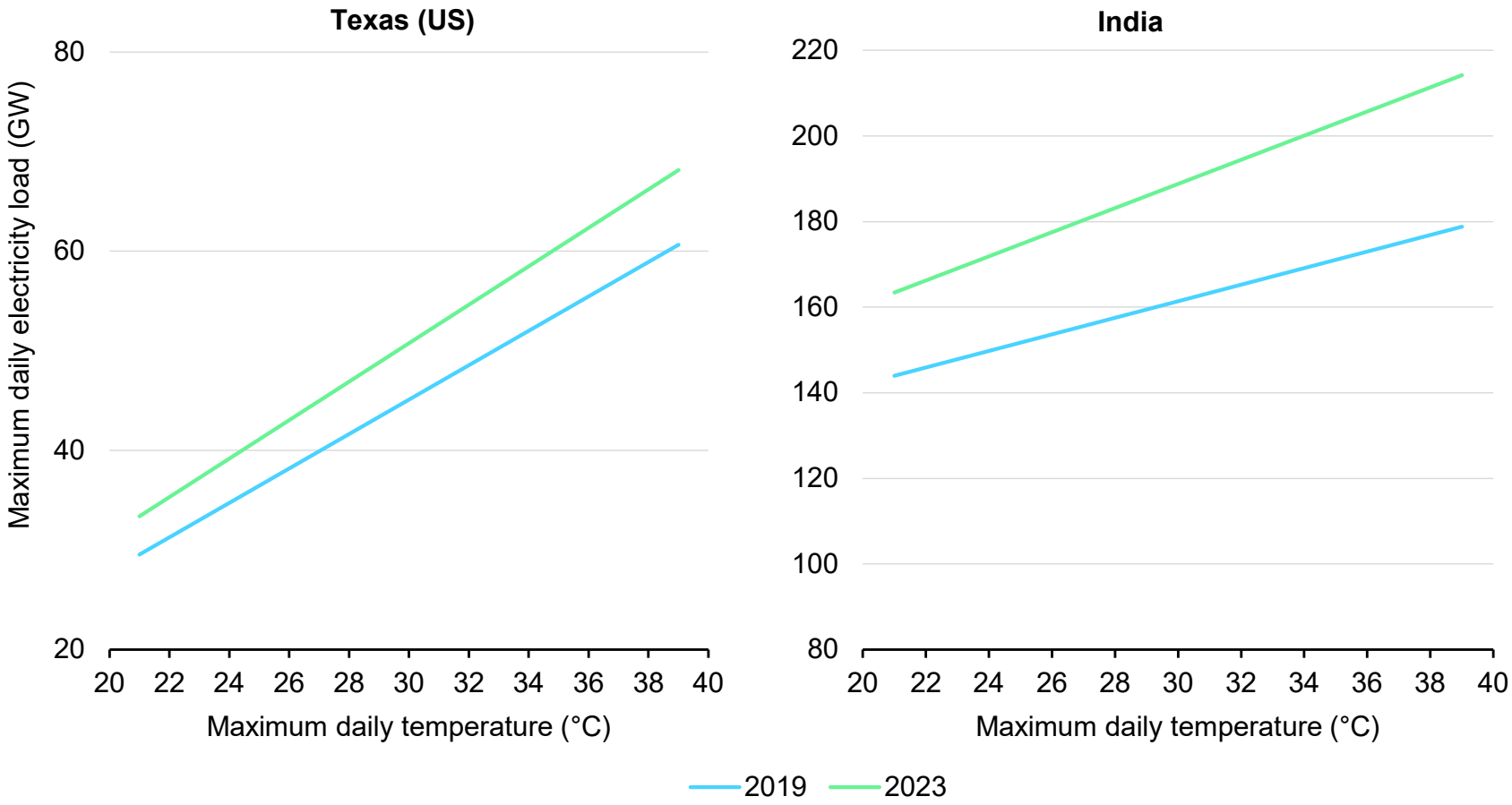
Space cooling demand booms, but efficiency can slow it down



Space cooling demand is set to be the most significant driver of electricity demand growth, particularly in emerging market and developing economies; but strongly policies can reduce demand by 20% by 2040

Hot weather drives energy demand for air conditioning

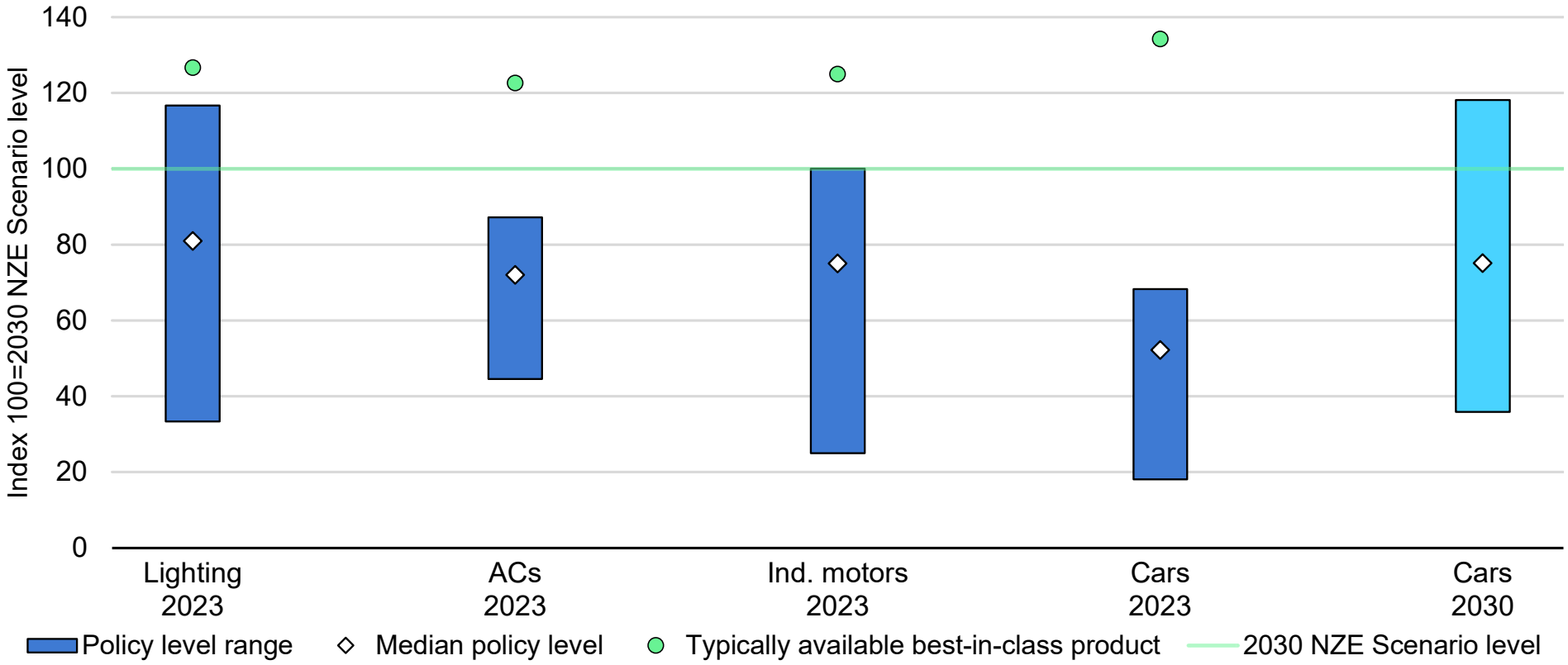
Electricity load and maximum daily temperature, May-September, 2019 and 2023



Every 1°C increase in the average daily temperature above 24°C drives a rise of about 4% in electricity demand in Texas, and a 2% gain in India, where air conditioner ownership is much lower.

MEPS for best in class already exist for air conditioners

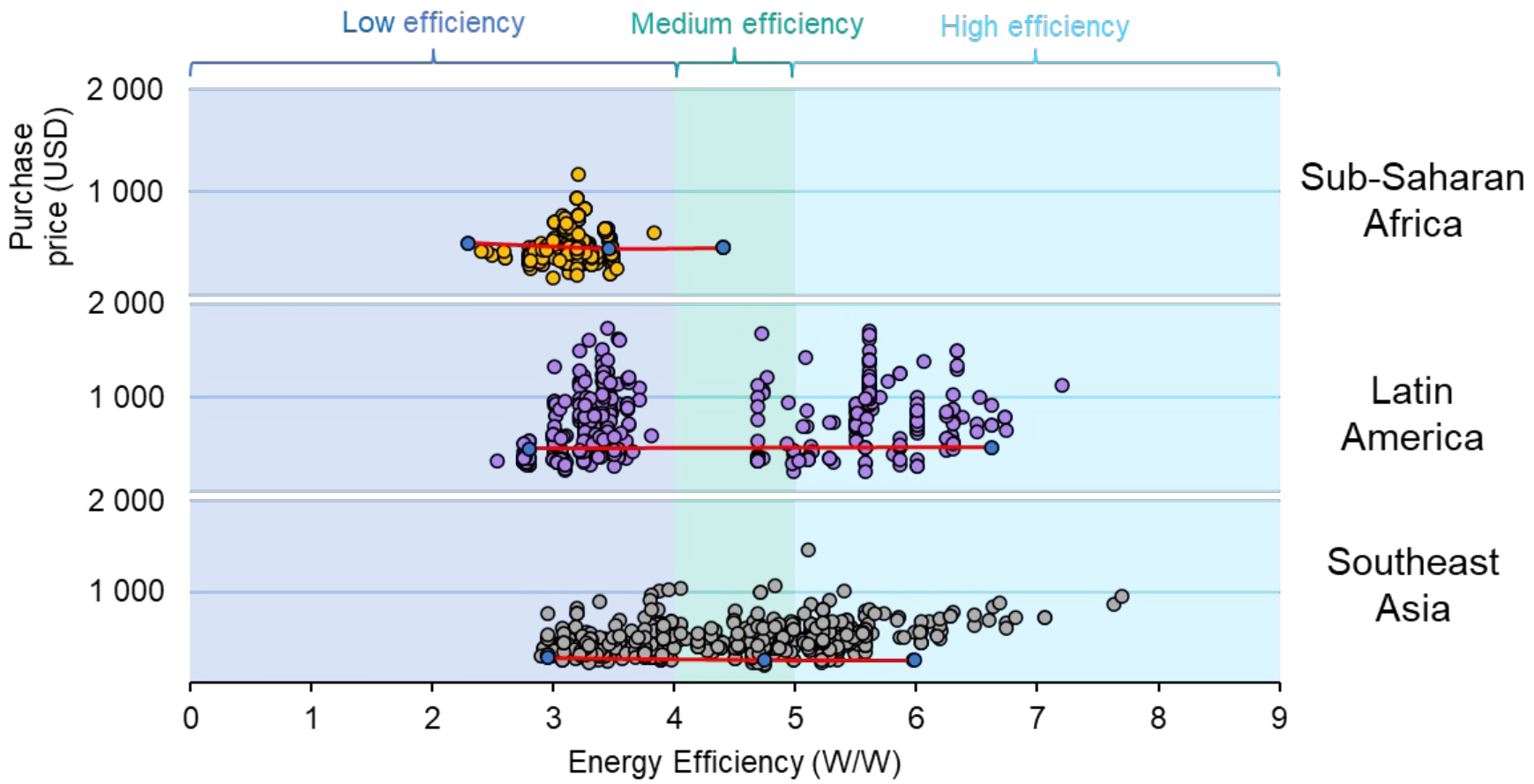
Minimum Energy Performance Standards, IEA Efficiency Policy Level Index end uses, global country range, 2023 and 2030



The technologies needed to achieve a doubling already exist, and policy thresholds are rapidly moving towards the required level.

Increased efficiency does not necessarily mean higher costs

Air conditioners (wall-mounted type) efficiency and cost in Latin America, Southeast Asia, and sub-Saharan Africa, 2023.



Highly efficient air conditioning models are as affordable as less efficient devices in Latin America and Southeast Asia