

\$8 Trillion Opportunity in Sustainable Cooling Solutions for Developing Economies

October 2, 2024



A new report released today by the UN Environment Programme (UNEP)-led Cool Coalition and International Finance Corporation (IFC) highlights a massive \$8 trillion opportunity for sustainable cooling solutions in developing economies.

The report, titled “Cooler Finance: Mobilizing Investment for the Developing World’s Sustainable Cooling Needs,” forecasts a significant growth in the cooling market in developing countries. By 2050, the market is expected to expand from \$300 billion to at least \$600 billion per year. Africa and South Asia are projected to experience the most rapid growth, with market sizes increasing by seven times and four times respectively.

The report emphasizes the need for prioritizing passive, energy-efficient, environmentally friendly, and economically viable cooling solutions. It warns that developing economies, already responsible for two-thirds of global cooling-related emissions, are on track to double their cooling demand by 2050.

By adopting sustainable cooling technologies, developing economies can reduce cooling-related emissions by nearly half by 2050. This requires a multifaceted approach, including:

- Prioritizing passive cooling strategies such as insulation, reflective materials, and enhancing green areas.
- Enforcing stricter energy performance standards and building codes.
- Accelerating the phase-down of climate-warming refrigerants.
- Adopting a systems approach to cold chains and large cooling infrastructure services.
- Providing incentives to promote innovation.

“The sustainable cooling market represents at least a 600-billion-dollar opportunity for the private sector, which could generate more than 8 trillion dollars in benefits for developing countries,” said Makhtar Diop, IFC’s Managing Director. “These nations are especially vulnerable to the deadly effects of rising temperatures and are urgently in need of cooling solutions. We are proud to present this report which describes the opportunity to invest in sustainable, affordable, and scalable cooling solutions, aiming for near-zero emissions by 2050.”

The report highlights the need for significant upfront investments, estimating that closing existing shortfalls in access to cooling for households and SMEs will require between \$400 billion and \$800 billion.

“As record temperatures continue to be broken across the world, keeping cool is an essential need for both

healthy communities and a healthy environment. However, we must avoid creating a vicious cycle of meeting cooling demands through solutions that further heat up the planet,” said Inger Andersen, Executive Director of UNEP. “We need sustainable, affordable and energy efficient cooling solutions that both meet growing demand and support climate, health, food security, and economic development. Governments, private businesses, and multilateral banks can use this report to harness a wide range of financial instruments for sustainable cooling and resilience to extreme heat.”

The report recommends several key actions to promote sustainable cooling, including:

- Improving data on cooling, capital costs, and financing.
- Raising awareness about sustainable cooling solutions.
- Expanding the use of best practice business models and financing tools.
- Increasing seed and high-risk funding for pilot technologies.
- Leveraging blended and concessional finance.
- Building on the Global Cooling Pledge to create a Sustainable Cooling Finance Partnership.

The transition to sustainable cooling requires a supportive environment to attract investors. UNEP and IFC are committed to working with governments, businesses, and other stakeholders to de-risk investments and ensure that sustainable cooling solutions are accessible to all, especially in low-income regions most vulnerable to extreme heatwaves.