



The Cooling Imperative

A report by The Economist Intelligence Unit in partnership with K-CEP

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COOLING EFFICIENCY PROGRAM

The
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Content:

Context: Why this report? Why the EIU?

The **size of cooling demand** and how it will grow out to 2030

Conclusions

Recommendations for further study

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Why this report? Why the EIU?

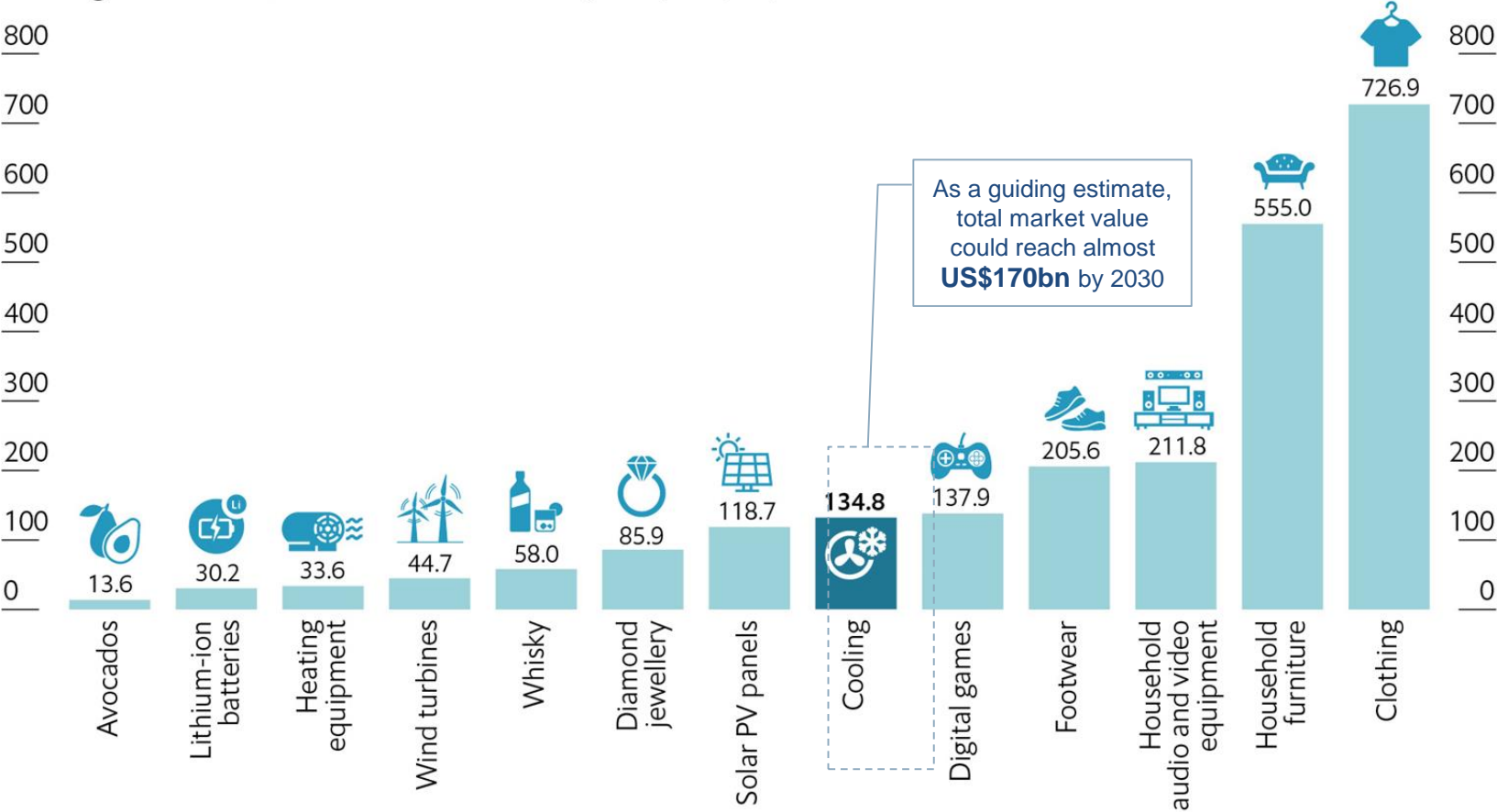
- Understanding the size of the challenge / opportunity
- Making the case for strategic importance
- The need for a non-cooling voice of authority (on the numbers) and an external perspective about the nature of the challenge / opportunity

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The size of cooling demand: Cooling is already a big industry

Cooling in comparison

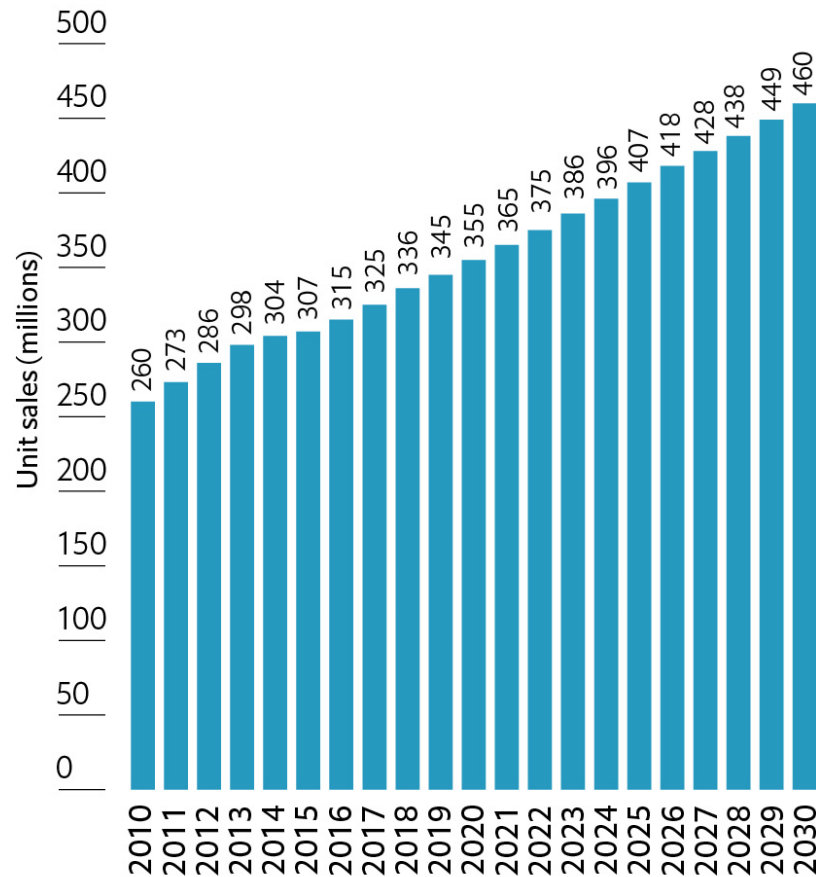
Cooling market value versus other sectors (2018, US\$bn)



Source: EIU; Clean Cooling Landscape Assessment; Transparency Market Research; Grand View Research; Alrosa; Newzoo; Power Technology; Allied Market Research

Cooling demand is set to grow, a lot. **4.8bn** new cooling units are to be sold between 2019 and 2030

Global annual cooling sales (2010-2030)



Source: P&S Intelligence, Green Cooling Initiative, EIU analysis.

What is driving the growth in cooling?

Urbanisation



Income and GDP growth



Electrification

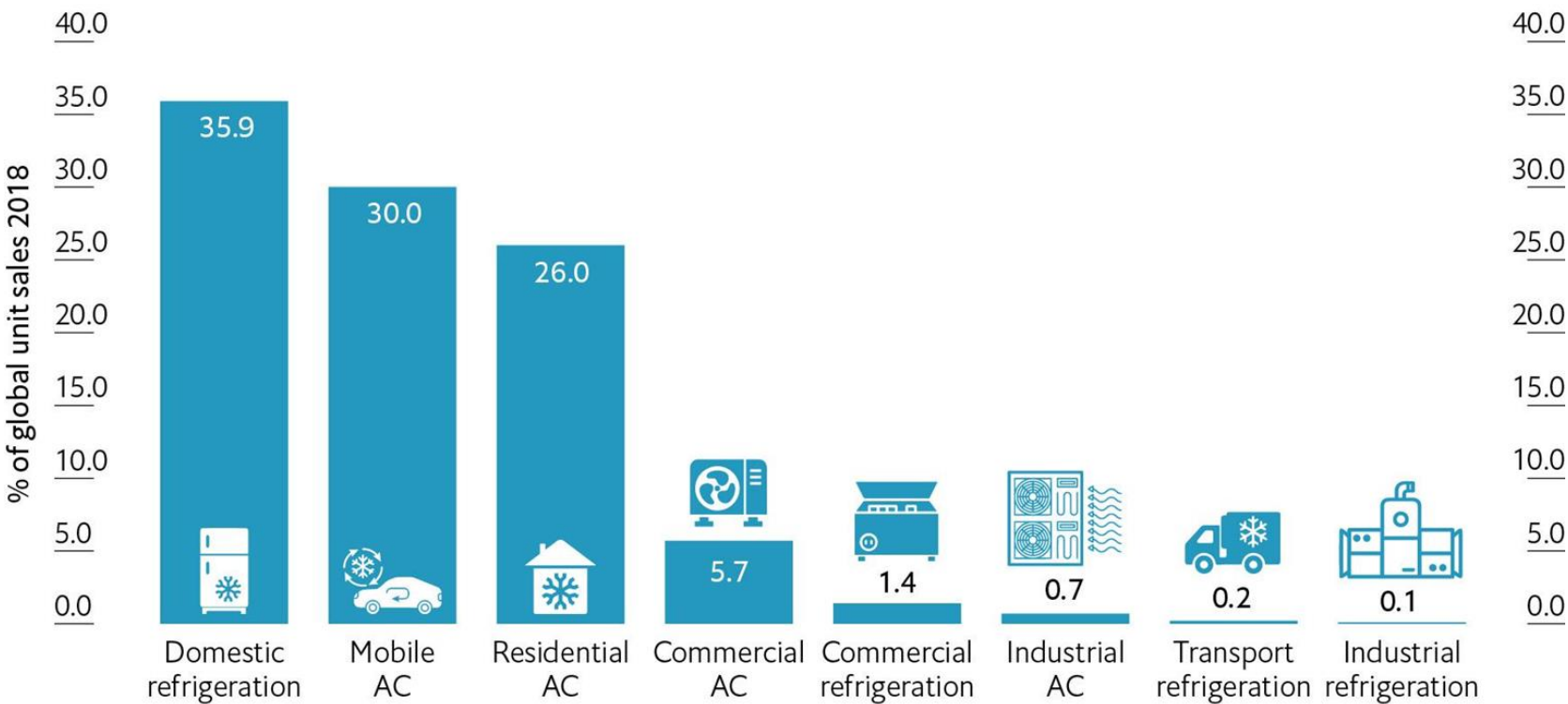


Climate change



Household cooling accounts for over 60% of demand, placing the onus on property developers and consumers

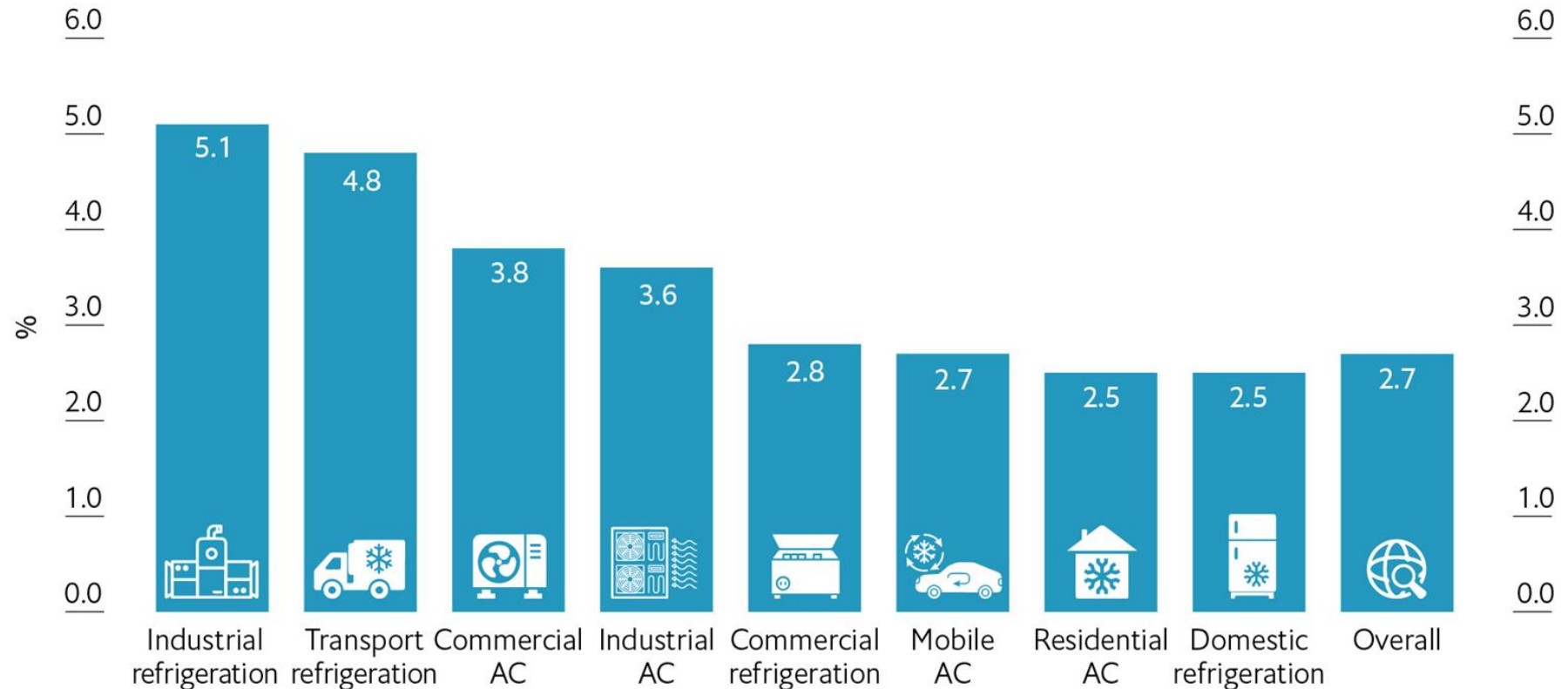
Sub-sector sales as a percentage of total sales (2018)



Source: P&S Intelligence, Green Cooling Initiative, EIU analysis.

But demand is growing most quickly among industrial, transport and commercial users - from hotels to data centre operators

Cooling sales: Average annual growth rate by sub-sector (2018-2030) (a)



(a) As measured by compound annual growth rates.

Source: EIU analysis.


Conclusion 1: The world must close the cooling gap if countries are to meet the Sustainable Development Goals

Making sustainability cool



How cooling will help achieve priority SDG goals




Food Security
Scaling up fresh and safe food provision and combating waste




Education
Boosting student performance and combating fatigue




Societal Inequality
Preventing hurt to marginalised citizens: women and the poor



Health
Combating heat stress and scaling up vaccines



Employee Productivity
Combating damage to employee well being from uncool conditions, and reducing productivity losses



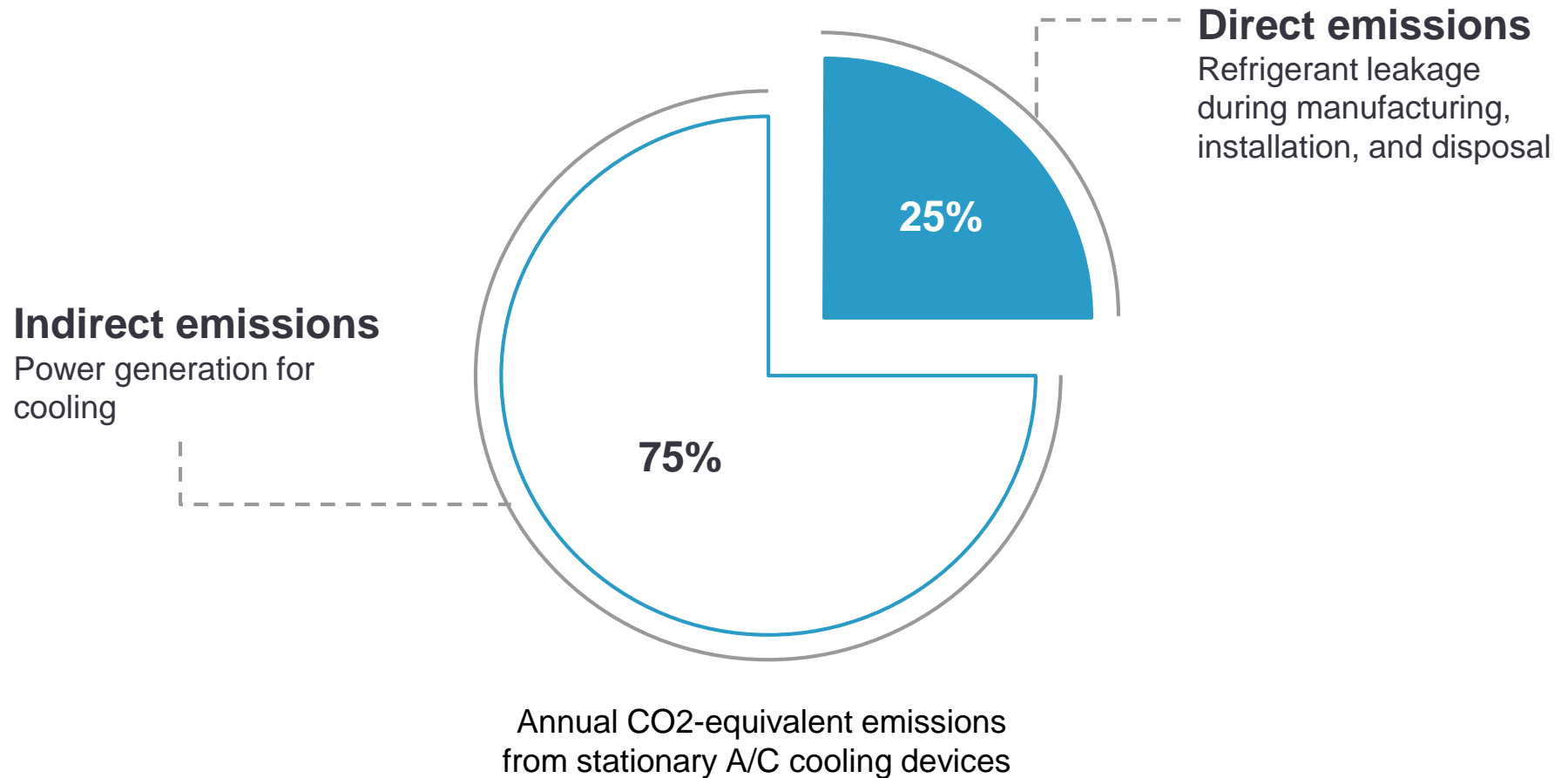
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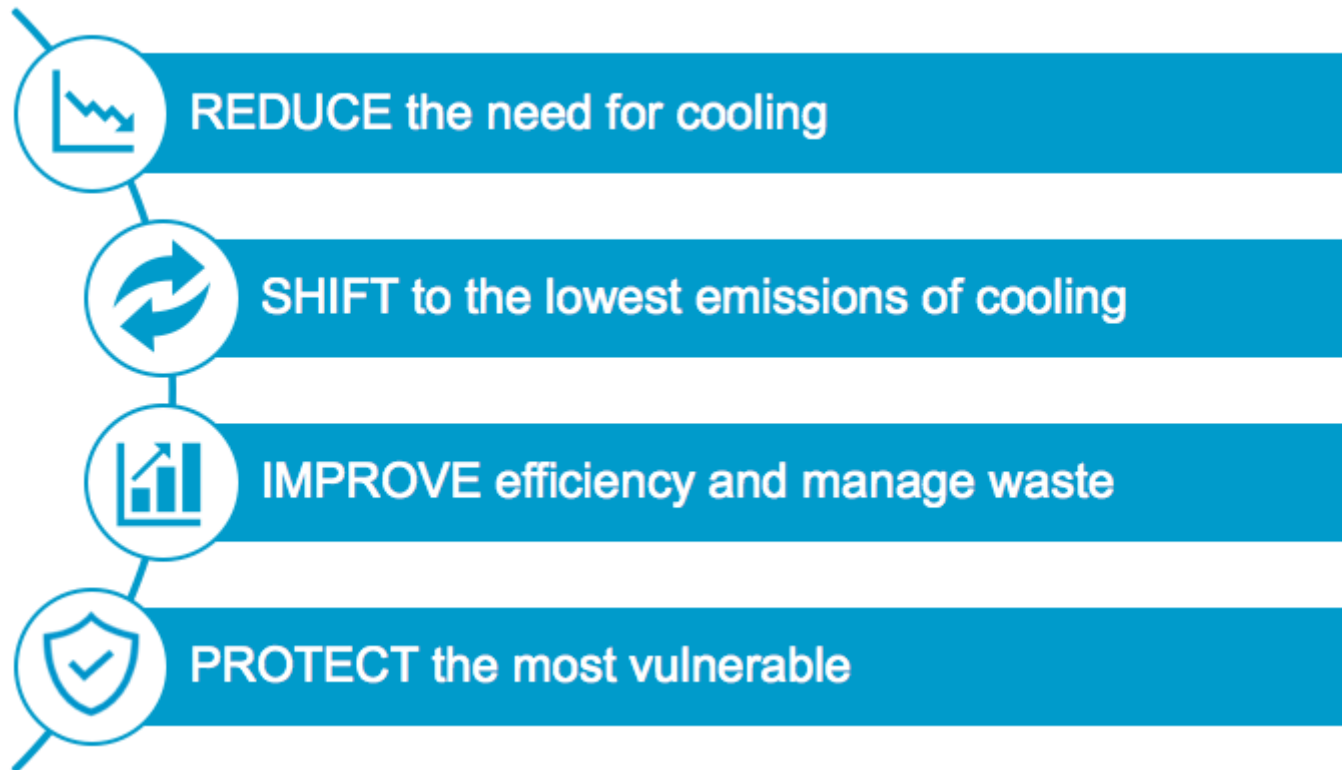


Source: EIU; UNDP

Conclusion 2: Cooling must become much more climate-friendly

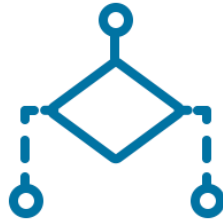


Conclusion 3: Urgent steps must be taken by businesses and policymakers to embrace efficient, climate-friendly cooling



Recommendations for further study

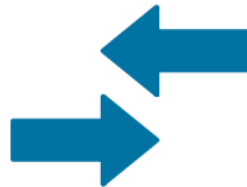
a) Introducing cooling scenarios



b) Expanding the national model to other countries



c) Comparing modelling approaches



d) Assessing market value of and emissions from each end user sector

