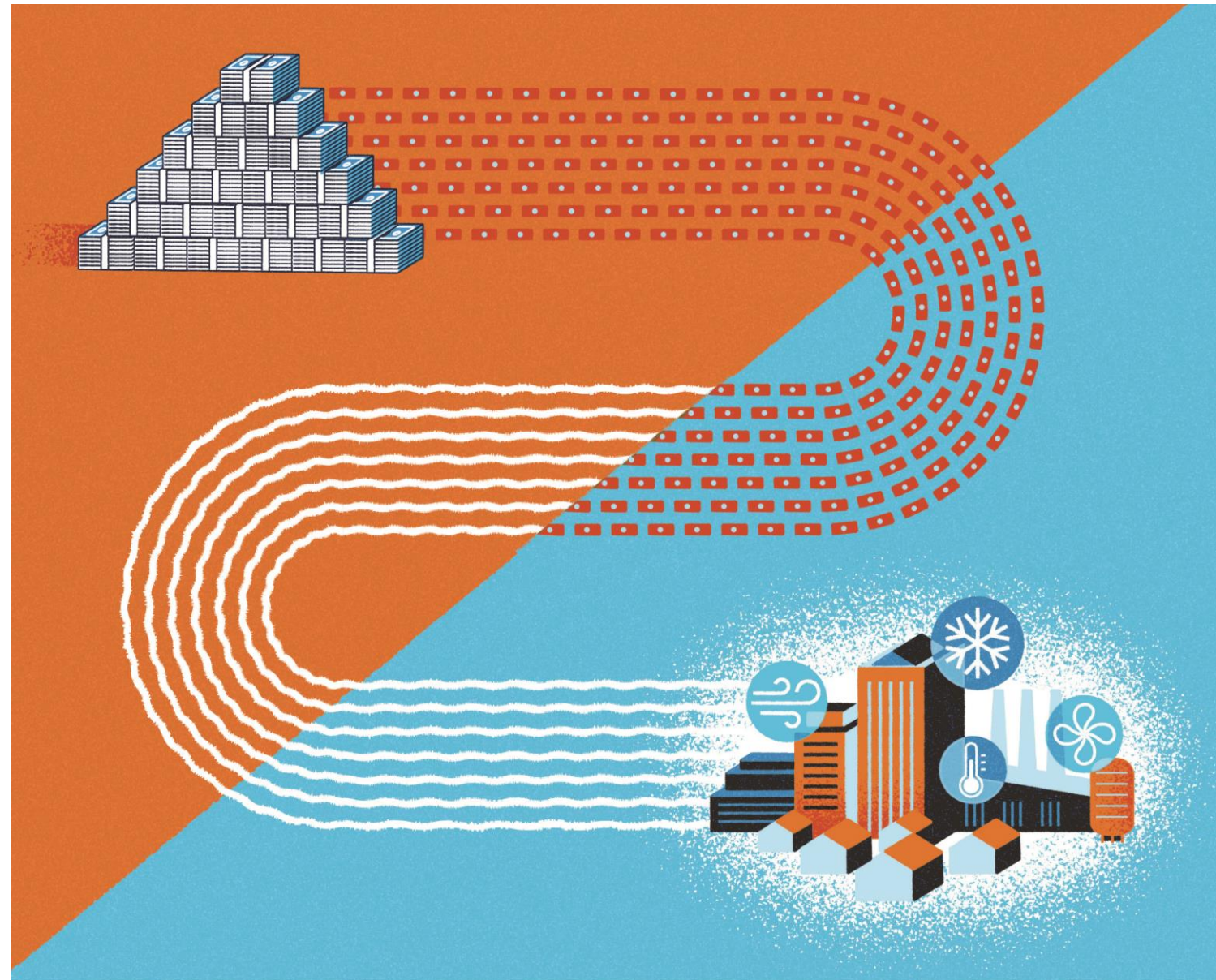


COOLER FINANCE:

**De-Risking Instruments to
Mobilize Investments**

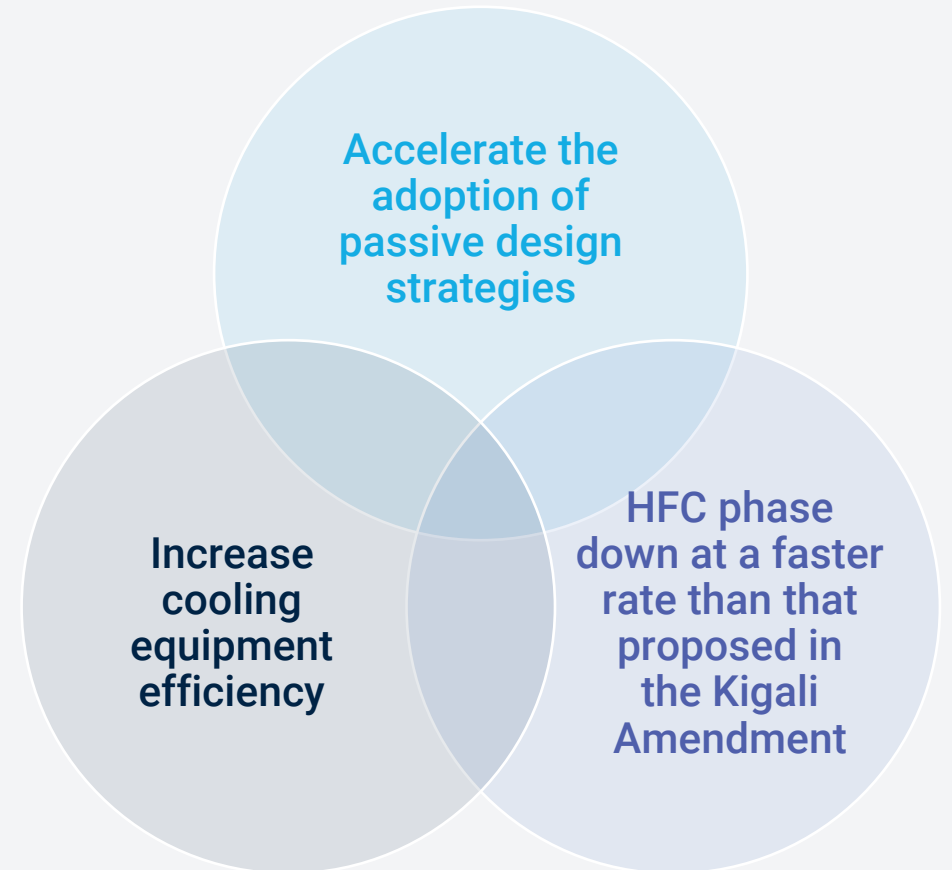
Bangkok, October 2024



What is Sustainable Cooling?

“**Accessible, affordable, and scalable**” cooling solutions that minimize environmental impact, aiming for **near-zero cooling by 2050**

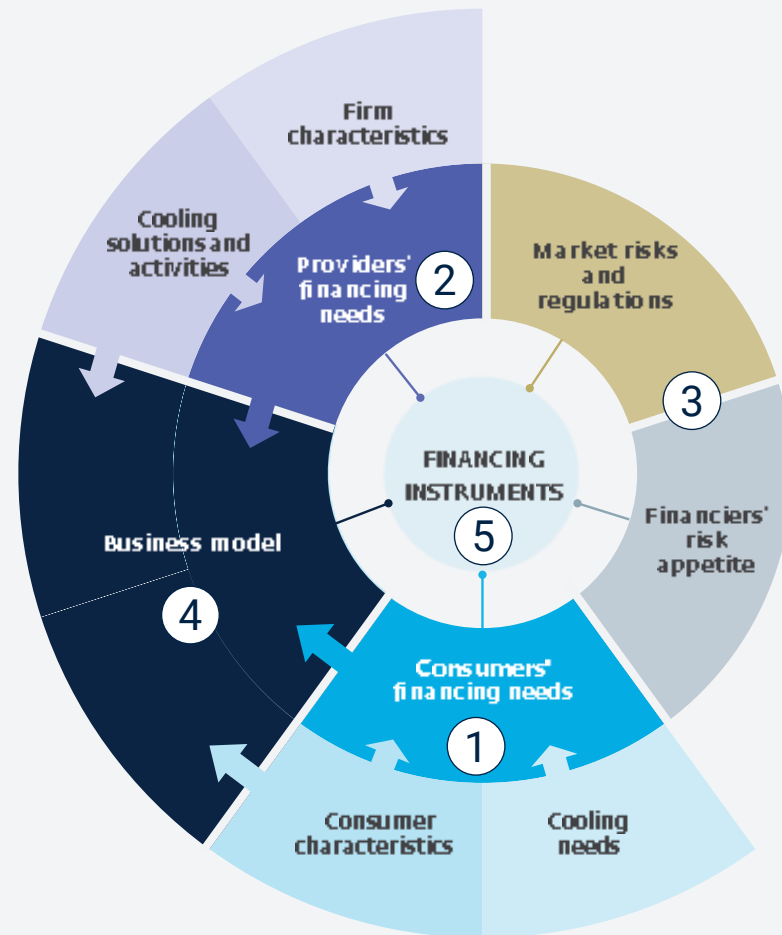
Key Areas



When it comes to Financing Sustainable Cooling: No Size Fits All!

The design of business models and financing instruments must consider:

- ① Consumers' financing needs and characteristics
- ② Providers' financing needs and characteristics
- ③ Local market context



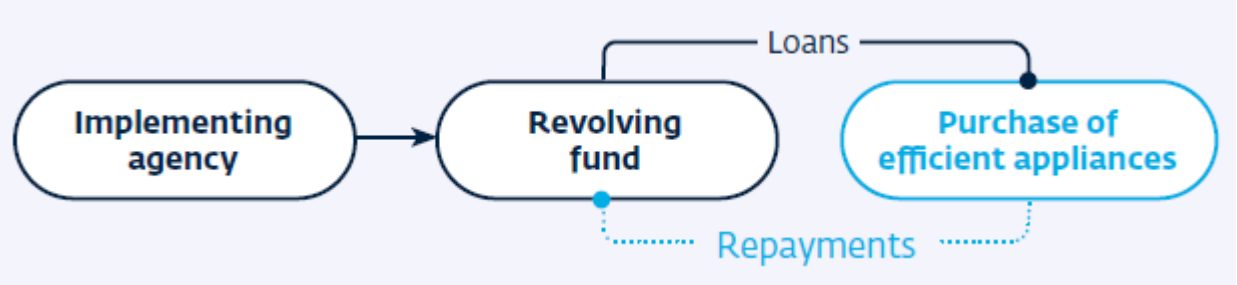
④ Business model Examples:

- ▶ Direct purchase
- ▶ Asset/property-linked financing
- ▶ Vendor financing
- ▶ Pay-As-You-Go (PAYG)
- ▶ Cooling-as-a-Service (CaaS)
- ▶ Cash for coolers
- ▶ Bulk procurement
- ▶ On-wage financing
- ▶ On-bill financing
- ▶ ESCOs/ DESCOs

⑤ Financing instruments Examples:

- ▶ Revolving fund
- ▶ Results based finance
- ▶ Conventional equity
- ▶ Conventional loan
- ▶ Risk sharing
- ▶ Performance guarantees
- ▶ Blended finance
- ▶ Public finance
- ▶ Working capital loan

Financing Instruments: Revolving Funds



NATIONAL CLIMATE FINANCE
INSTITUTIONS SUPPORT PROGRAMME
CASE STUDY: THE THAI
ENERGY EFFICIENCY
REVOLVING FUND

EXAMPLE 1: BRITISH INTERNATIONAL SCHOOL PHUKET

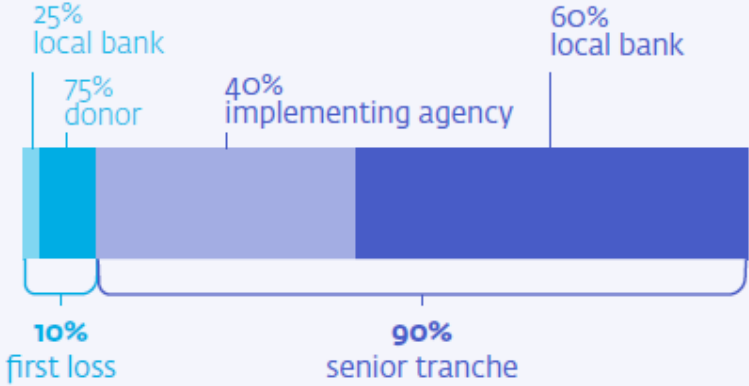
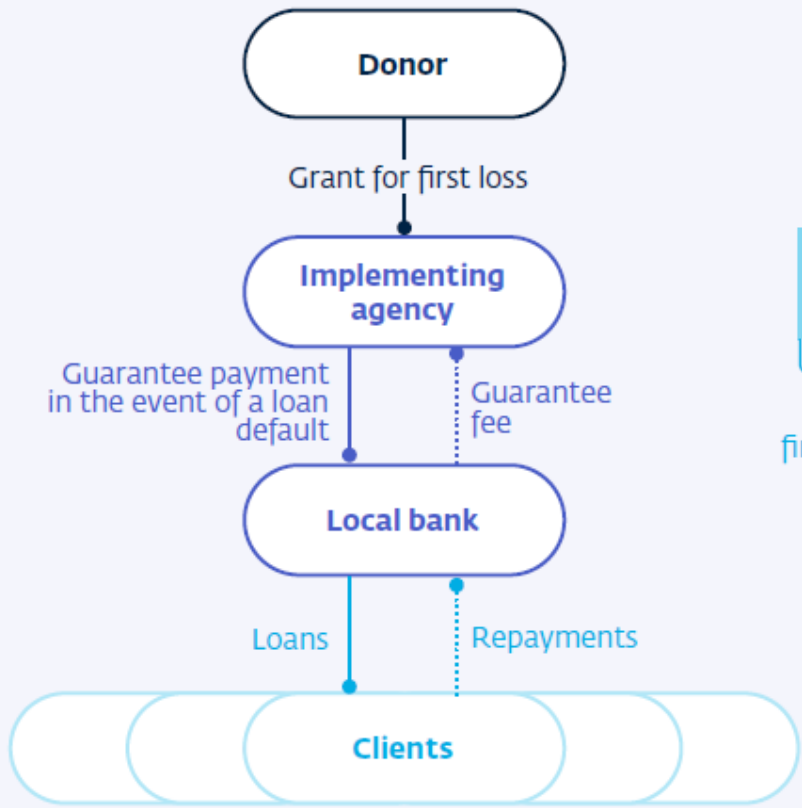
Type of Business	Academy
The technology used	Improve Energy Efficiency : Change Air Cooled Chiller by Water Cooled Chiller
Investment	9.25 Million Baht
Loan EERF	9.25 Million Baht
Financial Institution	The Siam Commercial Bank: SCB



SAVING RESULTS AND PAYBACK PERIOD of the BRITISH INTERNATIONAL SCHOOL

Average Electrical Saving	0.68 MWh/year
Cost Saving	2.37 Million Baht/year
Payback Period	3.90 year

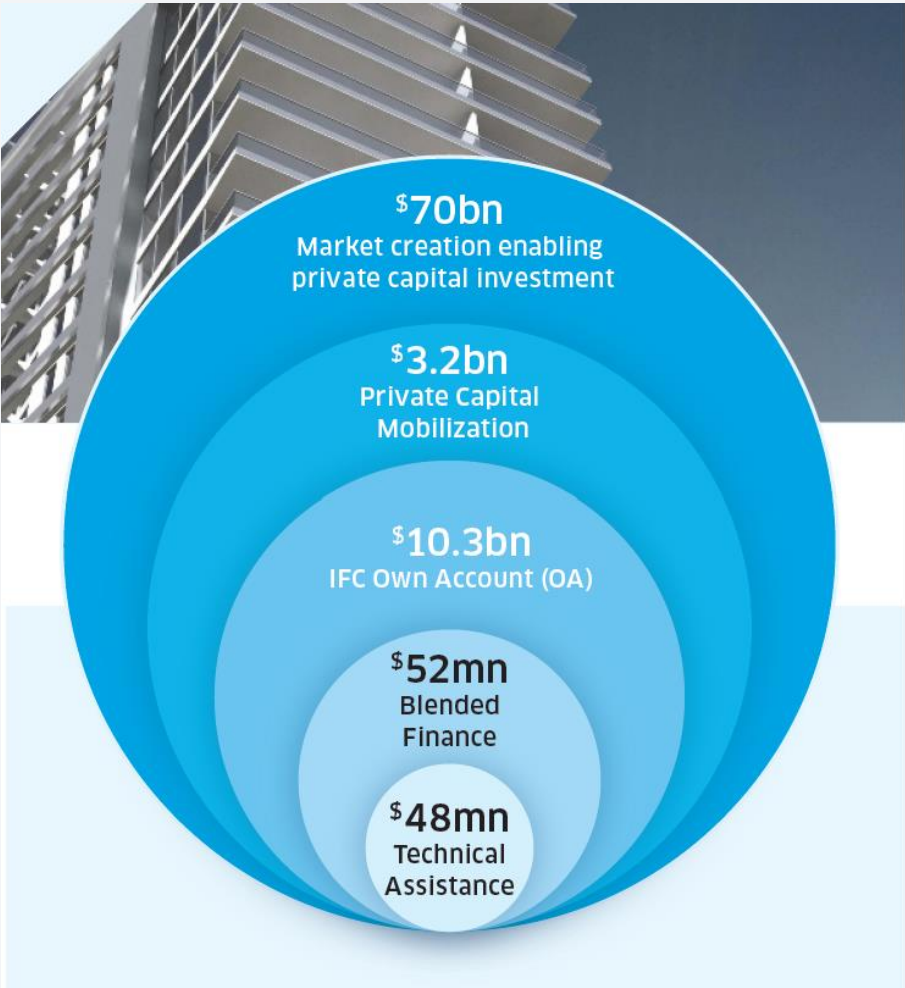
Financing Instruments: Risk Sharing Facility



IFC's China Utility-based Energy Efficiency Finance (CHUEE)

- ▶ Risk sharing facility for commercial banks.
- ▶ IFC provided technical assistance and partial risk guarantee for energy efficiency loans.
- ▶ 266 loans for USD 790 million issued
- ▶ Mobilized USD 1.88 billion

Financing Instruments: EDGE Program



1 Dollar Donor Funds → 800x Mobilized Private Capital Investment



Financing Instruments: Results-Based Incentives

UK-IFC Market Accelerator for Green Construction

Interest Rate Buy-down

- Rebate on the interest that clients pay on the loan
- Targets that “stretch” clients’ capabilities and reward FIs that meet them

Senior Loans

- Principal repayment forgiveness
- Conditional to meeting pre-agreed performance targets (e.g. an agreed volume of green mortgages)

Subordinated/Mezzanine Loans/Quasi-Equity

- Lower seniority makes it an effective tool to share and alleviate project-related risks
- Generally used for first-of-kind projects or untested technologies or untested business models

Risk Sharing Facility

- Investor shares the credit risk on a portfolio of loans
- RSF consists of a first loss tranche and a senior tranche

Additional Financing Instruments

> **Conventional Equity**

> **Working Capital Loans**

> **Carbon Offsets**

> **Cooling Bonds**

Business Models to Address...



Cooling Consumers' Affordability Constraints:

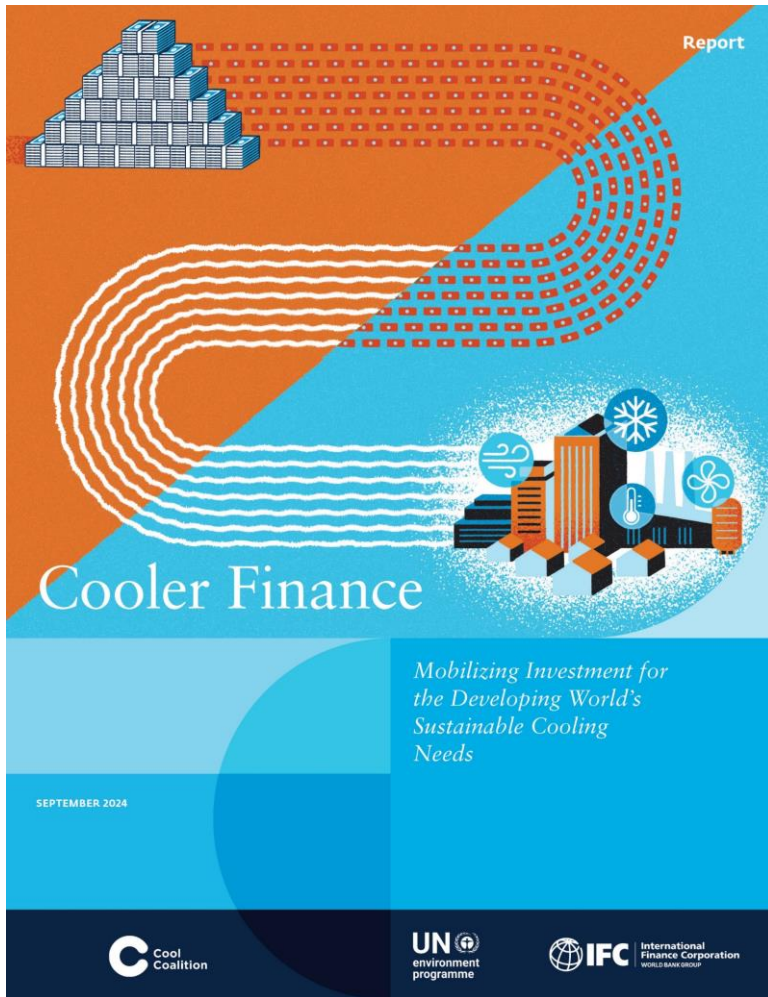
- ▶ On-Bill Financing and On-Wage Financing



Cooling Providers' Financial Constraints:

- ▶ Pay-as-you-go
- ▶ Bulk procurement
- ▶ ESCOs
- ▶ Cooling as a Service

Download Report



IFC's Sustainable Cooling Initiative is funded by the UK Government's Department for Energy Security & Net Zero



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Washington, DC

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[IFC's Sustainable Cooling Website](#)

Annex

Cooler Finance Report: Objectives and Contents

➤ Size the market opportunity that sustainable cooling represents across EMDEs

➤ Bring attention to challenges and opportunities to financing sustainable cooling in the context of EMDEs

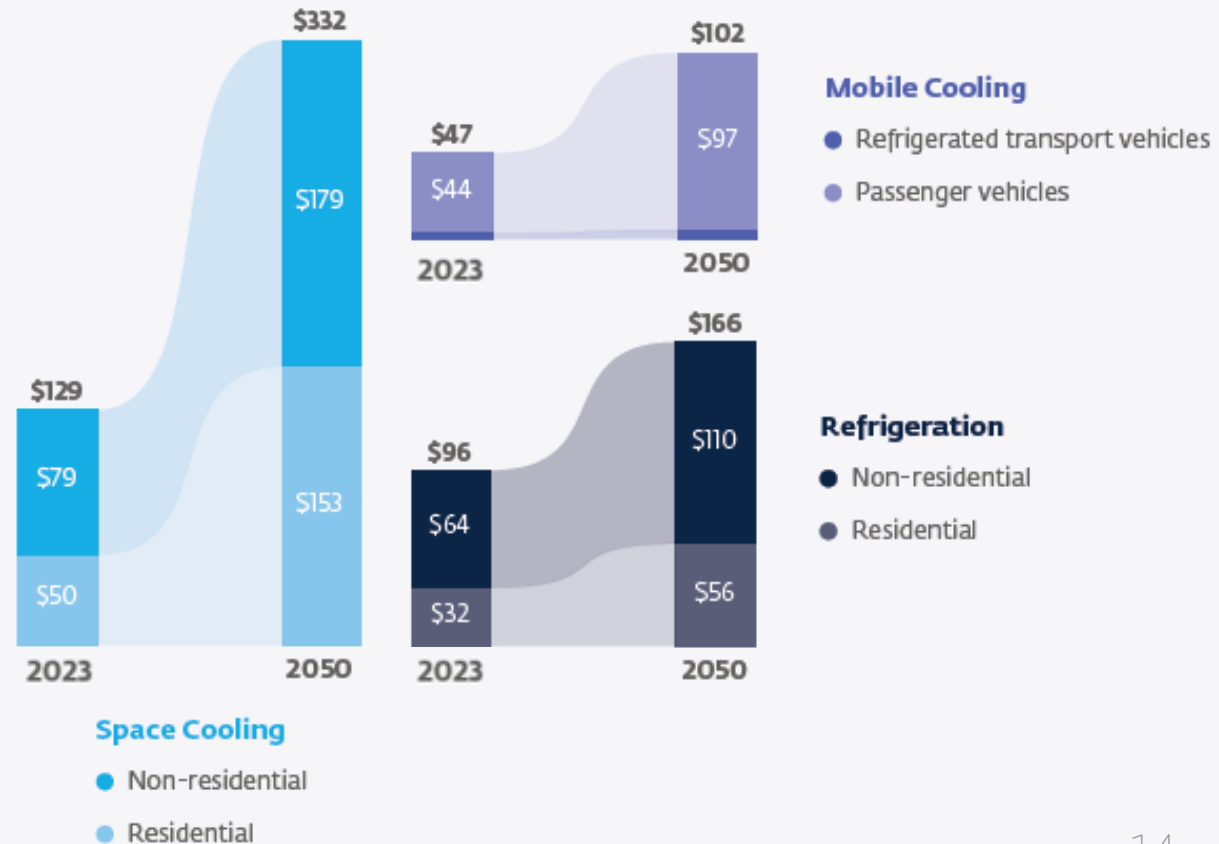
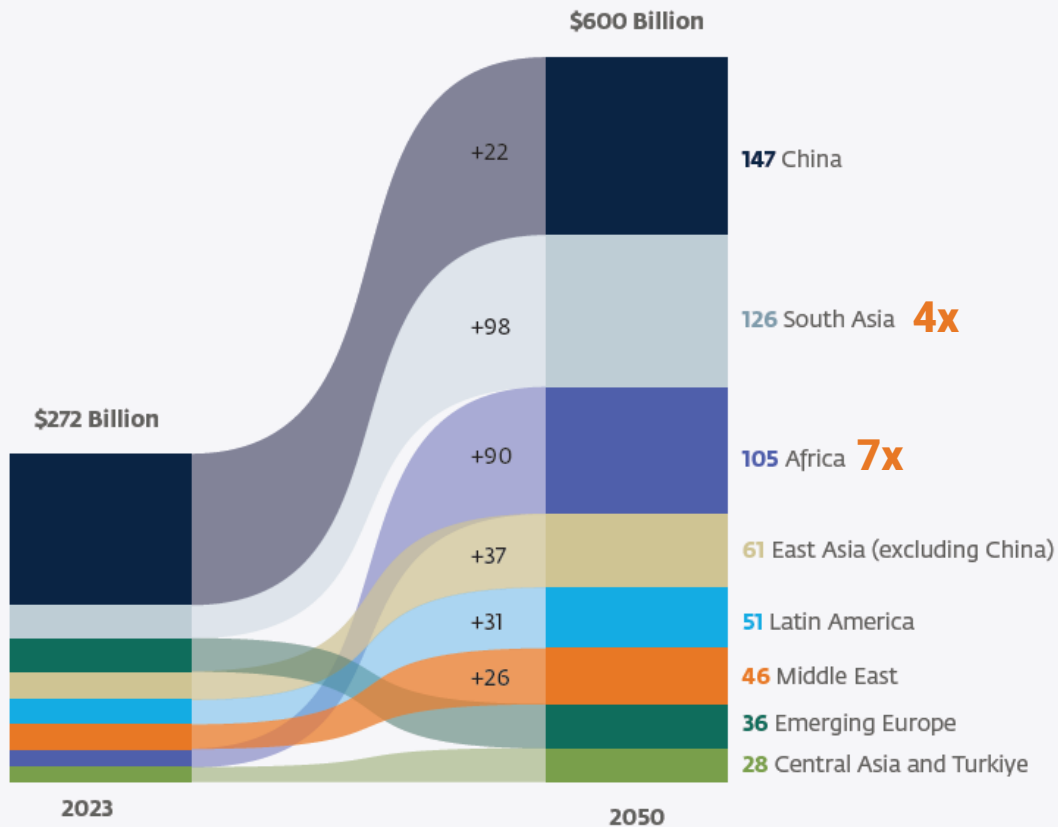
➤ Provide a blueprint on how to finance sustainable cooling

➤ **Chapter 2:** Sizing the Market and Business Case Potential for Sustainable Cooling

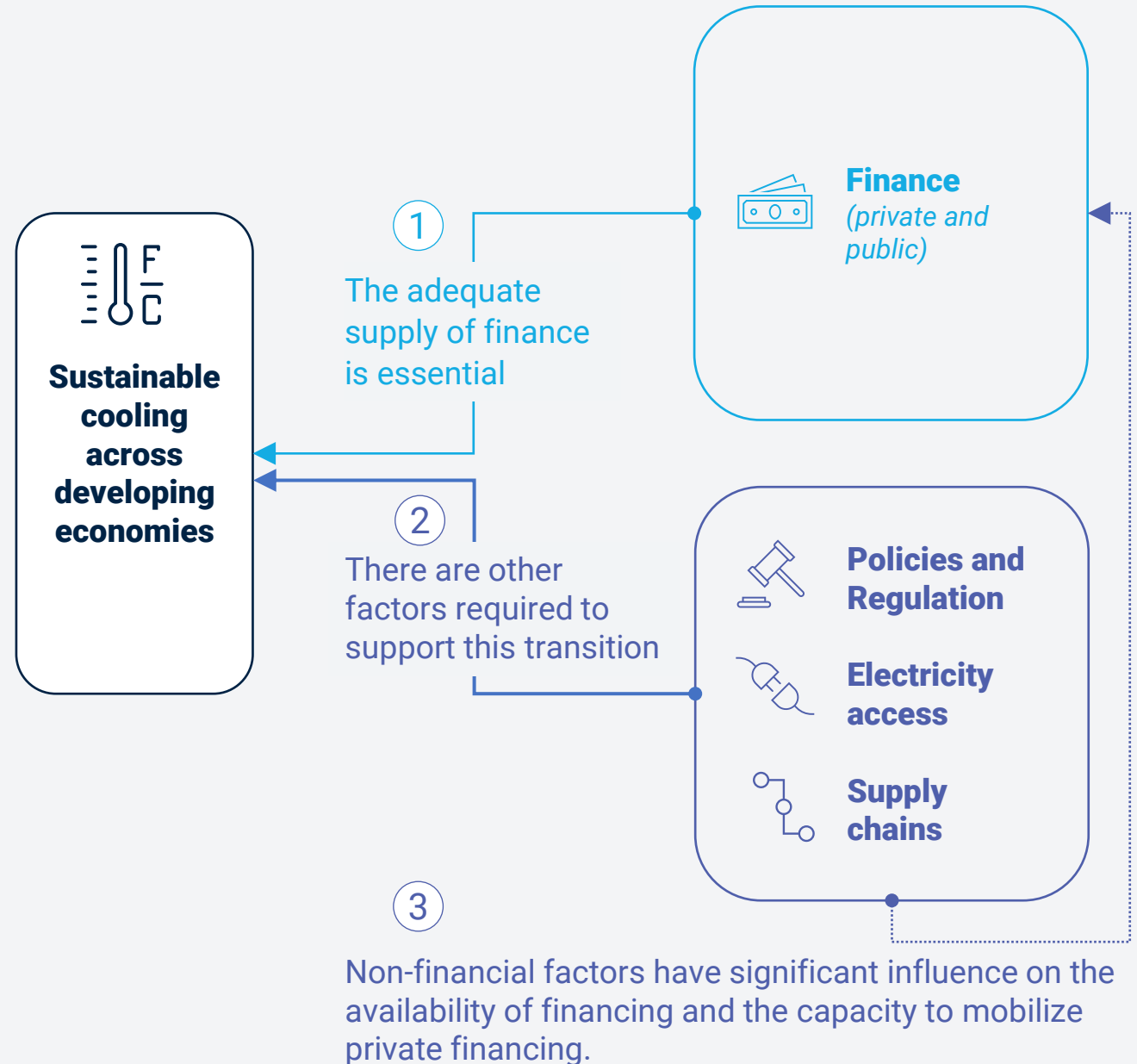
➤ **Chapter 3:** Challenges and Response Strategies

➤ **Chapter 4:** Financing Solutions and Innovations

Cooling Market is Expected to Double by 2050 to a **\$600 Billion Market**



Private Finance is Essential for the Transition to Sustainable Cooling, but Finance is Not Enough



Challenges to Private Investment in Sustainable Cooling in Developing Economies

Regulatory and Administrative Challenges



Systemic Issues



Challenges to Innovative Solutions



Cooling is Not a Traditional Sector or Asset Class



Ongoing Response Strategies



Standards, labeling, and certification

Regulatory approaches



Holistic and systems approach to supply chains

New business models addressing first-cost barriers



Innovation promotion

Urban programs to respond to extreme temperatures



Demand aggregation to lower prices, such as bulk procurement programs

Business Models for Cooling

Cooling Consumers' Affordability Constraints:

- ▶ On-Bill Financing and On-Wage Financing



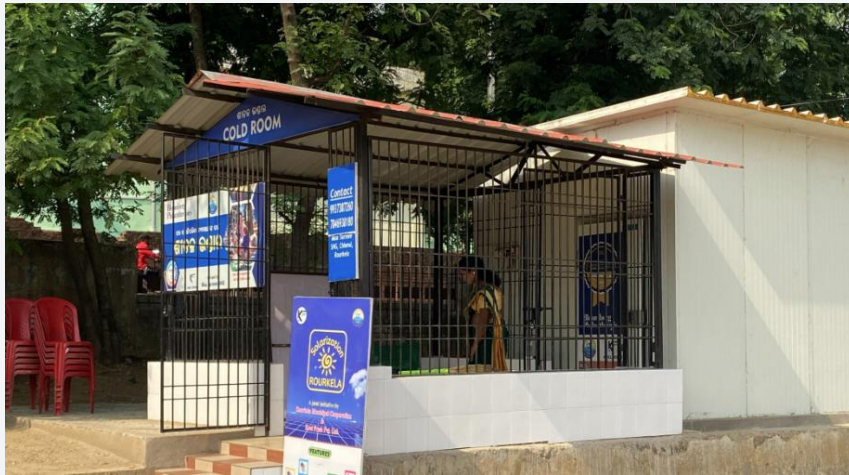
Cooling Providers' Financial Constraints:

- ▶ Pay-as-you-go



Business Models: Cooling-as-a-Service

Koel Fresh: small solar-powered cold rooms across major areas in Rourkela, India.



SokoFresh: CaaS model in Kenya with energy-efficient cold storage.



ColdHubs: solar powered pay-as-you-store model for small-scale operators in Nigeria.

