



OEWG48

Bangkok
13-17 July 2026



Financing Sustainable Cooling

From National Plans to Investment Pipelines

13 July 2026
13:00 – 15:00 (UTC+7)



Opening Remarks



Mr Amr Seleem

Country Engagement and Climate Policy Lead
UNEP Cool Coalition

Keynote: Turning cooling plans into finance-ready delivery pathways



Mr Thanavat Junchaya
Senior Environmental Engineer
World Bank

Financing Sustainable Cooling

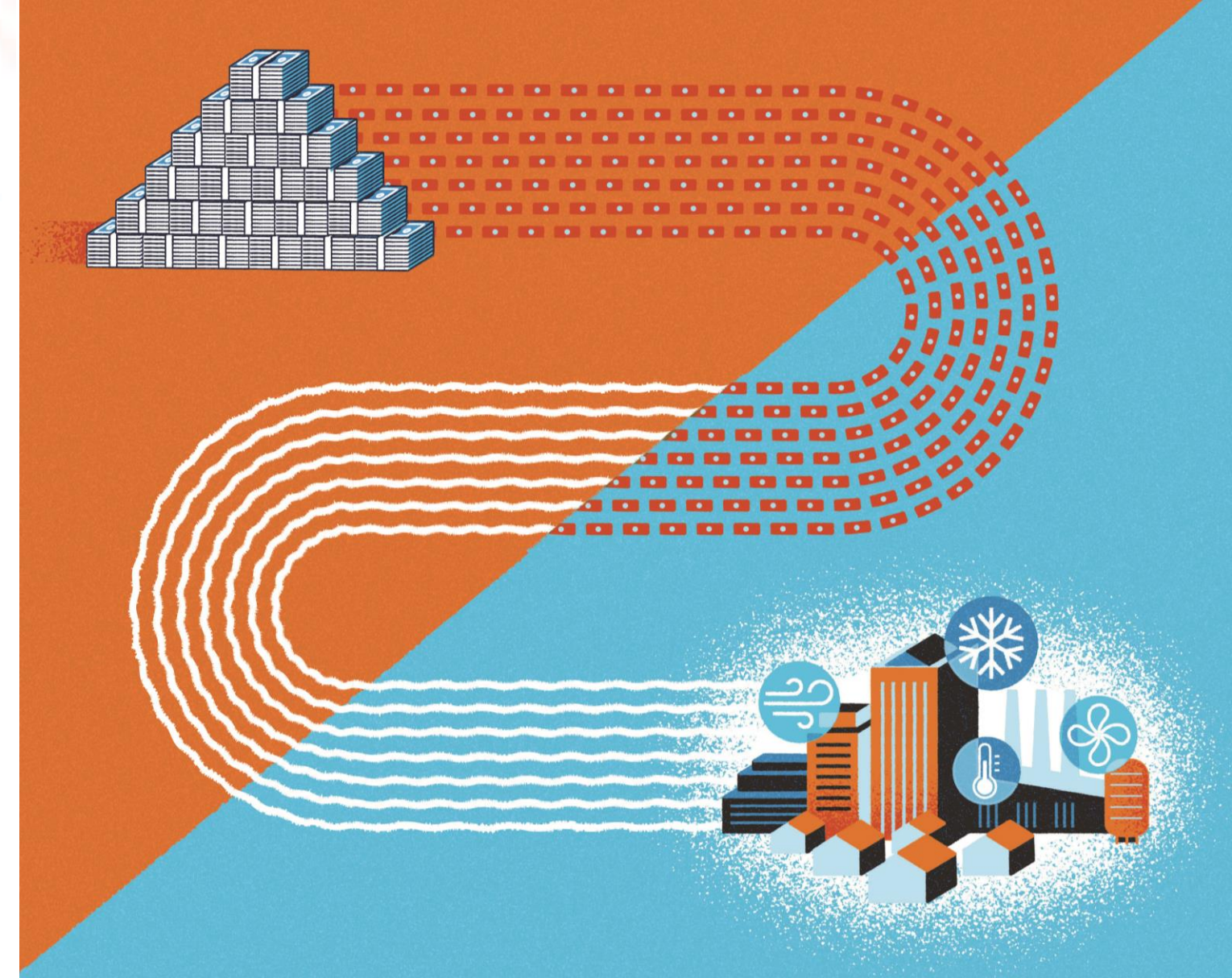
From National Plans to Investment Pipelines



OEWG48
Bangkok
13-17 July 2026



THE KIGALI
AMENDMENT
2016-2026



SUSTAINABLE COOLING & HEAT RESILIENCE INITIATIVE: “FIVE BY FIVE” PLAN

FIVE FOCUS SECTORS

BUILT
ENVIRONMENT



MANUFACTURING



AGRIBUSINESS &
COLD CHAINS



HEALTH &
EDUCATION



TRANSPORTATION &
INFRASTRUCTURE



INNOVATION IN FINANCIAL AND BUSINESS MODELS

FIVE ENGAGEMENT PILLARS

INSIGHTS



INFLUENCE



INNOVATION



INVESTMENT



IMPACT



WORLD BANK GROUP

THE WORLD BANK
IBRD • IDA

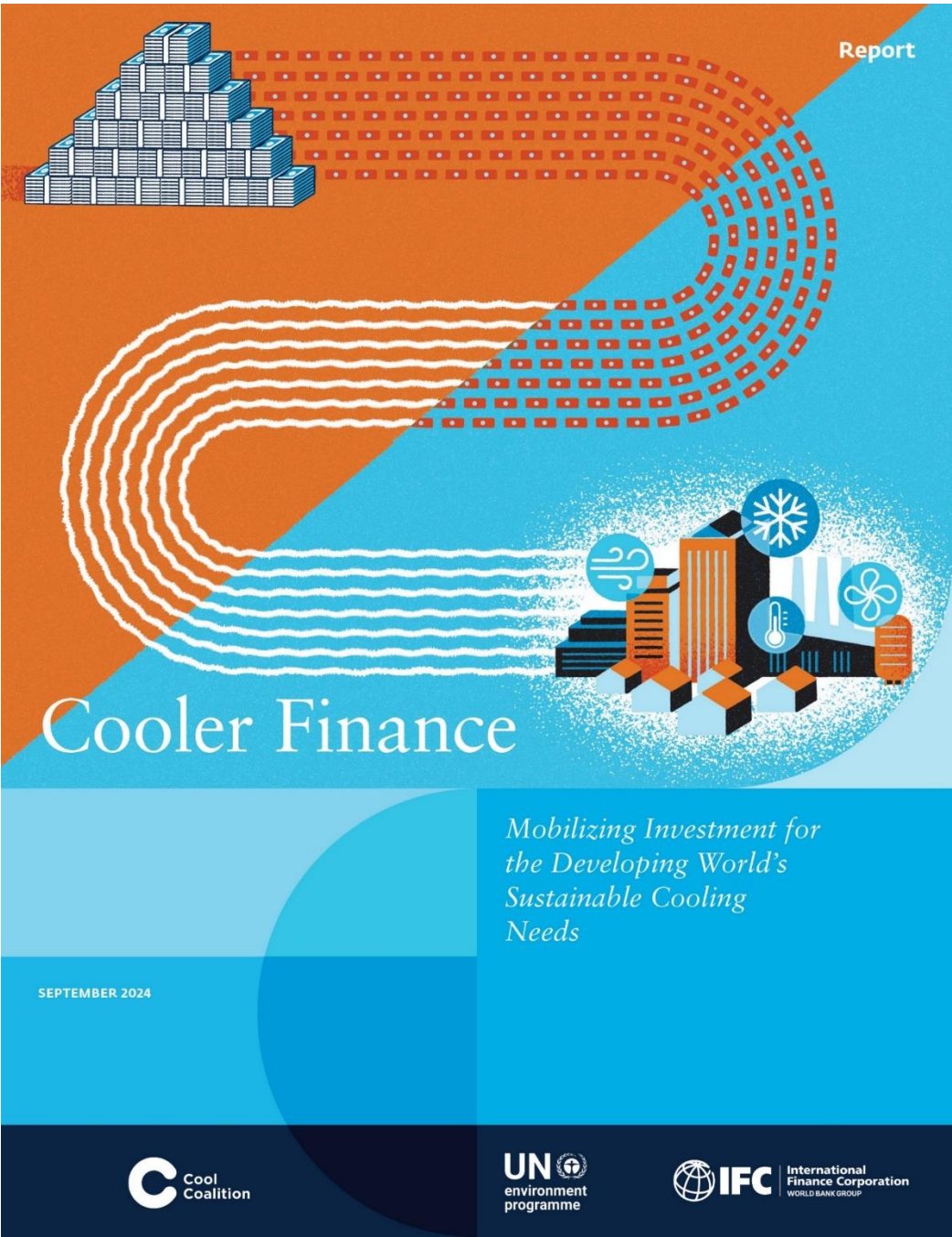
IFC

International
Finance Corporation

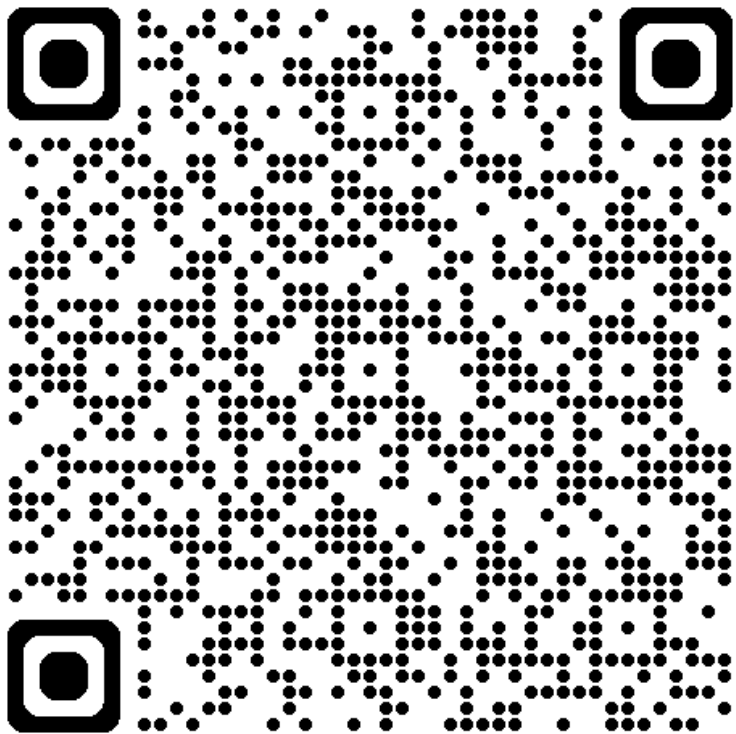
MIGA

Multilateral Investment
Guarantee Agency

FLAGSHIP “COOLER FINANCE” REPORT LOOKS AT MARKET SIZE , BUSINESS MODELS, CHALLENGES, AND SOLUTIONS



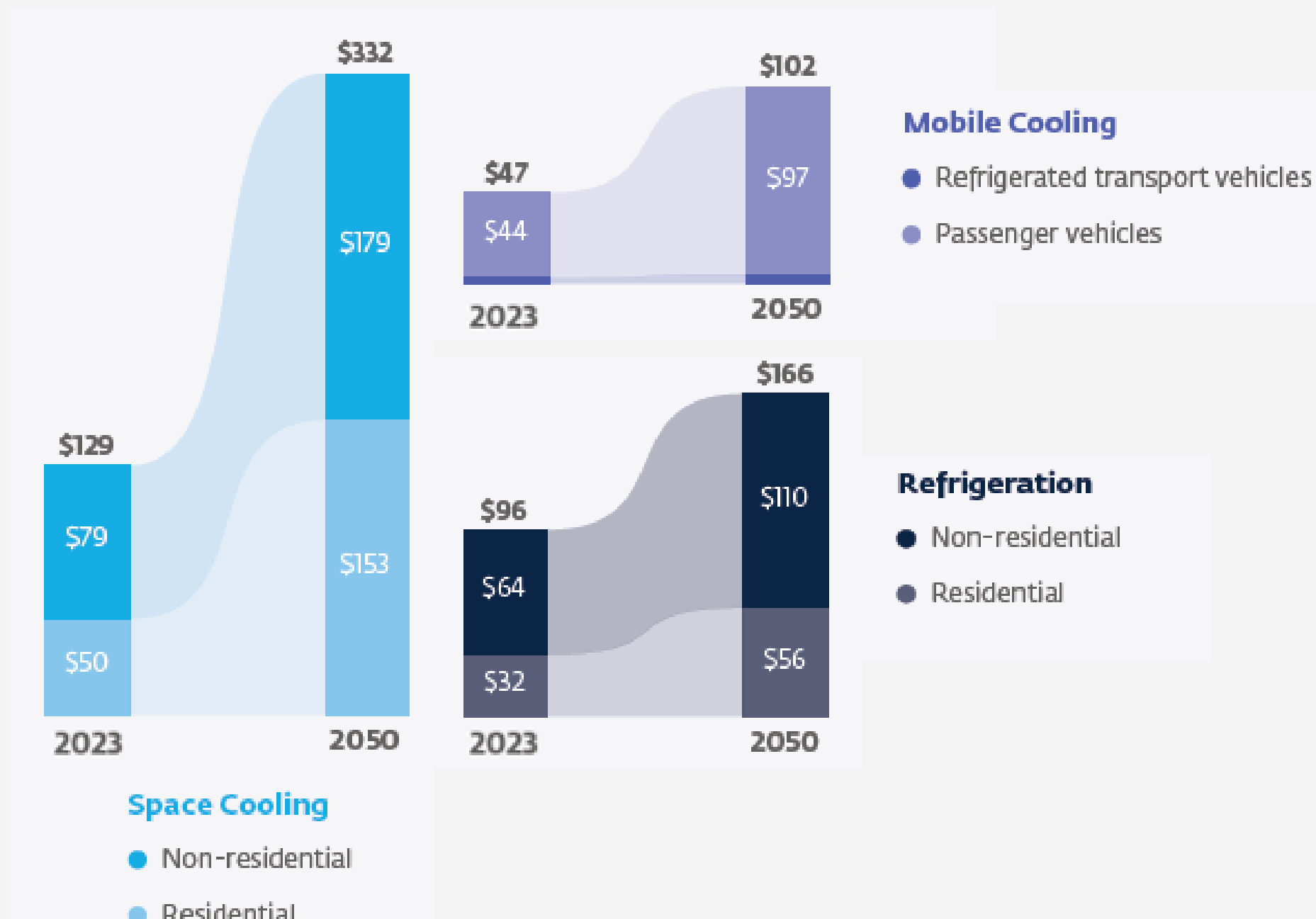
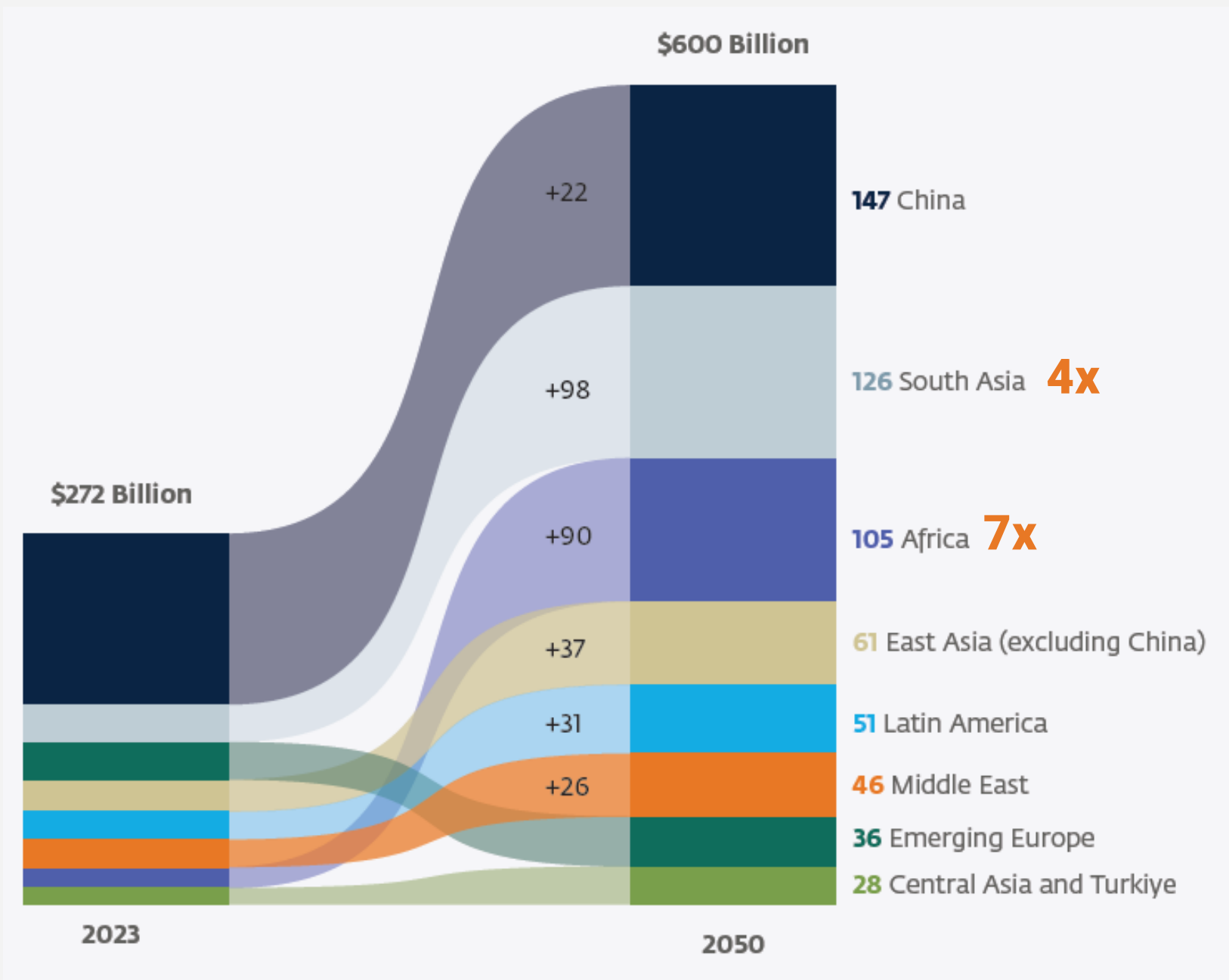
- Size the market opportunity that sustainable cooling represents across EMDEs
- Bring attention to challenges and opportunities to financing sustainable cooling in the context of EMDEs
- Provide a blueprint on how to finance sustainable cooling



[DOWNLOAD THE REPORT](#)

SUSTAINABLE COOLING IS A LARGE INVESTMENT OPPORTUNITY

Cooling is already a **\$300 billion market** which could grow to **\$600 billion per year or more** by 2050



Source: [Cooler Finance Report](#)

OBSTACLES TO COOLING FINANCE



HARD TO IDENTIFY



HARD TO TRACK



HARD TO ISOLATE



HARD TO SECURE



WORLD BANK GROUP

THE WORLD BANK
IBRD • IDA

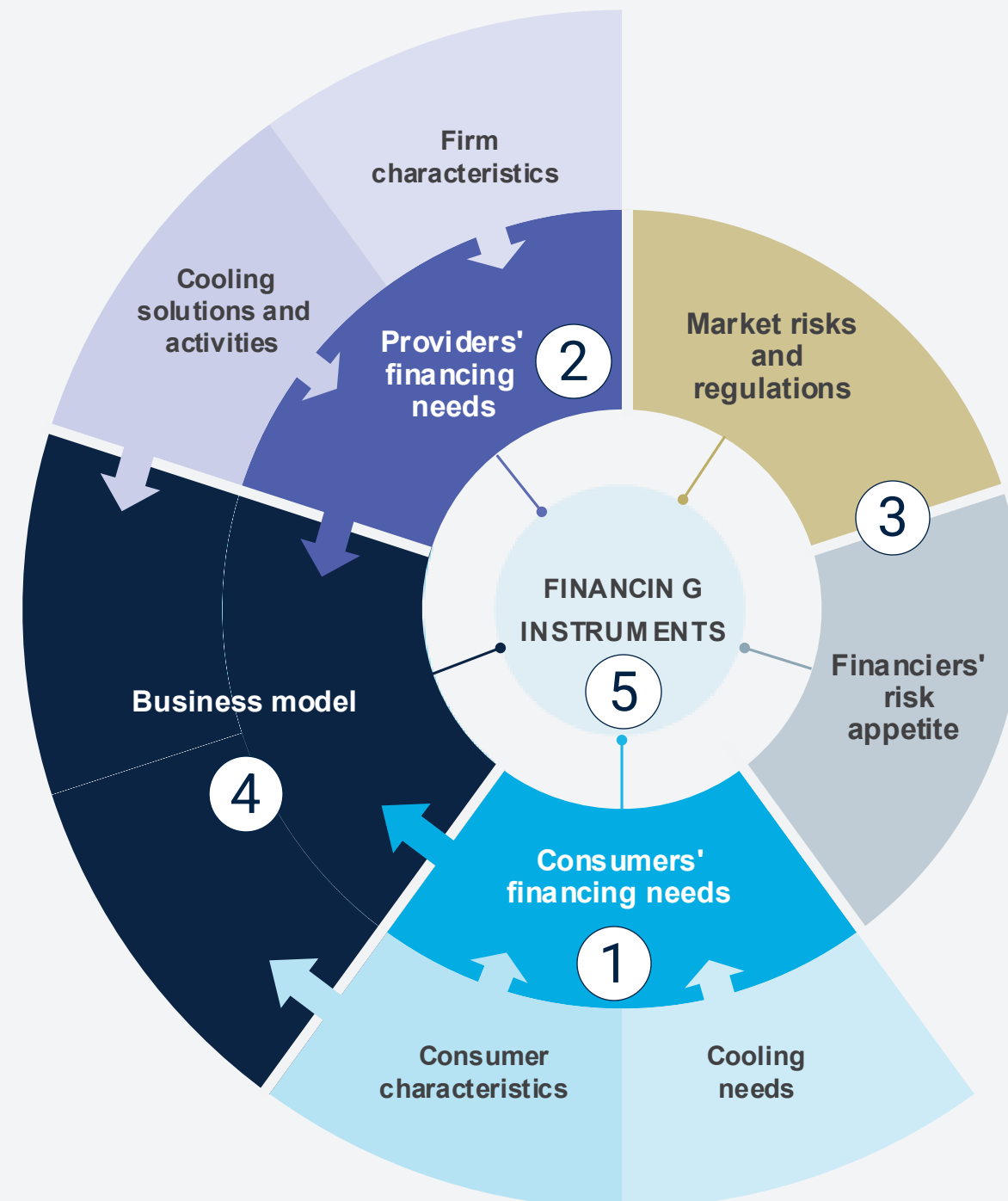
IFC International
Finance Corporation

MIGA Multilateral Investment
Guarantee Agency

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



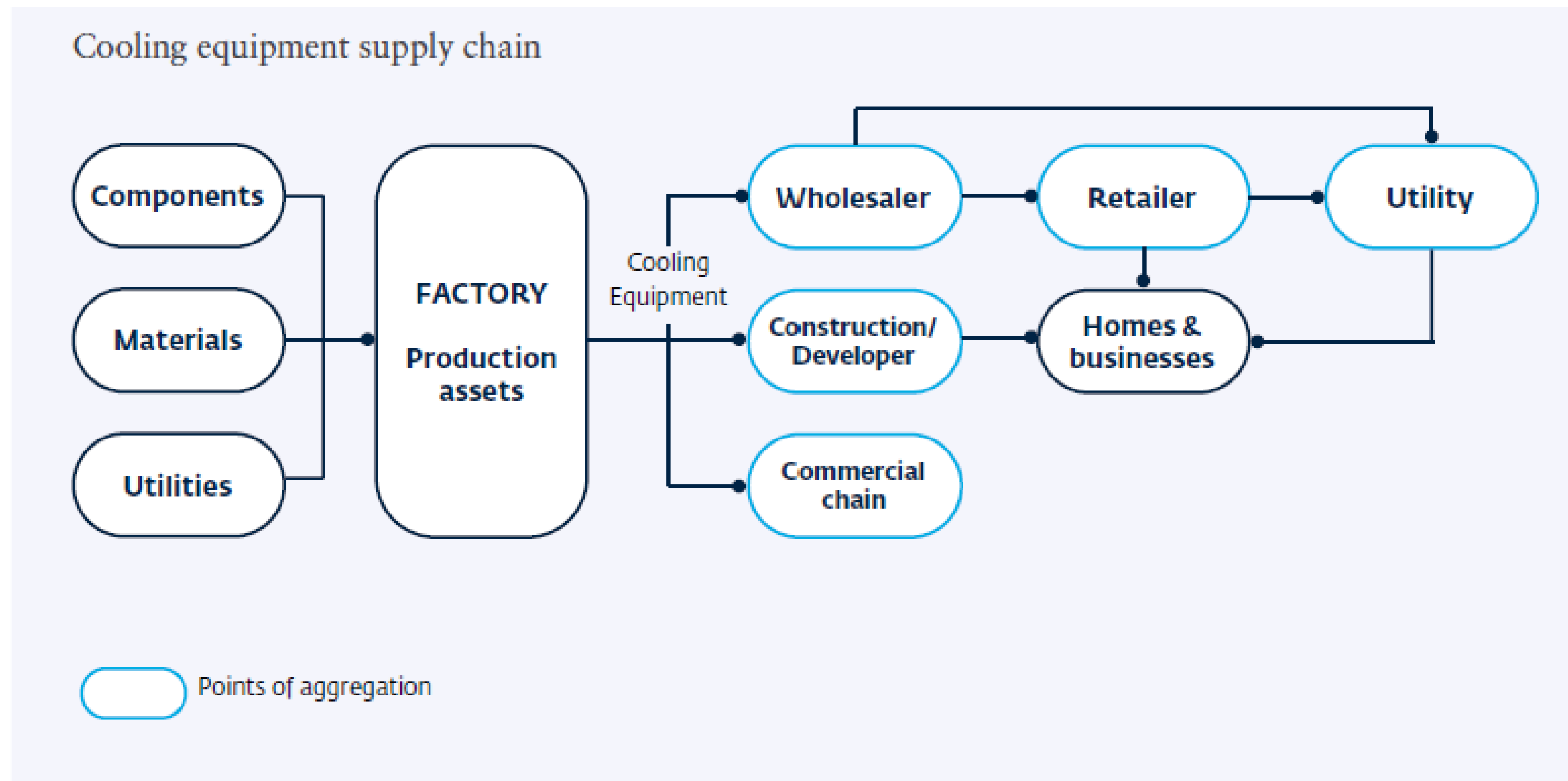
④ Business model Examples:

- ▶ 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

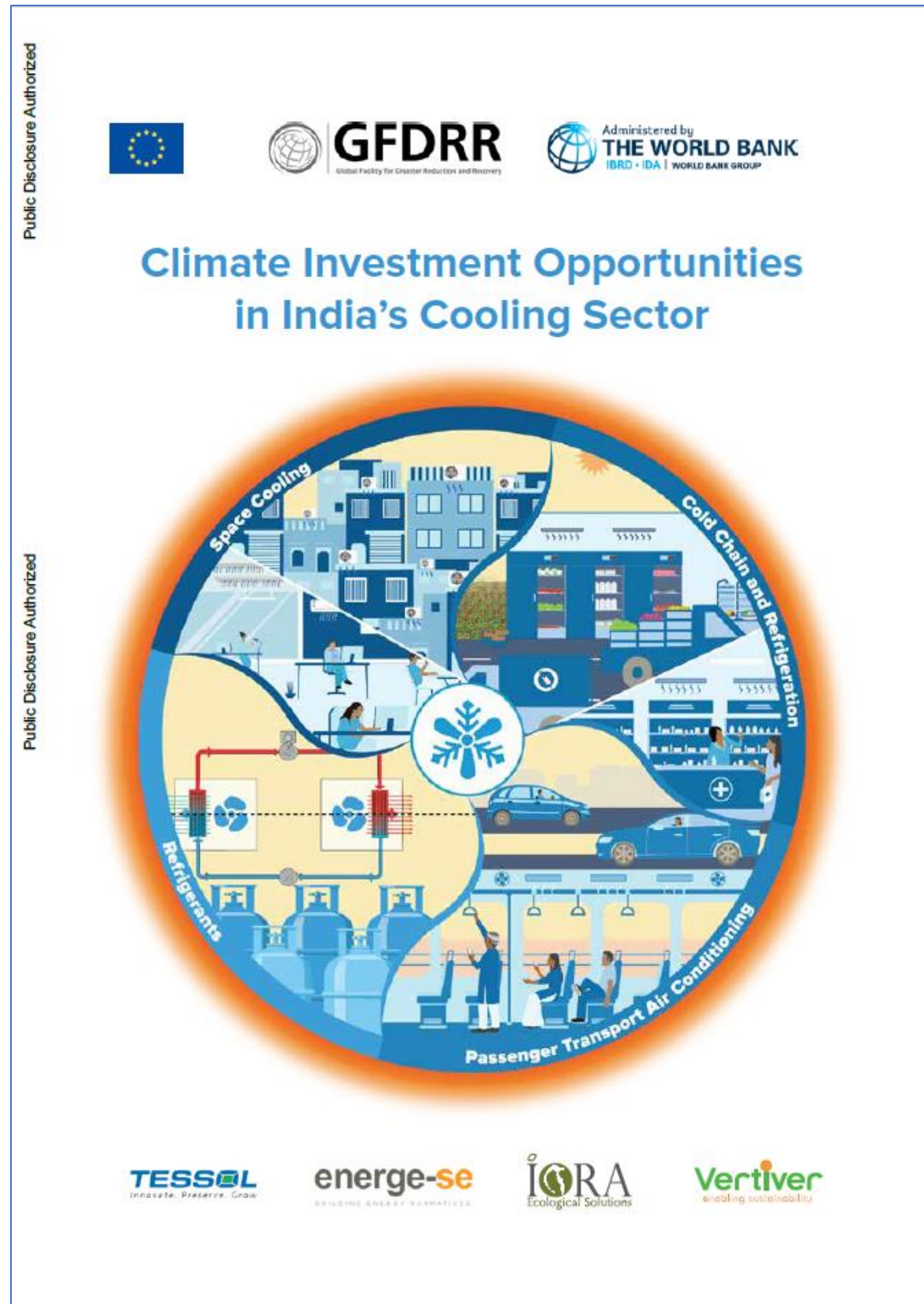
⑤ Financing instruments Examples:

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

FINANCING NEEDS ALONG THE COOLING SUPPLY CHAIN



FROM PLANS TO INVESTMENT ROAD MAPS



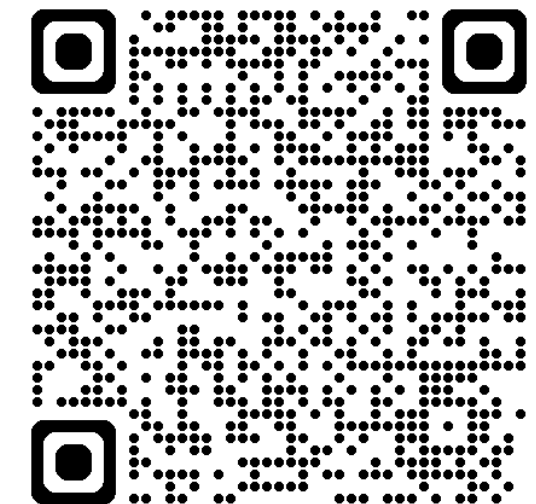
NCAP COMMITMENTS

- Reduction of cooling demand up to 25%;
- Reduction of refrigerant demand up to 30%;
- Recognition a key sphere of research;
- Training and certification of technicians

INVESTMENT OPPORTUNITY

- Investment opportunity of \$1.6 trillion by 2040
- Create 3.7 million jobs

[Download the report](#)



KEY POLICY RECOMMENDATIONS FOR INDIA

Key Policy Approaches Needed to Scale Up Action in Cold Chain and Refrigeration



Action plan for setting up small-scale decentralized cold chain links



Committee to identify challenges in the implementation of “Integrated Cold Chain, Value Addition and Preservation Infrastructure” scheme, and implement committee findings



Incentives and policies to jumpstart a market transformation program for improvements in equipment efficiency (domestic refrigerators and commercial deep freezers)



Incentives to promote fuel free or electric reefer systems



Policy and regulation to promote IoT for monitoring in cold chains and refrigeration



Training and certification program for cold chain and refrigerator operators

Key Policy Approaches Needed to Scale Up Action in Space Cooling



Update affordable housing policies and programs at the national and state levels to include thermal comfort as an essential criterion



Align the S&L program strategy to achieve ICAP goals—stringent standards and market transformation initiatives



Enact a national policy for district cooling: Mandate deployment of DCS in high density cooling greenfield developments



Guidelines for cities to integrate urban passive cooling measures in planning frameworks

Key Policy Approaches Needed to Scale Up Action in Refrigerants



Policy and training programs to support recovery, recycling and reclamation or the effective destruction of refrigerants

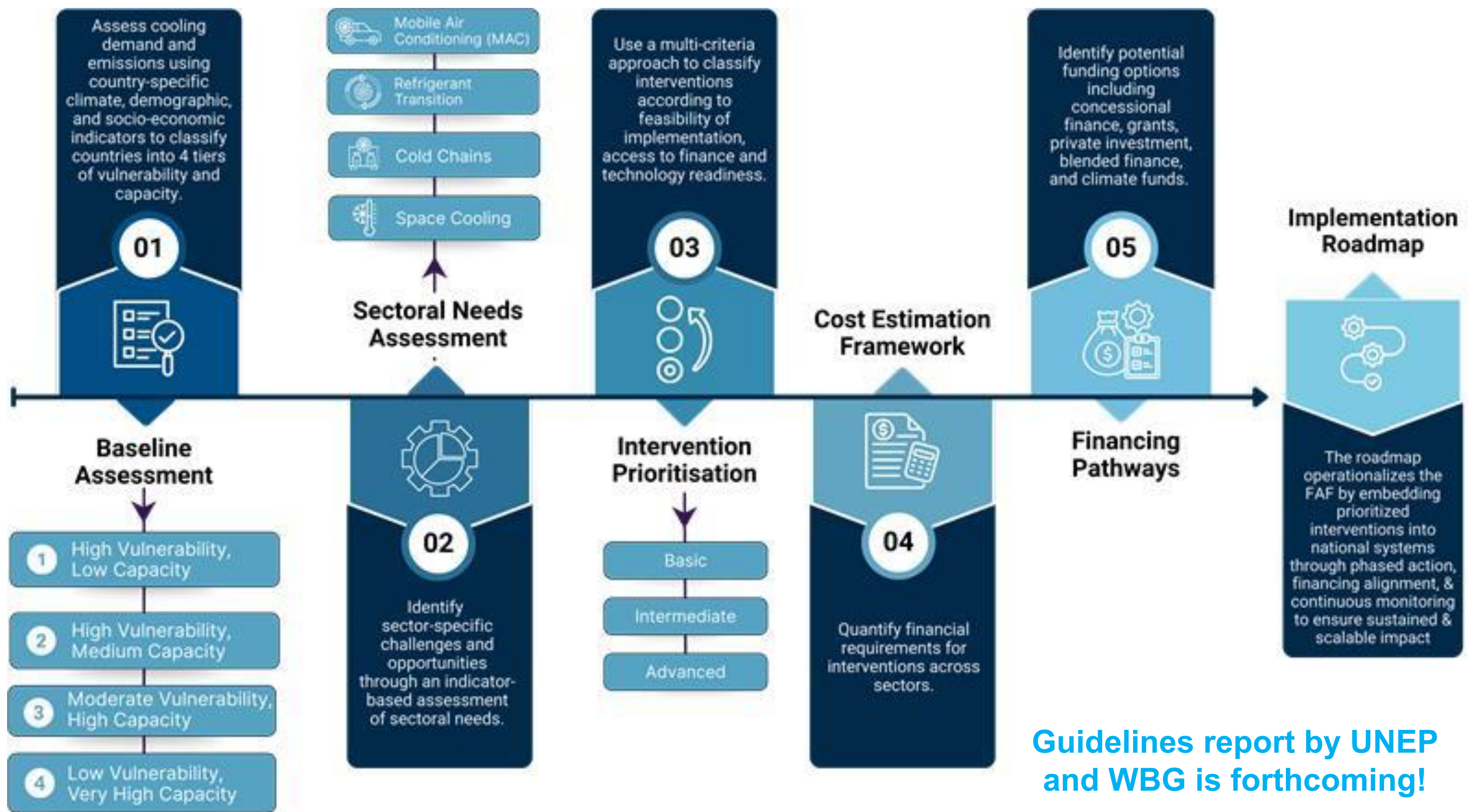


Refrigerant disposal guidelines embedded within the Extended Producer Responsibility and e-waste guidelines for reclaiming electronic components at end of life, particularly for RACs



Technician training on the recovery and transport of refrigerants to reclamation centers; mandatory public sector utilization of licensed service technicians only

CONCEPTUAL FRAMEWORK FOR GUIDELINES ON FINANCIAL ASSESSMENT



Guidelines report by UNEP and WBG is forthcoming!

THANK YOU!

Thanavat Junchaya

WBG Senior Environmental Engineer
Washington DC

tjunchaya@worldbank.org

For more information contact:

Rusmir Musić

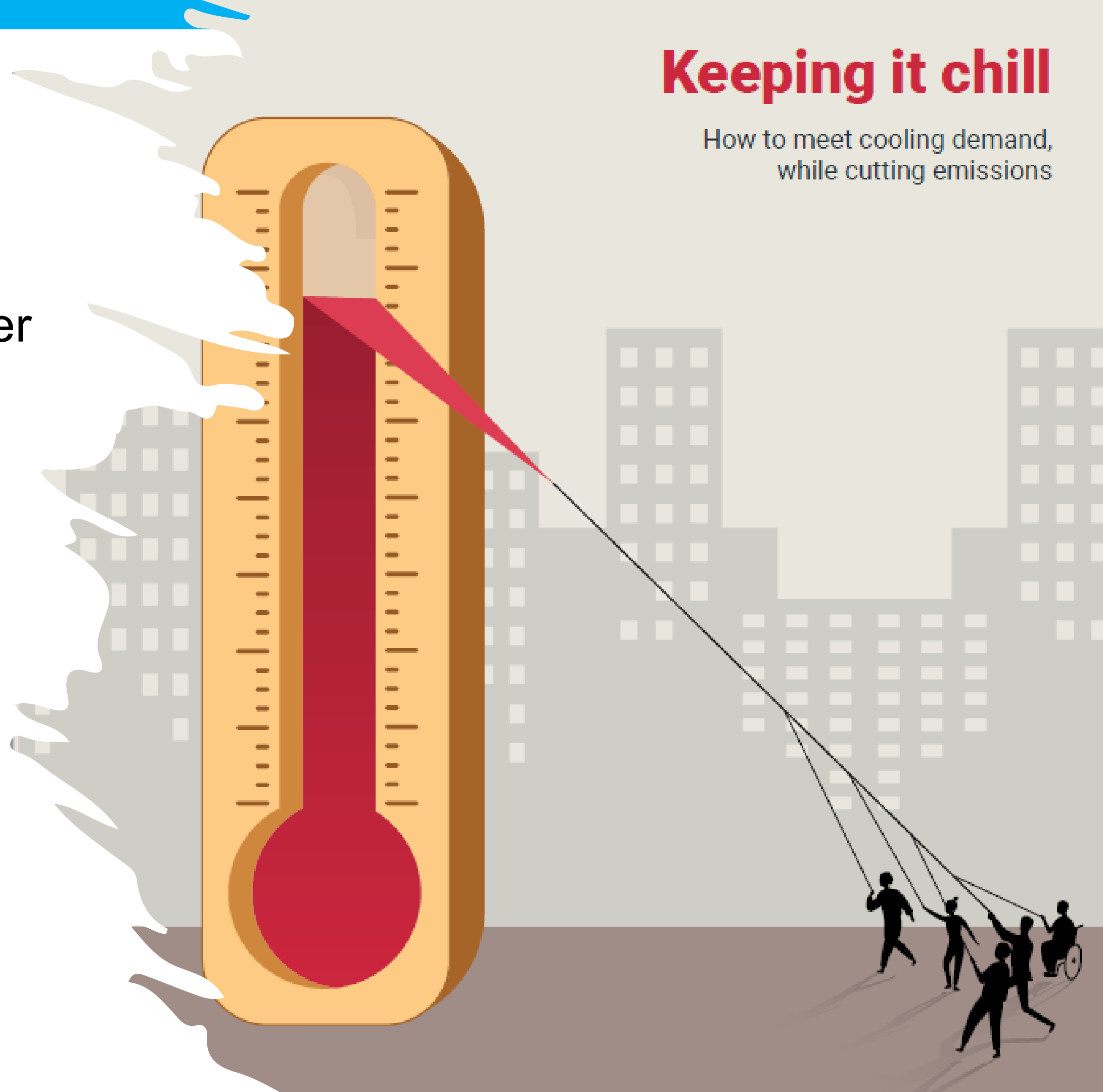
WBG Global Cooling Lead
Washington DC

rmusic@ifc.org

[LinkedIn profile](#)

Keeping it chill

How to meet cooling demand,
while cutting emissions



Panel discussion: From national plans to investment pipelines

Moderator



Mr Thanavat Junchaya

Senior Environmental Engineer
World Bank

Panellists



Mr Hu Jianxin

Professor, College of
Environmental Sciences and
Engineering
Peking University



Ms Morgan Simpson

Policy Advisor
UK Department for Environment,
Food and Rural Affairs



Mr Nils Hansen

Team Lead Africa
GIZ Proklima



Mr Eslam Mahdy

Programme Manager
Cool Up

Green and High-Efficiency Cooling Action Plan in China

Strengthen the leading role of energy efficiency standards (16 mandatory national EE standards)

Enhancing the supply of green and efficient refrigeration products

Promoting green and efficient refrigeration consumption (300 billions in 2025 for household appliances (mainly AC and refrigerators, Level 1 energy-efficiency products only))

Promoting energy-saving renovation (~ 20 billion yuan has been allocated to energy-saving retrofits of air conditioning equipment)

Lessons and conclusions

1. It is an indispensable process to scientifically and technically assess the environmental and economic benefits of these actions.
2. China's energy conservation and emission reduction efforts are led by the National Development and Reform Commission, with the Ministry of Ecology and Environment as one of the key member departments.
3. Develop responsive policy and technical standards based on careful researches involving different stakeholders.
4. China's policies, including MEPS and labelling systems, have yielded significant environmental benefits.

Panel discussion: From national plans to investment pipelines

Moderator



Mr Thanavat Junchaya

Senior Environmental Engineer
World Bank

Panellists



Mr Hu Jianxin

Professor, College of
Environmental Sciences and
Engineering
Peking University



Ms Morgan Simpson

Policy Advisor
UK Department for Environment,
Food and Rural Affairs



Mr Nils Hansen

Team Lead Africa
GIZ Proklima



Mr Eslam Mahdy

Programme Manager
Cool Up

Local financing institutions involved

All funding focuses on projects involving natural or low GWP refrigerants following the technology catalogue



Turkiye
Sustainable cooling loans
Product launch planned for 27.03.2026

Type of financing: asset loan with optional reduced interest rates
Target: SMEs and corporates
Source of funding: own and EBRD GEFF



Egypt
Sustainable cooling loans
Product launch planned for H2 2026

Type of financing: asset loan with optional reduced „interest” (Islamic Bank)
Target: SMEs and corporates
Source of funding: own and EBRD GEFF



Egypt, Jordan
Sustainable cooling loans
Cooperation to start H1 2026

Product concept is under development.



Jordan
Sustainable cooling loans
Product launch planned for H2 2026

Type of financing: asset loan with optional reduced „interest” (Islamic Bank)
Target: SMEs and corporates
Source of funding: own



Jordan
Governmental grant support for sustainable cooling
Product launched H2 2025

Type of financing: partial grant for projects involving natural and low GWP refrigerants
Target: SMEs
Source of funding: governmental



Lebanon
Sustainable cooling microfinance
Product launch planned for H2 2026

Type of financing: microfinance loans
Target: Micro companies and private people
Source of funding: own



Lebanon
Sustainable cooling microfinance
Product launch planned for H2 2026

Type of financing: microfinance loans
Target: Micro companies and private people
Source of funding: own



What Cool Up offerings for Financial Institutions

Finance sector assessment for cooling technologies in 4 countries

End-user surveys for analyzing market potential of highly implementable projects

Conduct debt financing potential for cooling technologies

Conduct feasibility studies of projects having high potential for implementation in partner countries

Identify prospective end-users willing to adopt sustainable cooling technologies (2022-23)

Develop financing solutions using outputs from financial feasibility assessment

Defining sustainable cooling technologies (Technology Catalogue)

Awareness raising to executives

Gap analysis in existing strategy and products

Support the rollout of the new technologies in financing schemes

Bankability tool

Sustainable cooling GHG reporting set up

Training and capacity building of loan officers to use dedicated financing products developed

Explore formation of dedicated fund by International Financial Institution(s) for providing financial assistance.

Panel discussion: From national plans to investment pipelines

Moderator



Mr Thanavat Junchaya

Senior Environmental Engineer
World Bank

Panellists



Mr Hu Jianxin

Professor, College of
Environmental Sciences and
Engineering
Peking University



Ms Morgan Simpson

Policy Advisor
UK Department for Environment,
Food and Rural Affairs



Mr Nils Hansen

Team Lead Africa
GIZ Proklima



Mr Eslam Mahdy

Programme Manager
Cool Up

Q&A session

Moderator



Mr Amr Seleem

Country Engagement and Climate
Policy Lead
UNEP Cool Coalition

Panellists



Mr Hu Jianxin

Professor, College of
Environmental Sciences and
Engineering
Peking University



Ms Morgan Simpson

Policy Advisor
UK Department for Environment,
Food and Rural Affairs



Mr Nils Hansen

Team Lead Africa
GIZ Proklima



Mr Eslam Mahdy

Programme Manager
Cool Up

Closing Remarks



Ms Niroopa Kowlessar

Cooling Policy Specialist

UNEP Cool Coalition



OEWG48

Bangkok
13-17 July 2026



Financing Sustainable Cooling

From National Plans to Investment Pipelines

13 July 2026
13:00 – 15:00 (UTC+7)

