GLOBAL COOLING PLEDGE ASSEMBLY

SINGAPORE 15 - 18 SEPTEMBER 2026

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Ministry of Sustainability and the Environment SINGAPORE

IGCC Session 4

GLOBAL COOLING PLEDGE ASSEMBLY

SINGAPORE 15 - 18 SEPTEMBER 2026

A Heat Resilience Roadmap for National and Global Action

11:00 – 12:30

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Facilitator Framing

Eleni Myrivili

Global Chief Heat Officer, **UNEP**

1. The proposition:
One guiding architecture for a problem that is currently fragmented

PROBLEM SETTING

Rising heat risk
and rising cooling demand
are accelerating together -

but are still addressed through
separate agendas.

THE SHIFT

From “How much
cooling do we need?”

to

“How do we deliver
thermal safety?”

THE VALUE

Connect the heat and cooling agendas and actions across sectors like health and wellbeing, energy, water, buildings and infrastructure .

Support domestic priorities and help meet international obligations - mitigation and adaptation including Belem Indicators - which include Heat Resilience.

2. Start with what we want to achieve - Two simple questions anchor the whole Roadmap

THERMAL SAFETY ACCESS (TSA)

Can people [communities?] remain safe

and participate in daily life

during extreme heat?

HEAT RESILIENCE CAPACITY (HRC)

Can critical systems –

health, energy, water, food, transport,
critical economy sectors,
and communications -

continue to function under heat stress?

Sustainable cooling is not a third outcome. It is the pathway to achieving both.

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3. Building a flexible architecture:

Having looked at the examples of countries taking action on Heat Resilience we'd like to propose and co-design with you an architecture that leads from ambition to action.

A. GOVERNANCE

How do we coordinate and integrate planning and action?

How do we organise government leadership and connect it to national and international commitments?

B. STRATEGIC ACTION AREAS

Where is heat creating the greatest risks and what do we need to prioritise?

What's our Resilience Pathway: how do we organise and prioritise our *risk, which sectors/systems need to respond?*

C. SOLUTIONS

What actions will deliver those priorities?

Which combination of behavioural, nature-based, passive, active-cooling and policy/finance solutions is most appropriate?

D. OUTCOMES

Are people safer and are systems more resilient?

How do we measure Thermal Safety Access (TSA) and Heat Resilience Capacity (HRC)?

Governance enables > Strategic Action Areas organise > Solutions deliver > Outcomes measure & feed back into the system

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A. Governance - proposed module for discussion

Political mandate

- Head of State/Government recognition the systemic heat challenge and as a "**disaster**"
- Mandate established through appropriate national mechanism

Institutional ownership

- Designate an institution or office with the mandate to coordinate development and implementation of the Roadmap
- Connect relevant ministries and existing national plans
- Establish multilevel governance mechanisms

Accountability & reporting

- Coordinate reporting on outcomes and progress
- Link heat resilience action to relevant national and international climate commitments

The Roadmap does not create a new bureaucracy; this governance module establishes the mandate, the coordination mechanism needed to connect existing responsibilities, and the authority to maximize impact.

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B.1 Strategic Action Areas - proposed module for discussion

Step 1. Understand the Risk:

What are the country's greatest heat and cooling risks?

Step 2. Organise the Response in Five Strategic Action Areas:

Where do these risks affect people, systems and the economy and where should government action be organised?

Health & Human Wellbeing	Cities / Buildings / Public Space	Critical Infrastructure	Economic & Institutional Resilience	Disaster Preparedness Response & Recovery

Science/Data and Education/Capacity = cross-cutting areas.

Step 3. Deside Priorities

What should we do first and where should we focus?

Prioritise and sequence actions ➡ Define Resilience pathway

Output: A clear set of national heat-resilience priorities

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C. Solutions– proposed module for discussion

Resilience Pathway = WHAT needs to change → Solutions Taxonomy = the menu of HOW to achieve it.

Solution families to chose from:

BEHAVIOURAL & SOCIAL
Heat-safe behaviour | community preparedness & capacity | EWS…

NATURE-BASED
Trees | green/blue infrastructure | green corridors | green roofs…

PASSIVE DESIGN & PLANNING
Shade | ventilation | cool roofs | building design | retrofits…

ACTIVE COOLING
Efficient cooling | hybrid systems | district cooling where appropriate…

POLICY, GOVERNANCE & FINANCE
Codes | standards | procurement | incentives | finance…

Decision Rule:
Sustainable Cooling Hierarchy

Reduce exposure & demand >

Low-energy/hybrid >

Efficient active cooling >

Low-GWP + clean energy

The country selects and sequences the combination of solutions that best delivers its Resilience Pathway with a climate mitigation and economic lens .

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D. Outcomes – proposed module for discussion

THERMAL SAFETY ACCESS (TSA)

Can people remain safe?

Possible indicators for population at:

- Home: what percentage of people remain safe at home?
- Workplace: what percentage of workers remain thermally safe?
- School and care facilities: are children and vulnerable people protected?
- Public realm: can people safely move through the city?
- Cooling refuge access: can people access emergency cooling?

HEAT RESILIENCE CAPACITY (HRC)

Can critical systems continue to function?

Possible indicators for critical systems:

- Critical infrastructure readiness and resilience
- Health-system heat readiness and resilience
- Critical Economic Sectors R&R
- Energy-system R&R
- Water system
- Transportation
- Communications and digical systems
- Supply and cold Chains, etc

Baseline > Track progress > Review > Adjust

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Why Do We Need a Modular Heat Resilience Roadmap?

Connecting cooling, adaptation, resilience and development

- Today, countries are already acting on heat through multiple frameworks

  Cooling | Adaptation | DRM | Health | Infrastructure | Urban | Labour & Agriculture

- The challenge: Speed and Scale of Implementation

  The same heat risk is being addressed through multiple plans, ministries, funding streams and reporting systems.

- The Roadmap proposition

  Organize action around the outcomes we want to achieve rather than around individual sectors or technologies.

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Example: A Cool Roof Programme

Under a cooling lens:

- Reduces cooling demand
- Improves energy efficiency

Under a heat resilience lens:

- Protects people from heat
- Supports adaptation
- Improves public health
- Reduces disaster risk
- Supports productivity
- Reduces energy demand

What changes?

The same investment becomes relevant to:

- climate adaptation funding
- development finance
- infrastructure finance
- disaster risk reduction finance
- public health budgets
- energy-system investments

A single investment aligns multiple government priorities and funding streams and enabling prioritization and implementation

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What Changes in Governments?

Strong Mandate - Who coordinates How progress is measured - How ministries contribute to common outcomes?

Before

Environment: Cooling
Health: Heat mortality
Energy: Peak demand
Cities: Urban heat
DRM: Emergency response
Agriculture: Food
Labor: Workforse

After: Shared Outcomes

Thermal Safety: Can people remain safe during extreme heat?

Heat Resilience Capacity: Can critical systems continue functioning?

It moves cooling from a technical topic into a national resilience and development conversation, a shared national objective that can coordinate ministries without creating a new bureaucracy.

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7. Heat Resilience Roadmap for a Warming world – a proposition to take forward

As Heat is Rising COUNTRIES NEED:

- Common way to understand and handle heat + cooling risk
- A way to prioritised and sequenced action
- Connection to existing national plans and investments
- Regional peer-to-peer learning
- Meaningful resilience outcomes

What can we CO-DESIGN at the Singapore Assembly:

- Discuss outcomes: TSA & HRC indicators and national baselines
- Governance : how do we organise and implement
- Strategic Action Areas: how do we set national priorities
- Solutions Taxonomy: which solutions will get us there?
- Outcomes: measuring success and linking with existing efforts?

Global Cooling Pledge = ambition | Roadmap = modular decision architecture for implementation

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“So what does this add?”

“It provides the missing architecture to connect the actions countries are taking on health, adaptation, cooling, buildings, energy and infrastructure, development into a coherent, climate-resilient response to growing heat risk.”

“It provides a roadmap as well as a framework for the new heat reality, connecting the plans countries need and ones they already have.”

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Rapporteur reporting back

Amit Prothi

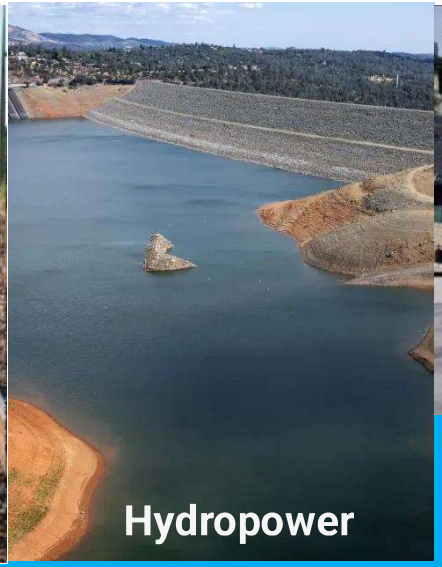
Director General,

Coalition for Disaster Resilient Infrastructure

Critical Infrastructure & Extreme Heat

Heat Stress is a Developmental Challenge

Buckled railway tracks in UK during heatwaves in July 2022



Lake Oroville in California in 2021, when the major West Coast reservoir sat at a dangerously low level.

Melted rooftop of the Forbidden City Cultural Relics Museum in China amid a blistering heatwave in July 2022

Melted asphalt of road in New Delhi during the heatwave in May 2015

- **Heat is becoming an infrastructure risk—not just a weather or health risk.**
- **Rising temperatures create thermal stress, material fatigue and operational disruptions in infrastructure designed around historical climate conditions.**

CDRI
Coalition for Disaster Resilient Infrastructure

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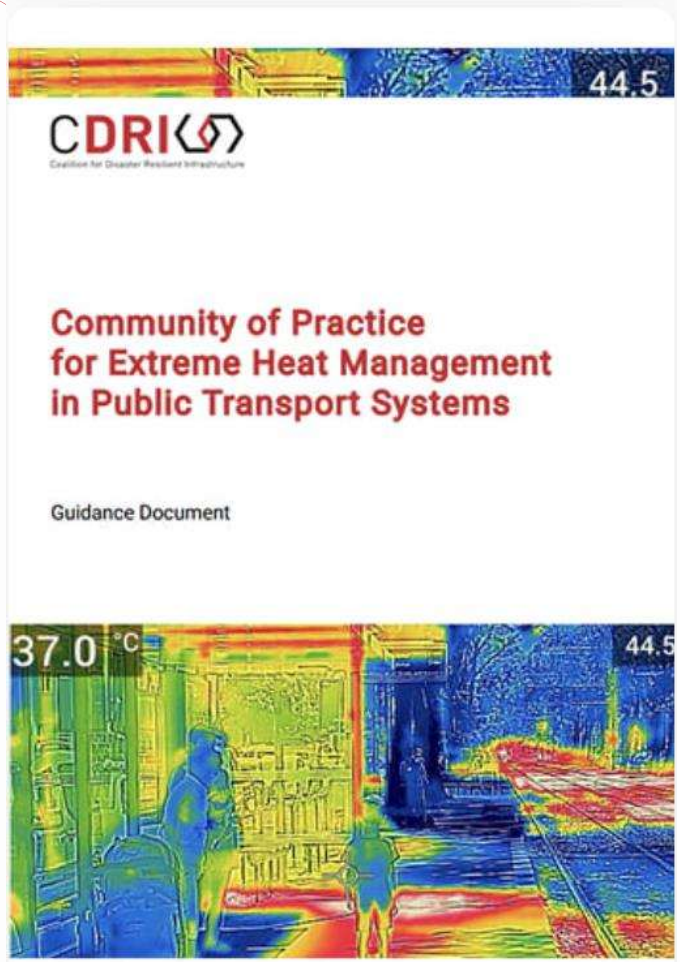
Reliability/Performance of Services is Affected

Energy

- Increased peak loads due to cooling demands
- Reduced grid efficiency
- Grid failures
- Increased transmission and distribution losses
- Blackouts and brownouts
- Sagging of overhead lines and flashovers
- Decrease in lifetime of transformers

- **Heat can undermine the reliability of essential services precisely when demand is highest.**
- **The impacts are interconnected across infrastructure systems.** A heat event can simultaneously increase electricity demand, affect power generation and transformers, strain water resources and disrupt transport—creating potential cascading effects across critical services.
- **Infrastructure performance itself can deteriorate under extreme heat.** Even a 1°C temperature increase can reduce solar-panel efficiency and shorten transformer lifespans

Recognizing Vulnerabilities



https://cdri.world/urban/cop-on-extreme-heat-in-transport-systems/

- **Heat resilience must protect both infrastructure and people.**
  - Transportation - heat exposure in vehicles, stations, transit stops and first/last-mile connections.
  - In addition to the transportation infrastructure system and assets
- **Vulnerability is highly uneven.**
  - Children, older people, people with disabilities, low-income communities and workers exposed to heat can face disproportionate risks.
  - Infrastructure design therefore needs to **consider who uses the service**, not simply whether the asset survives.
- **Heat risk needs to be understood at the system level, not asset by asset.**
  - Data, risk assessments
  - Understand interdependencies to anticipate cascading impacts.

CDRI Coalition for Disaster Resilient Infrastructure

Extreme Heat Management in Public Transport System

Community of Practice Guidance Note

Establish a Long-Term Vision with Dedicated Funding for Heat Resilient Urban planning

Mandate Heat Impact Screenings for Transport Projects with a Focus on Vulnerable Populations

Integrate Heat-Resilient Materials in Transport Infrastructure Construction and Renovations

Transition Public Transport Fleets to Clean Energy with Efficient Cooling Systems

Incentivize or Mandate Shading and Cooling at Transport Stops

Enable Data Driven Decision Making and Predictive Maintenance for Transport Systems

Improve Transport Frequency to Reduce Wait Times and Crowding

Enhance the Communication and Timing of Heat Warnings and Service Updates

Heat Smart Schools

Community of Practice Guidance Note

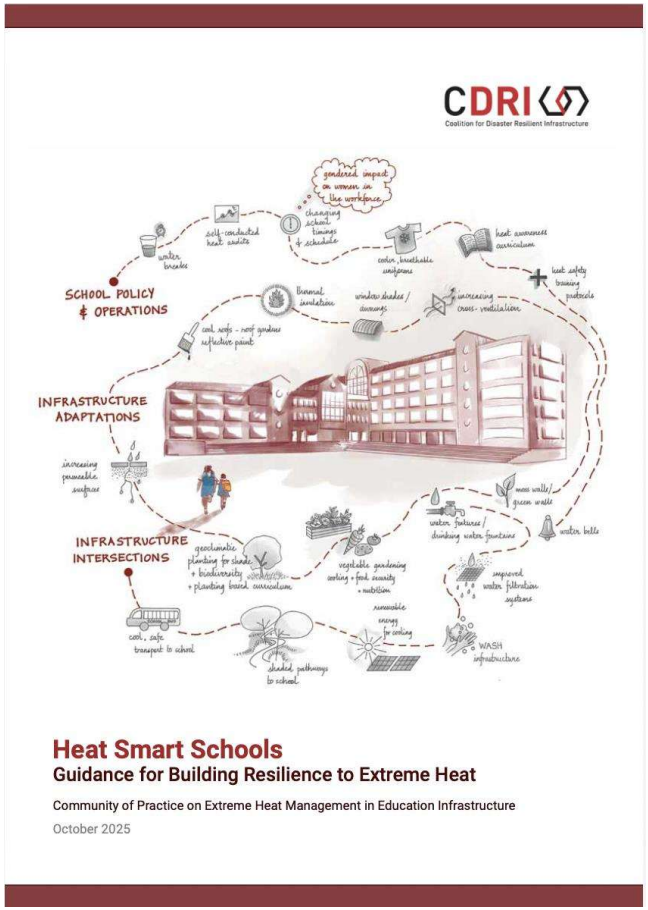
Thermal safety

Availability of potable water

Accessibility (pedestrian, buses)

Outdoor play area and hours

Clean toilets



https://cdri.world/heat-smart-schools/#summary

01 Set Up Governance:
Establish inclusive schools and administrative structures with clear accountability for disaster resilience, ensuring adequate focus on extreme heat.

02 Use the Science:
Harness forecasts, local data, and school-level diagnostics to guide actions on heat resilience.

03 Implement Adaptation Actions:
Retrofit, design, and green schools using codes and nature-based cooling solutions.

04 Educate:
Empower students, teachers, and parents with heat literacy.

05 Address Underlying Risks:
Ensure access to water, nutrition, health services and heat safe environments when they are outside school.

06 Invest in Risk Reduction:
Mobilize finance for heat resilience from education, public works, health, urban and climate budgets.

07 Prepare for the Future:
Integrate heat resilience into school disaster management, response, and recovery. Integrate schools into city heat action plans.

Resilience Principles

Singapore – whole of government approach (Planning, Policy, Partnerships)

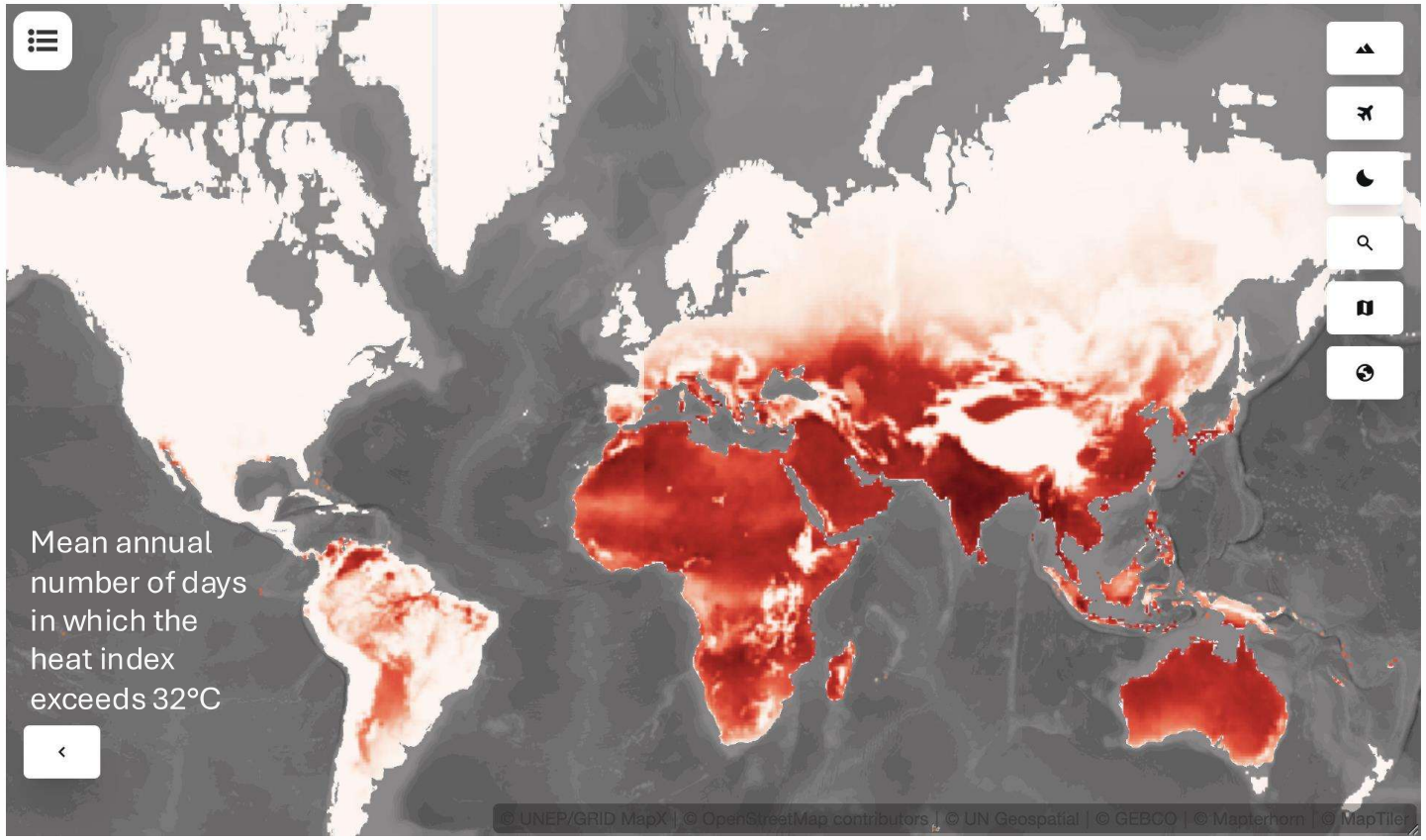
Education/Health Ministries (Thermal Safety, Access to Reliable Infrastructure Services)	Meteorological Department (Science and Early Warning)
Environment/Disaster Ministries (Coordination/preparation of NAPs, NCAPs, SDGs)	Infrastructure* & Urban Ministries (Standards, Practices, Innovation)
	Finance Ministry (Recognize cost of Heat Waves, Budget Provisions)

***Example: Indian Railways factors availability of additional water in passenger trains during extreme heat season**

- **Understanding heat stress should change how infrastructure is designed and upgraded.** (heat-resilient materials, passive cooling, shading, ventilation, nature-based solutions, efficient cooling and retrofits)
- **Heat resilience needs to be embedded in infrastructure lifecycle and investment decisions.** (Hazard assessments, stronger data and monitoring, resilience standards, technical capacity and financing to be integrated throughout the infrastructure lifecycle)
- **The objective is not simply to withstand a heatwave, but to maintain continuity of essential services.** (resilient infrastructure in terms of its ability to resist and absorb impacts, maintain adequate service levels during crises, and recover while reducing future risk)

Coalition for Disaster Resilient Infrastructure

A partnership of 71 members including 59 countries



CDRI: Global Infrastructure Resilience Model
(prepared in partnership with UNEP GRID - https://giri.unepgrid.ch/)

1. Share examples from Coalition partners on addressing risks to critical infrastructure from Extreme Heat
2. Identify data gaps and opportunities for Early Warning for Infrastructure Service Providers
3. Develop SOPs and Guidelines in partnership with critical infrastructure providers and support capacity building activities
4. Facilitate research and innovation on new solutions
5. Organize communities of practice for continued dialogues

Cool Spotlight: Japan

Jiro Hiratsuka

Director,

Ministry of the Environment, Japan

環境省
Ministry of the Environment

Heat resilience and sustainable cooling: Policies and technologies of Japan

- **Global Cooling Pledge Assembly 2026 @ Singapore**

- 18 September 2026

- **HIRATSUKA Jiro, Director**
- Office for Climate Change Cooperation
- Ministry of the Environment (MOEJ)

Today's topics

1. Challenges to heat stroke
2. Reduce overcooling
3. Cooling technologies of Japan
4. Lifecycle Refrigerant Management

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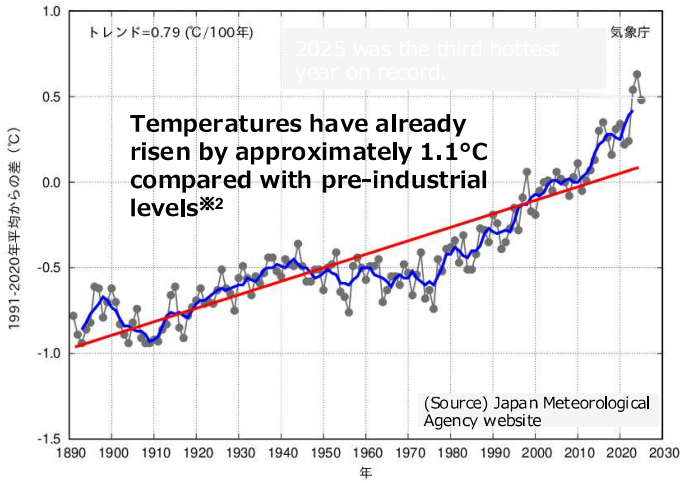
Why Heat Adaptation Matters in Japan?

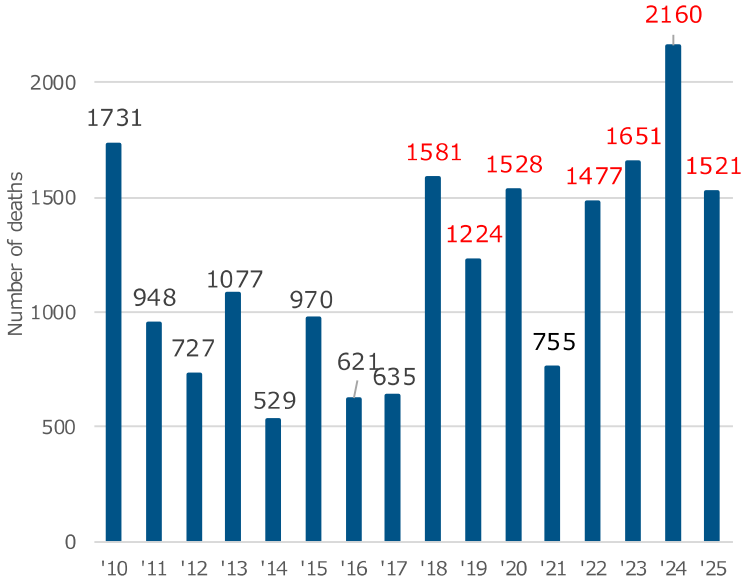
- The World Meteorological Organisation (WMO) announced in March 2026 that **2025 was the third hottest year on record**, with the global annual average temperature rising **by approximately 1.43°C** compared with pre-industrial levels.
- Addressing heat-related health risks is one of Japan's highest adaptation priorities in the health sector. Protecting lives from extreme heat is a top priority of Japan's adaptation policy.

Changes in the global annual average temperature

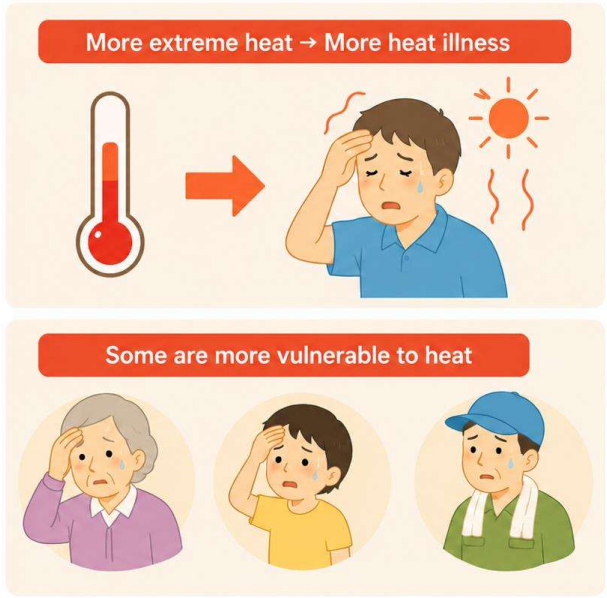


※2 Calculated by comparing the global average temperature based on the pre-industrial period (1850–1900) with the global average temperature for 2011–2020.

Annual trends in deaths due to heat illness



Source: Vital Statistics, Ministry of Health, Labour and Welfare
Deaths in 2025 are approximate numbers (from June to September).



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Climate Change Adaptation Act (2018) revised in 2023

1. Integrated Promotion of Adaptation

- Set out clear roles for national and local governments, private sectors, and citizens to promote climate change adaptation.
- The national government shall formulate the **Climate Change Adaptation Plan** to promote adaptation in sectors such as agriculture and DRR.
- MOE shall implement **climate change impact assessments**, almost every five years.

Promote effective adaptation measures in various sectors based on reliable detailed information

Agriculture, Forestry, and Fisheries	Water Environment, Water Resources	Natural Ecosystems	Natural Disasters	Human Health	Industrial / Economic Activities	Life of Citizenry

2. Development of Information Platforms

- The **National Institute for Environmental Studies (NIES)** is **positioned as the core of the information platforms** for adaptation.

3. Enhancement of Local Adaptation

- Local governments (prefectures and municipalities) shall endeavor to formulate **Local Climate Change Adaptation Plans**.
- Prefectures and municipalities should establish systems to collect and provide information on adaptation (**Local Climate Change Adaptation Centers**).
- Organizing **Regional Councils on Climate Change Adaptation**, national and local governments and other entities promote adaptation measures locally.

4. International Development of Adaptation and Other Issues

- Promote international cooperation
- Promote initiatives by business entities and adaptation business

5. Promotion of Heat Illness Prevention Measures

- **The action plan for heat stroke countermeasures**
- National : Announcement and dissemination of **heat stroke alert information・heat stroke special alert information**
- Local : Designation and utilization of designated **heat evacuation facilities and heat stroke prevention promotion organizations**

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Action Plan for Heat Stroke Countermeasures (2023)

Mid-term goal (2030)

To halve the number of deaths due to heat illness (5-year moving average)

Specific measures to prevent heat stroke

1. Public **awareness raising and information provision** to protect people's lives and health
2. Heat illness prevention for **people vulnerable** to heat illness, e.g., elderly people and children
3. Heat illness prevention in the **places** where personnel in change of management are present
4. Heat illness prevention by **local governments and community stakeholders** concerned
5. Collaboration with **industrial players**
6. Promotion of **research** on heat illness countermeasures

Response to extremely high temperatures

7. **Preparedness** for extreme high temperatures
8. Announcement and public awareness raising of **Special Heat Stroke Alerts** and prompt implementation of countermeasures

Implementation and review of action plans

The action plan will **continue to be reviewed** for addition and reinforcement of further measures by the situation of climate change, future trends in heat illness, and trends in public opinion. The implementation structure for extremely high temperatures will also be reviewed in response to the results of the study.

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Heat Stroke Alert and Special Heat Stroke Alert

	Heat Stroke Alert	Special Heat Stroke Alert
Positioning	When **there is a risk of damage to human health** due to heat illness as a result of extremely high temperatures (Promotes awareness of the dangers of heat illness) Number of alerts issued to date FY2021:613 times FY2022:889 times FY2023:1,232 times FY2024:1,722 times **FY2025:1,749 times**	When **there is a risk of serious damage to human health** due to heat illness as a result of **extremely** high temperatures (All people should practice individual preventive actions through their own efforts, as well as support preventive actions through mutual and public assistance.) **Implementation began in April 2024.** **There has not been a single alert issued.**
Alert criteria	When the daily maximum Heat Stress Index (WBGT) is predicted to reach **33** (predicted value, rounded to the nearest whole number) at any of the locations where the Heat Stress Index information is provided **within the prefectural forecast area**.	When the daily maximum Heat Stress Index (WBGT) for the next day is predicted to reach **35** (predicted value, rounded to the nearest whole number) at **all** locations where the Heat Stress Index information is provided **within the prefecture**. (Criteria for announcement regarding natural and social conditions other than the above will continue to be considered in FY2024 and beyond.)
Announcement time	Around **5:00 pm** on the day before and around **5:00 am** on the day	Around **2:00 pm on the day before** (Judged by the predicted value around 10:00 am on the previous day)

FY2025 Operation Period : From April 24,2025 to October 22,2025. Since November 2025, an expert panel has reviewed and discussed the future framework of the Heat Stroke Alert system and related measures. As a result, certain information provision sites will no longer be used as reference points for determining the issuance of Special Heat Stroke Alerts from FY2026.

Cooling Shelters

- Mayors of municipalities may designate facilities that meet certain requirements within that municipality as designated cooling shelters.
  The designated facilities are commonly referred to as "**Cooling Shelters**".
- **When a Special Heat Stroke Alert is issued, the designated facility will be opened to residents** on a predetermined date and time by the manager of the facility.

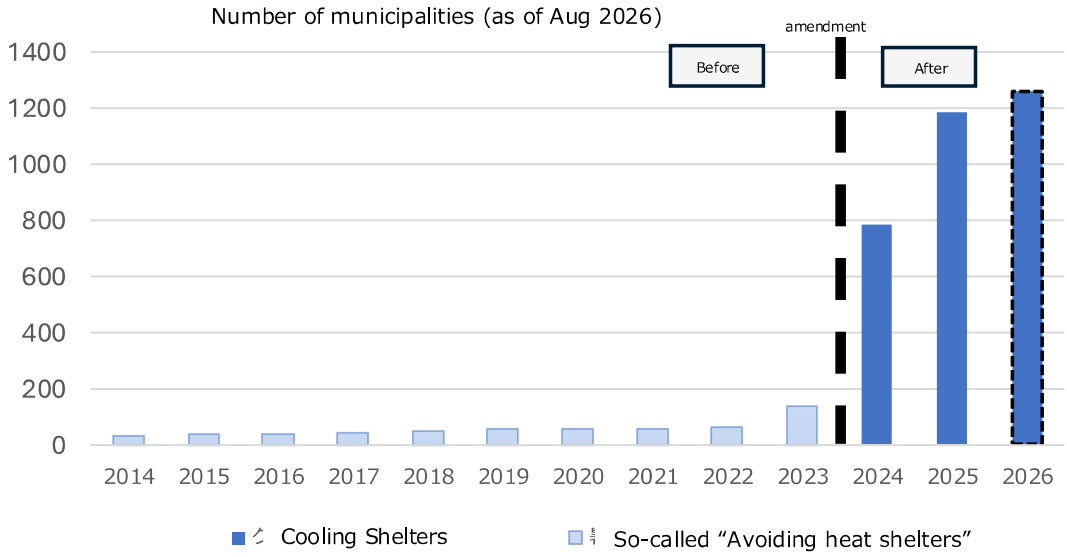
Requirements for facilities

(1) Having appropriate air-conditioning facilities.

(2) To be open to residents, etc. during the period when Special Heat Stroke Alerts are issued.

(3) Sufficient and appropriate space to stay is provided for residents, etc.

Source: Komatsu City



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Interministerial framework for heat stroke prevention

- Heat Stroke Prevention Promotion Council was established in 2021, chaired by the Minister of the Environment with 12 ministries and agencies
- Announcements and campaigns on heat stroke prevention for various groups in various situations such as:
  - **For** children, labors, farmers, foreign tourists
  - **At** schools, construction sites, evacuation facilities during disasters
  - **During** sports activities
  - **Information** on alerts, patient stats, energy-efficient air-conditioners

内閣府 こども家庭庁 消防庁 文部科学省 スポーツ庁 厚生労働省 農林水産省 経済産業省 国土交通省 観光庁 気象庁 環境省

Ministerial meeting on heat stroke prevention (July 2026)

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Warm welcome with smart cooling – Reduce overcooling

- Setting low temperature for air-conditioners is:
  - More **CO2** emission
  - More **energy consumption**, with a large peak at daytime
  - For some people, **uncomfortable** and pose an **adverse effect on health**
- Low hanging fruit: why not just setting to a moderate temperature?

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Cool Biz (2005-): Moderate temperature with casual wear

■ Cool Biz - one of the most successful government-led initiatives

- **Comfortable in offices and homes** even when the room temp is **28°C** with AC
- Encourage taking off jackets and ties from June to September
- Involve government and business executives, and disseminate to Asia

→ An immediate success, with high recognition, support and adoption rates

☺ **Cost saving**, **Comfortable**, **Clear action**, **Top down**

■ Flexible approach to encourage further adoption

- **Period**: June to September → May to October (2011)
  → May to September (2016)
  → Abolish standardized nationwide period (2021)
- **Temperature**: Setting at 28°C → Room temp at 28°C (2006)
  → Abolish temp from campaign (2023)
  → Abolish temp from the Government Action Plan (2025)

Cabinet meeting wearing “Kariyushi” (June 2026)

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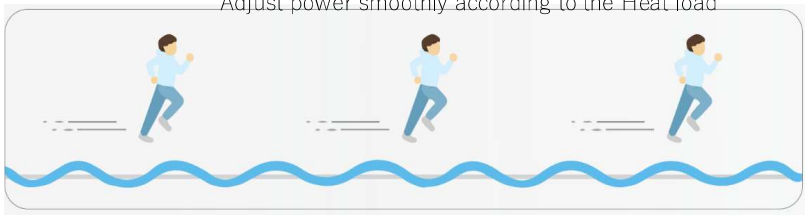
Mobilize “high-efficient” inverter drive air-conditioner

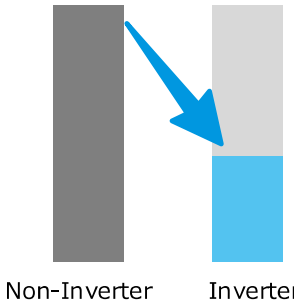
Improving the energy efficiency of air conditioning can **significantly contribute to reducing global electricity consumption and CO2 emissions**.

Key Technology Inverter

Non-Inverter Repeat ON／OFF Operation

Inverter Adjust power smoothly according to the Heat load

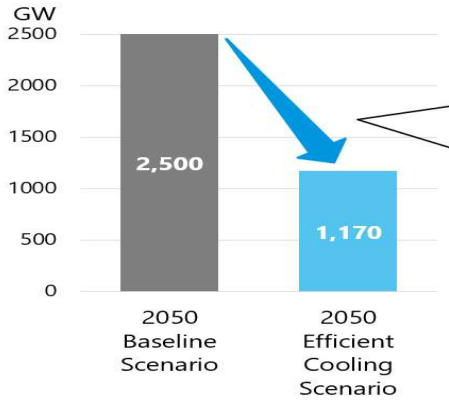




Energy Consumption 50% Reduction

*Based on demonstration test by Daikin

Impact on Power



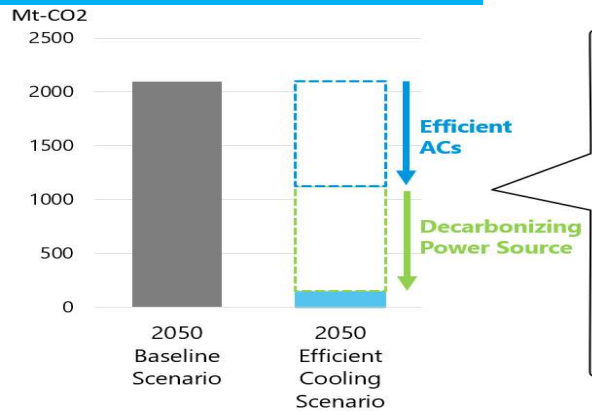
Energy-efficient air conditioners can reduce additional power generation capacity by

1,330 GW worldwide*.

Can reduce more than present

the total power generation capacity of the U.S.

Impact on CO2 Emissions



Combining energy-efficient air conditioners and decarbonizing power can reduce CO_2 emissions by

about 2Gt-CO_2 worldwide*.

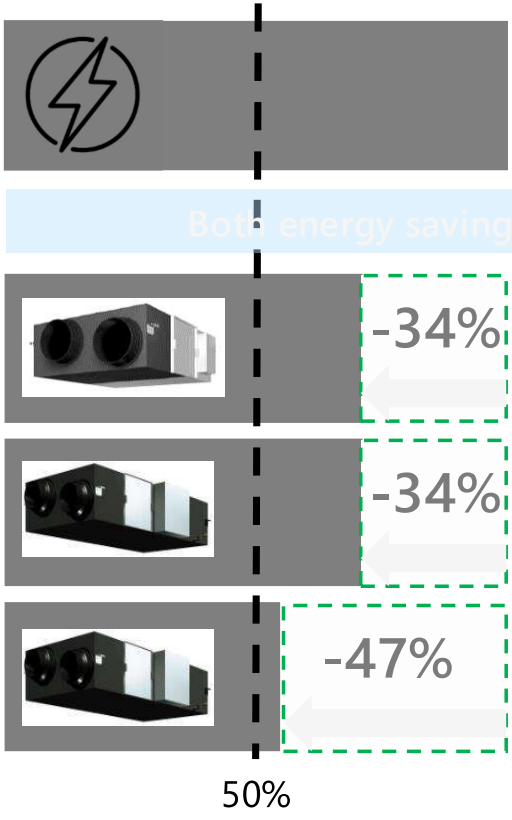
Can reduce more than present

Transportation sector CO_2 emissions in the U.S.

*Sources：IEA (2018), The Future of Cooling

Prevent overcooling – Combined Ventilation Systems

Efficient cooling technologies can enhance **comfortability and energy saving** while maintaining a **moderate temperature setting**

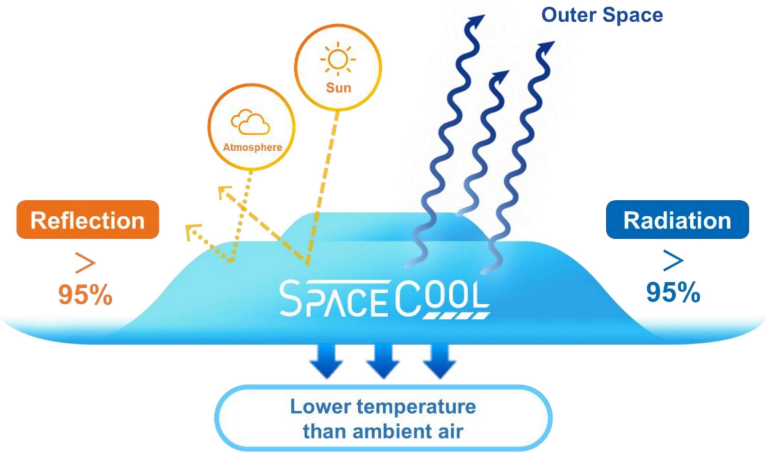


Source: DAIKIN

Reduce cooling demand through passive cooling

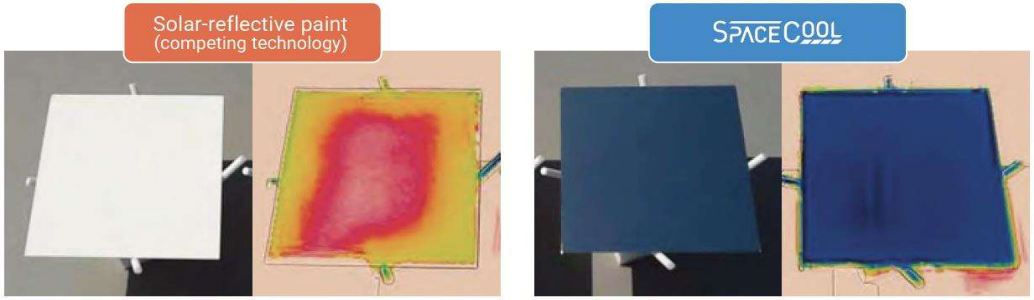
■ What is Passive Radiative Cooling Materials?

A material that reflects solar radiation and releases heat to outer space enables passive cooling even under direct sunlight.

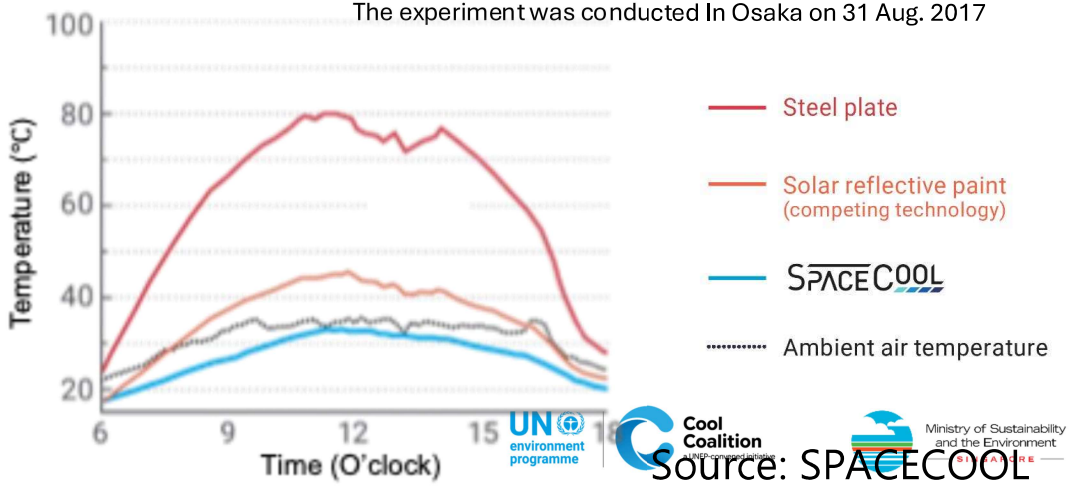


■ What are the effects of radiative cooling materials?

Surface temperatures of steel plate is 2–6° C below ambient air temperature under direct sunlight.



The experiment was conducted In Osaka on 31 Aug. 2017



Source: SPACECOOL

Radiative cooling for buildings and infrastructure

- Because the cooling function is embedded in the surface, passive radiative cooling can be integrated into both new and existing assets.
- It can reduce solar heat loads without additional electricity or mechanical equipment.

Buildings & Roofs

Reduce heat entering buildings and cooling demand

HVAC & Data Centers

Improve AC efficiency by reducing solar heat gain

Power & Infrastructure

Reduce solar heat gain on heat-sensitive equipment

People & Outdoor Heat Protection

Reduce radiant heat exposure and help mitigate heat-stress risk

Lower cooling demand

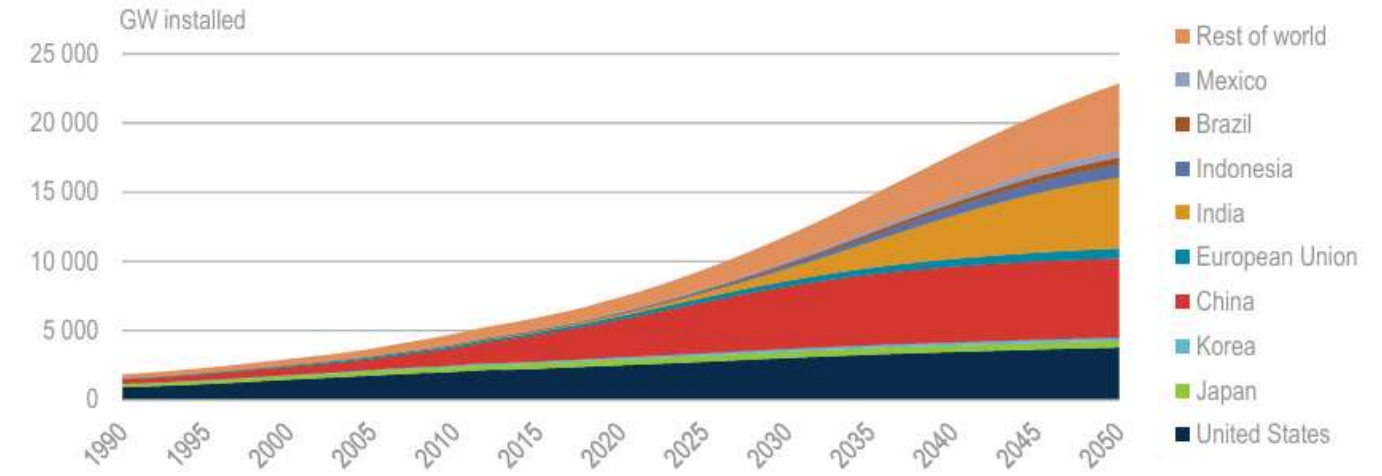
Reduce energy use for cooling

Protect infrastructure and people

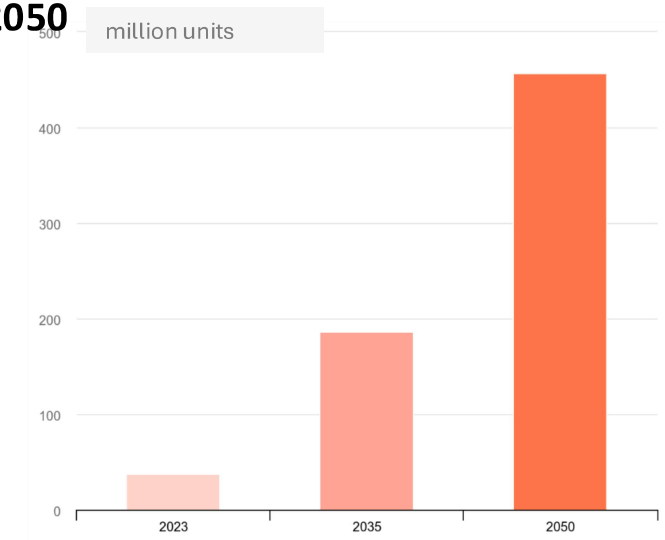
Global air-conditioning capacity is increasing

- Demand for air conditioners is growing due to global warming, economic growth, and urbanization.
- Global air-conditioning capacity is projected to increase from **6,200 GW to 23,000 GW for residential applications** and from **5,500 GW to 14,000 GW for commercial applications** between **2016 and 2050**. Demand for refrigerants is expected to grow accordingly.
- IEA projects **air conditioners in Southeast Asia** will increase **x5 in 2035, x12 in 2050** (of 2023)

Residential AC cooling capacity



Air conditioners in Southeast Asia, 2023-2050

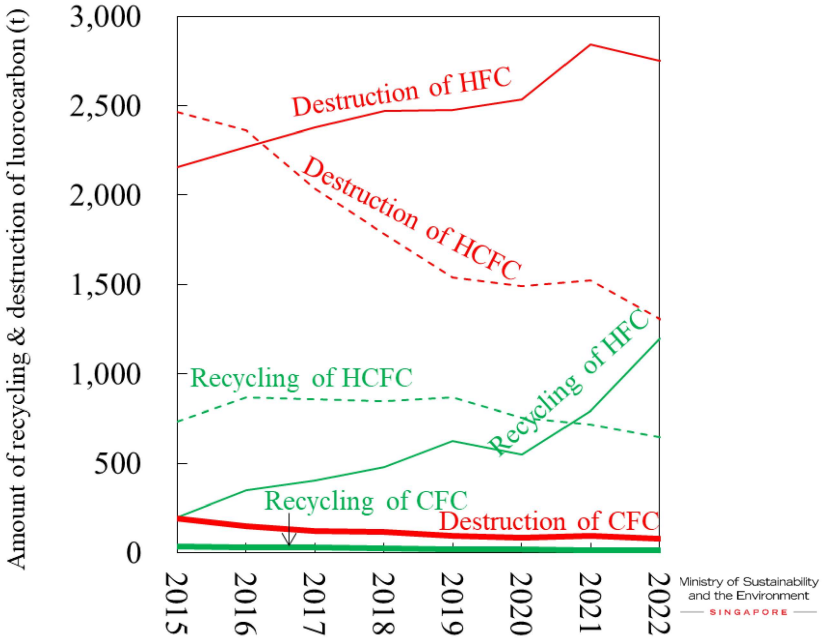


IEA (2018) The Future of Cooling | IEA (2024) Air conditioners in Southeast Asia, 2023-2050

LRM under Fluorocarbon Emissions Control Act

- Owners of equipment **must request an operator to recover remaining fluorocarbon** from the equipment when disposing of it
- **Filling and recovery operators** (~52,000 operators) must report filling and recovery amount to the prefectural government every year
- **Recycling and destruction operators** (35 recycling facilities, 56 destruction facilities) must report recycling and destruction amount to the national government every year

Distillation and purification



International cooperation for LRM

- Based on Japan's experience, **collection and recycling model projects** have been implemented to support the establishment of LRM in Malaysia and Vietnam
- **Carbon credits under Article 6** of the Paris Agreement may help implement HFC recovery and destruction, which is difficult due to cost burdens and other factors

  → Japanese companies and MOEJ have collaborated to implement four HFCs **Joint Crediting Mechanism (JCM) projects** in Thailand, Vietnam, and the Philippines

Used residential AC collection (Malaysia)

Reclamation facility (Malaysia)

Cylinder Collection (Philippines)

Destruction facility (Philippines)

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See you in Antalya!

- Japan Pavilion will be set up in COP31 Blue zone in Antalya, Türkiye
- **Solutions to The World**: 40+ seminars and tech showcase of 15 companies

- **MOEJ and UNEP/Cool Coalition will organize a seminar at Japan Pavilion**
  Friday 13 November 10:00-11:00
- The seminar will further discuss the implementation of Global Cooling Pledge to tackle heatwaves and extreme heat

Japan Pavilion team in COP30

COP31 Japan Pavilion (image)

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Cool Spotlight: Uttar Pradesh, India

Manoj Singh

IAS 1988 (R)

CEO, State Transformation Commission

Former Chief Secretary

Government of Uttar Pradesh, India

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GLOBAL COOLING PLEDGE ASSEMBLY

SINGAPORE 15 - 18 SEPTEMBER 2026

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Ministry of Sustainability and the Environment SINGAPORE

IGCC Discussion: Priorities for Strengthening Heat Resilience and Cooling Action

Moderated by Eleni Myrivili,
Global Chief Heat Officer, UNEP

Closing and takeaways

Eleni Myrivili

Global Chief Heat Officer, **UNEP**