



From Heat Actions to Heat Governance: Taiwan's Path toward Measurable Adaptation

Taiwan Climate Action Network | Hsin Chen

01

When Heat Cancels Climate Events

Soures: Met Office

!

Red warning
Extreme heat

×

09:00
Today

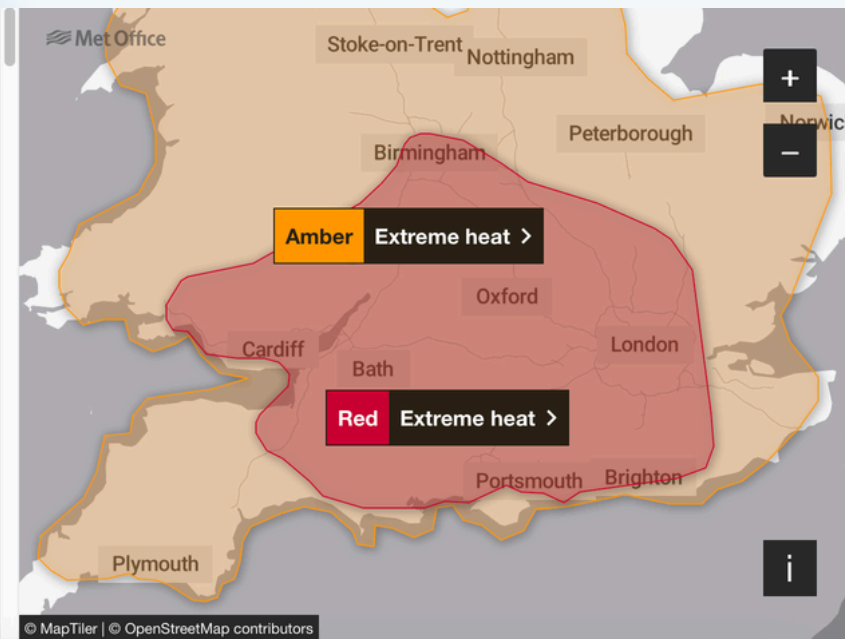
UTC+1

23:59
Tomorrow

An exceptional spell of hot and humid weather is expected across this region, with impacts to the general population highly likely.

What should I expect?

- Population-wide adverse health effects experienced, not limited to those most vulnerable to extreme heat, leading to serious illness or danger to life
- Substantial changes in working practices and daily routines will be required
- High risk of failure of heat-sensitive systems and equipment, with the loss of power and other essential services, such as water, electricity, gas or mobile phone services
- Significantly more people visiting coastal areas, lakes and rivers, leading to

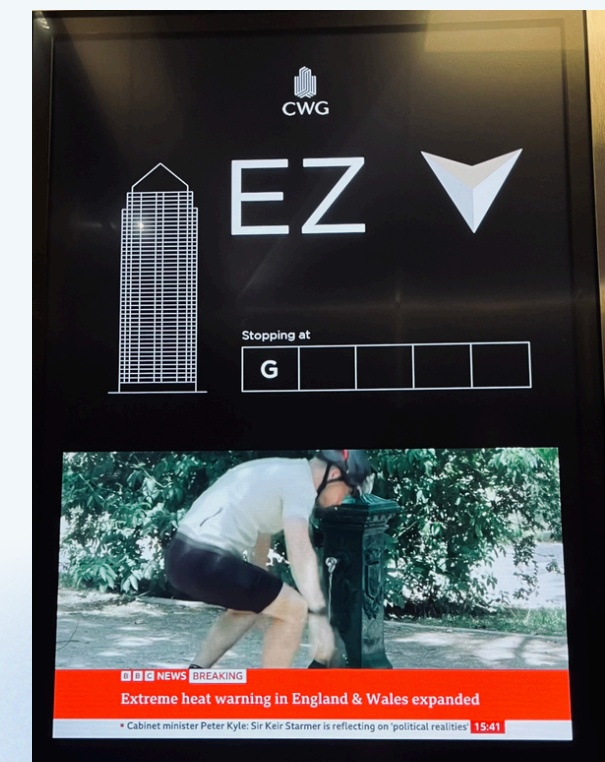


Event cancellation - Extreme heat: Improving governance and strengthening action around the world

Dear all

I am very sorry to update that we are cancelling the event [Extreme heat: Improving governance and strengthening action around the world](#) on Wednesday due to extreme heat!

A red warning for extreme heat was issued this morning for Greater London and comes in to force on Wednesday morning until end day Thursday. Temperatures of approaching 40 degrees are forecast. The event venue, like most buildings in London, does not have any cooling mechanisms in place and we cannot risk the wellbeing of guests or speakers by subjecting everyone to very unpleasant indoor conditions in addition to hot journeys to the venue. Unfortunately, we are not able to organise a fully online format at this late notice and so must cancel online as well as in person attendance.



NEWS

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LIVE • 18,031 viewing • Updated 7 minutes ago

More than 1,000 schools shut or closing early as extreme heat warning extended in southern England

▶ Watch live



Soures: BBC

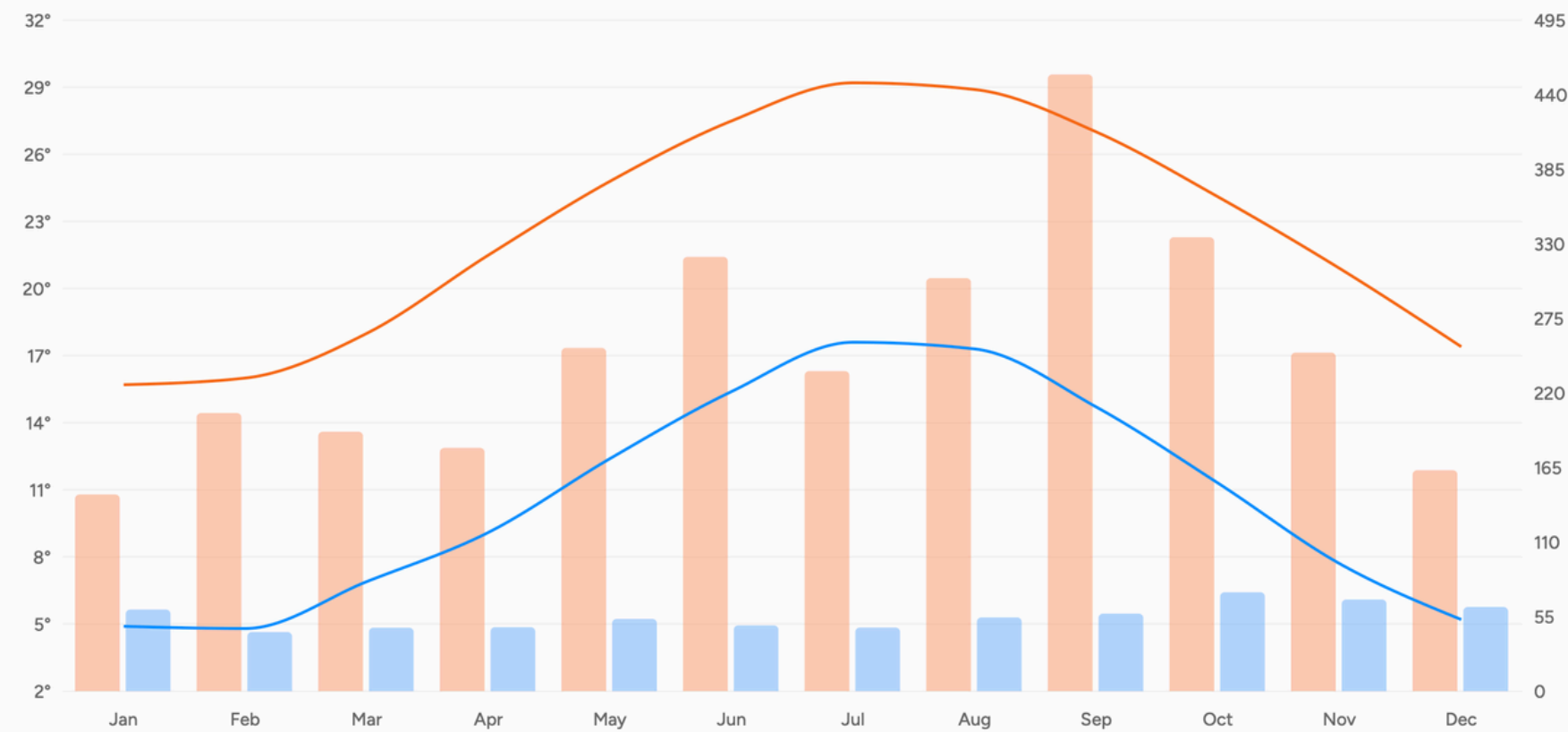
01

When Heat Cancels Climate Events



Taipei vs. London

Climate Daily range Daylight Sun times



Source: CHELSA-climatologies 1981–2010.



Source: June 23, 2026, Ministry of the Environment

-  Older Adults & Heat-Health Risks
-  Outdoor & Heat- Exposed Workers
-  Overheated and Underserved People
-  Older Buildings & Indoor Heat
-  Outdoor Mobility, Shade & Greenery

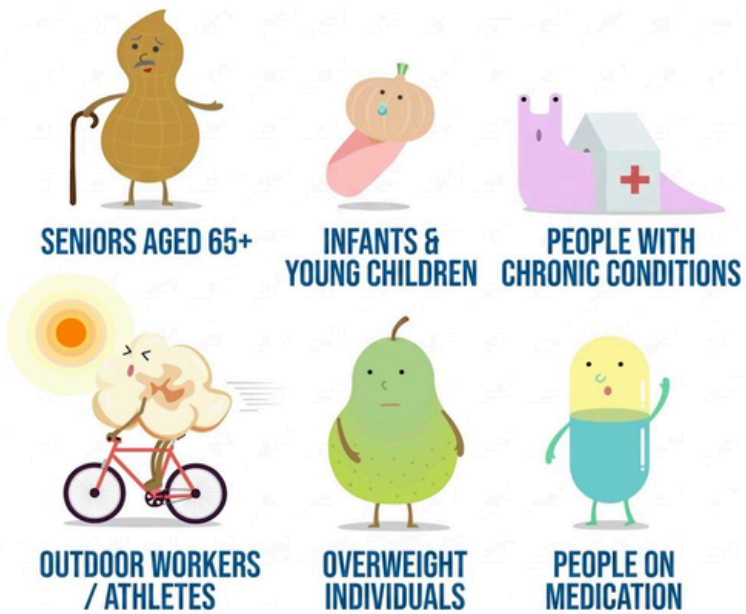


Older Adults & Heat-Health Risks

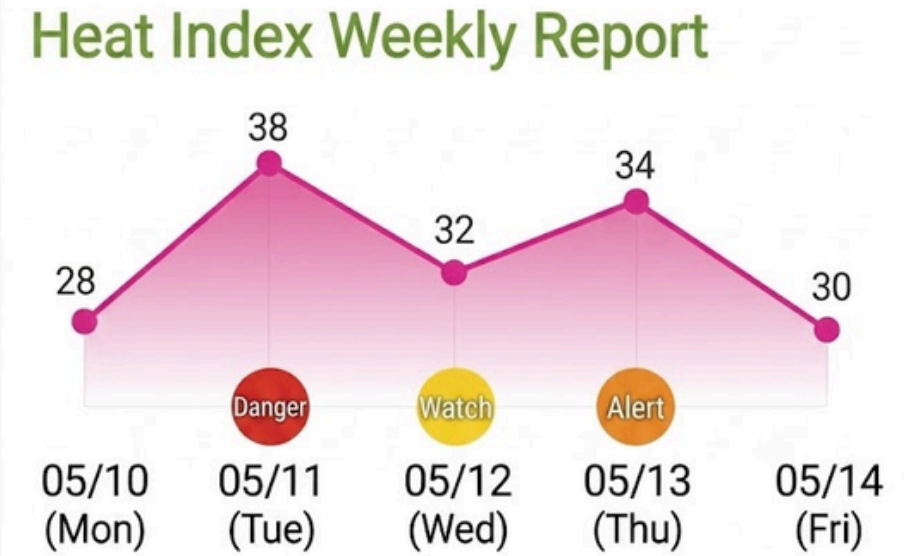
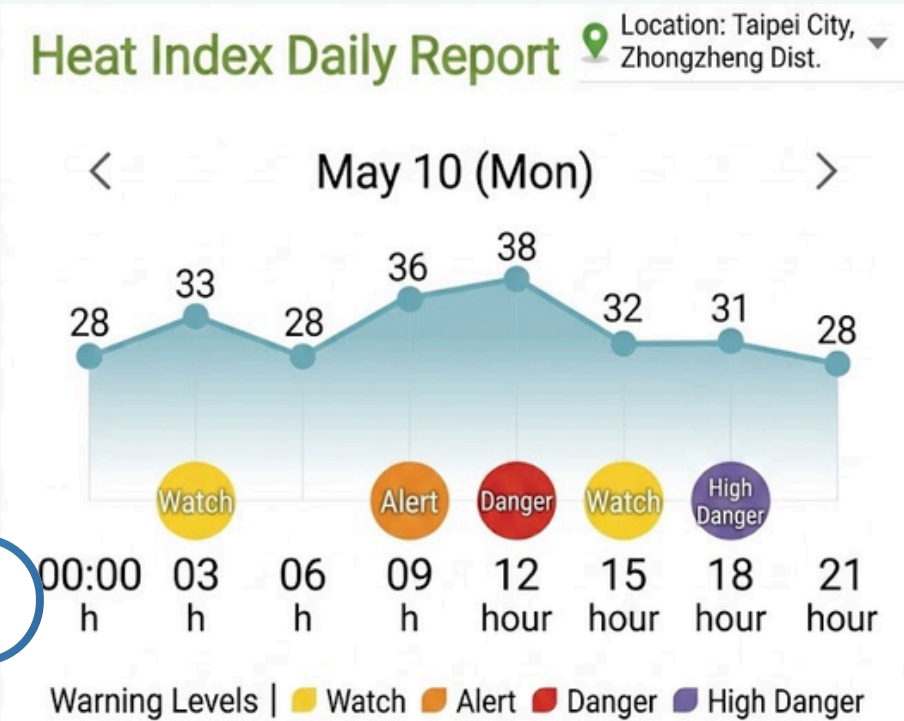


Application

WHO IS AT HIGHER RISK FOR HEATSTROKE



Source:Lohas Weather



Source:Health Promotion Administration, Ministry of Health and Welfare

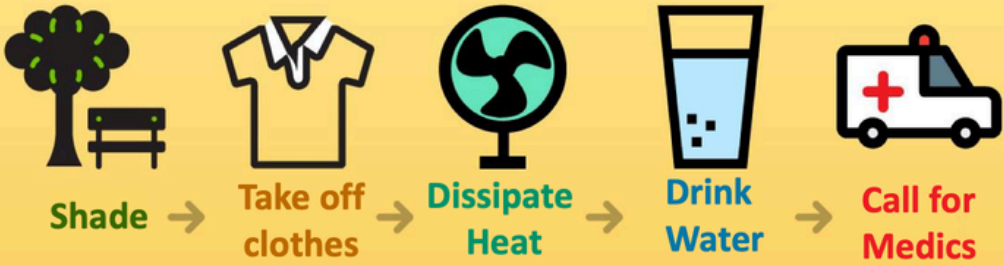
Easy Guide

**Keep Away From Me,
Heat Injury!!**

**5 Steps for First Aid
(Easy Guide)**



First Aid: 5 Steps! Review



Remember the 5 steps
to reduce heat injury

For more information, please go to
"Heat Injury Prevention Website"



2021 HEAT WAVE CARE SERVICES IN TAIWAN

(All Counties & Cities Total)

1 TOTAL HEAT WAVE CARE SERVICES PROVIDED

1,282 PERSON-TIMES
(Includes Well-being Checks & Water Distribution)

2 HATS DISTRIBUTED

212

3 HAND FANS DISTRIBUTED

118

4 EMERGENCY COOLING SHELTER SERVICES

36 PERSON-TIMES

5 OTHER FOOD & COOLING SUPPLIES

40 ITEMS

*Based on ROC Year 110 (2021) National Data

Supplies

Five Heat Adaptation Concerns in Taiwan

02



Outdoor & Heat- Exposed Workers

High Temperature Work Protection Information Network

Home About Us Latest News & Resources Nearby Medical Institutions Information Heat Hazard Risk Level Assessment & Calculator
Water & Rest Reminders Settings Subscribe to Heat Hazard Alert Notifications High-Temperature Outdoor Work Checklist Health Assessment
Common Heat Irrness Management Principles FAQ Privacy & Secolity Policy

Home / Heat Hazard Risk Level Assessment & Calculator / 中文

HEAT HAZARD RISK LEVE ASSESSMENT & CALCULATOR

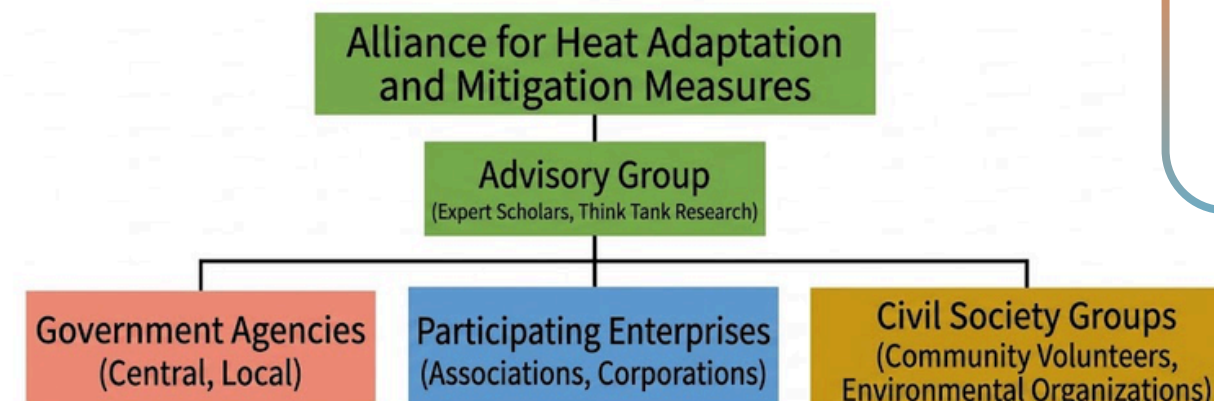
Website

Labor Inspection

Alliance for
Heat
Adaptation and
Mitigation
Measures



Source: Ministry of the Environment



6 KEY REVISION POINTS FOR THE “GUIDELINES FOR PREVENTION OF HEAT HAZARDS IN HIGH-TEMPERATURE WORK”

Expanded Scope of Application

- Includes laborers, self-employed workers, and dispatched workers

Clearly Defined Mandatory Measures for Fourth-Level Heat Hazards

- Install shade and cooling equipment
- Provide rest areas and drinking water, etc.

Update the "High-Temperature Work Protection Information Network" and Link with Weather Service for Real-time Information

- Use the Central Weather Service local WBGT to evaluate heat hazard risk levels
- The "High-Temperature Work Protection Information Network" updates links to hourly weather information for each county, city, township, and district
- Mobile real-time checks on heat hazard risk levels and corresponding measures

Add Protection for Flexible and Temporary Outdoor Work Types

- Applicable to work types such as delivery drivers, sign holders, etc.
- Carry sufficient drinking water at all times
- Use personal protective equipment (such as wet towels, sun protection products, etc.)
- Make good use of open institutions or stores for rest
- Immediate reporting of health conditions

Strengthen Cooling and Rest for Special Work Types

- Applicable to work types such as high-altitude pylon maintenance, road construction, scenic tree pruning, etc.
- Personal protective equipment or items should be provided
- Pre-planning and installation of simple rest areas

Provide Specific Adoption Measures with Illustrations and Explanations

- Shading (e.g., shade nets, awnings, umbrellas, etc.)
- Rest areas, cooling facilities (e.g., fans, water mist, etc.)
- Personal protective equipment or items (e.g., wide-brimmed hats, fan vests, etc.)

Guidelines

Source:Occupational Safety and Health Administration

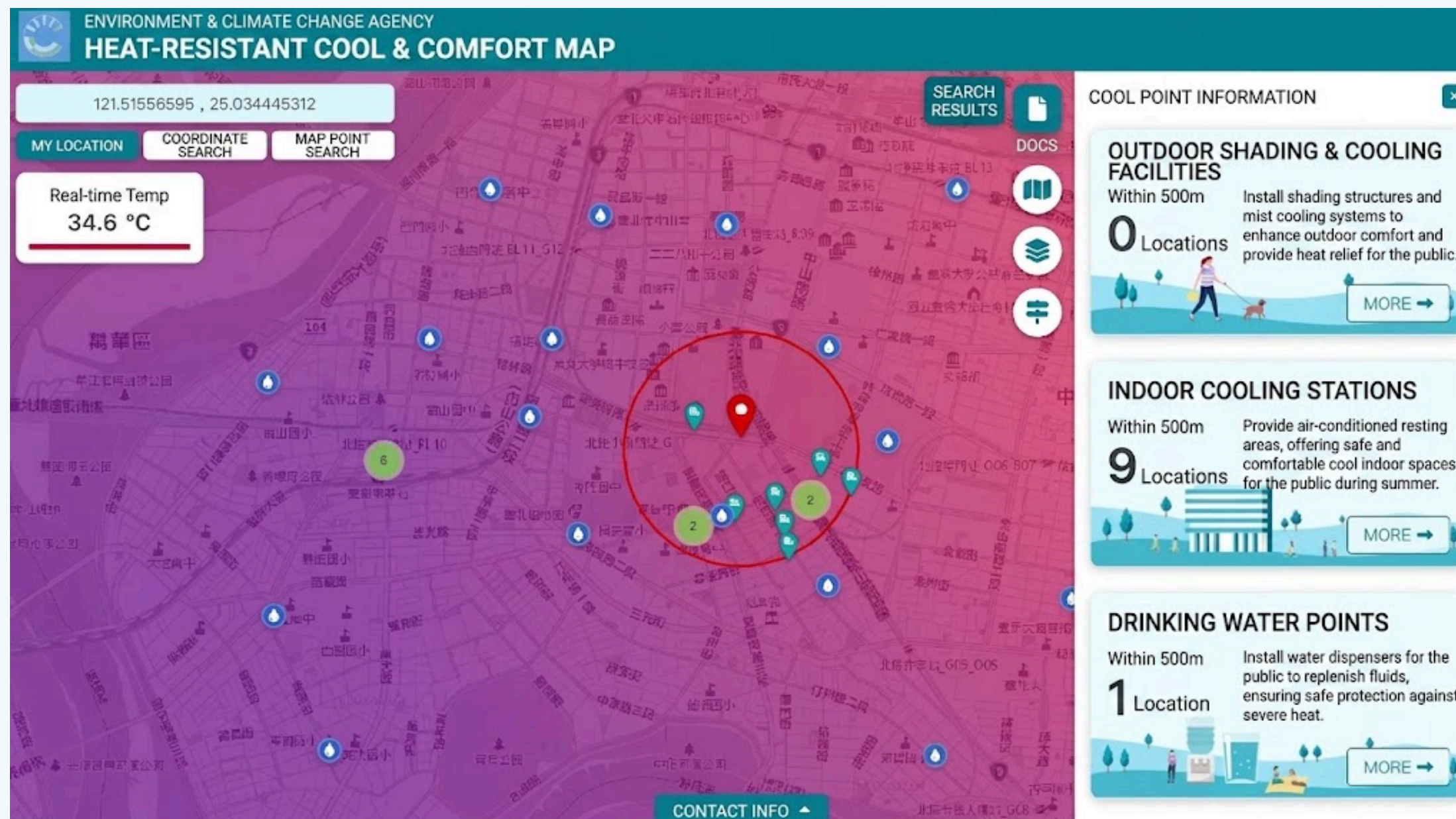
Five Heat Adaptation Concerns in Taiwan

02



Overheated and Underserved People

Cool Map



Source: Ministry of the Environment



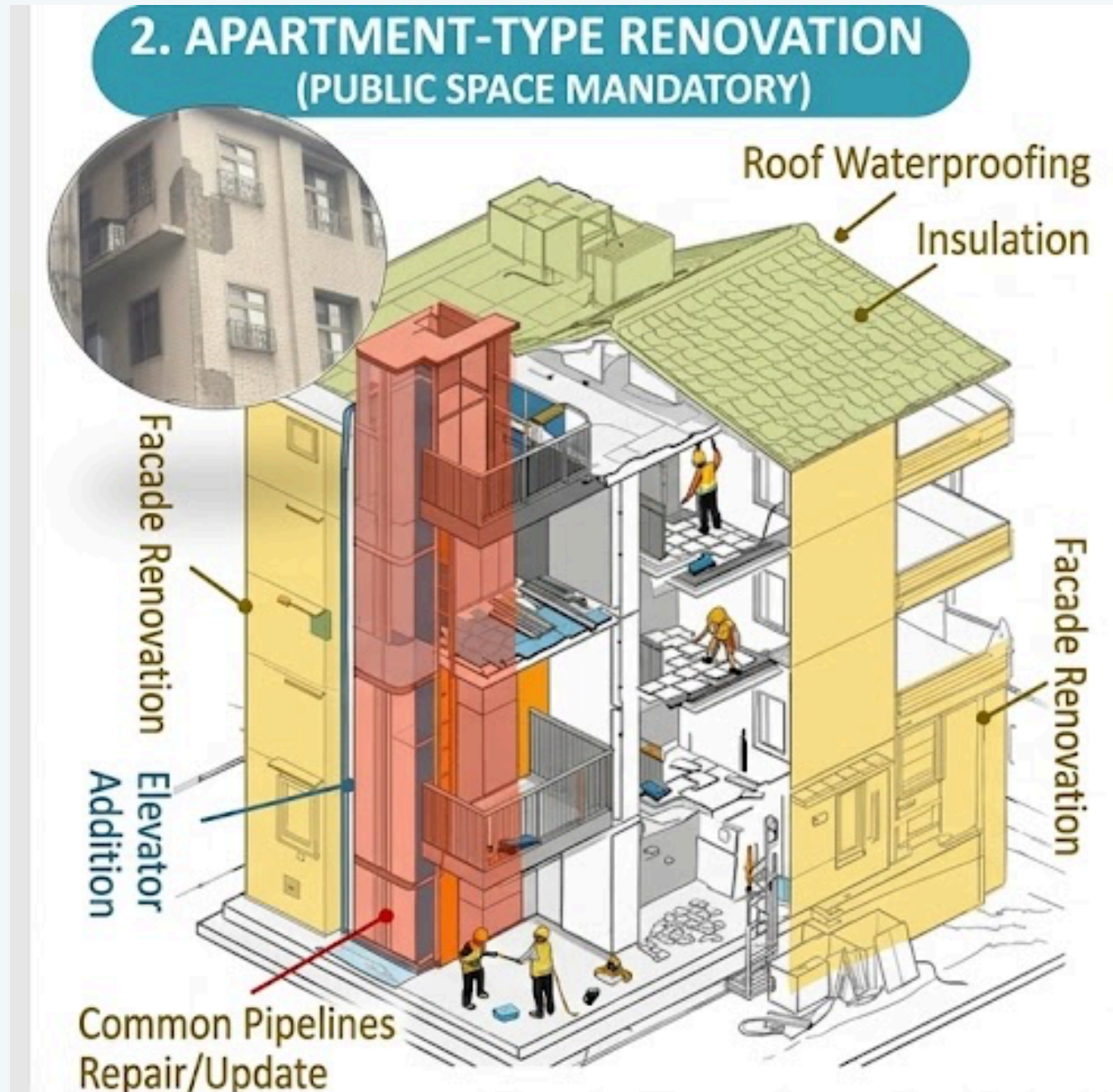
Convenience
Store

Five Heat Adaptation Concerns in Taiwan

02



Older Buildings & Indoor Heat



Apartment buildings (30+ years old, 4–6 floors) and detached houses (≤ 6 floors). Funding covers both indoor and outdoor renovations.

- Total Budget: NT\$ 5 billion
- Timeline: Until 2027
- Target: 600 buildings



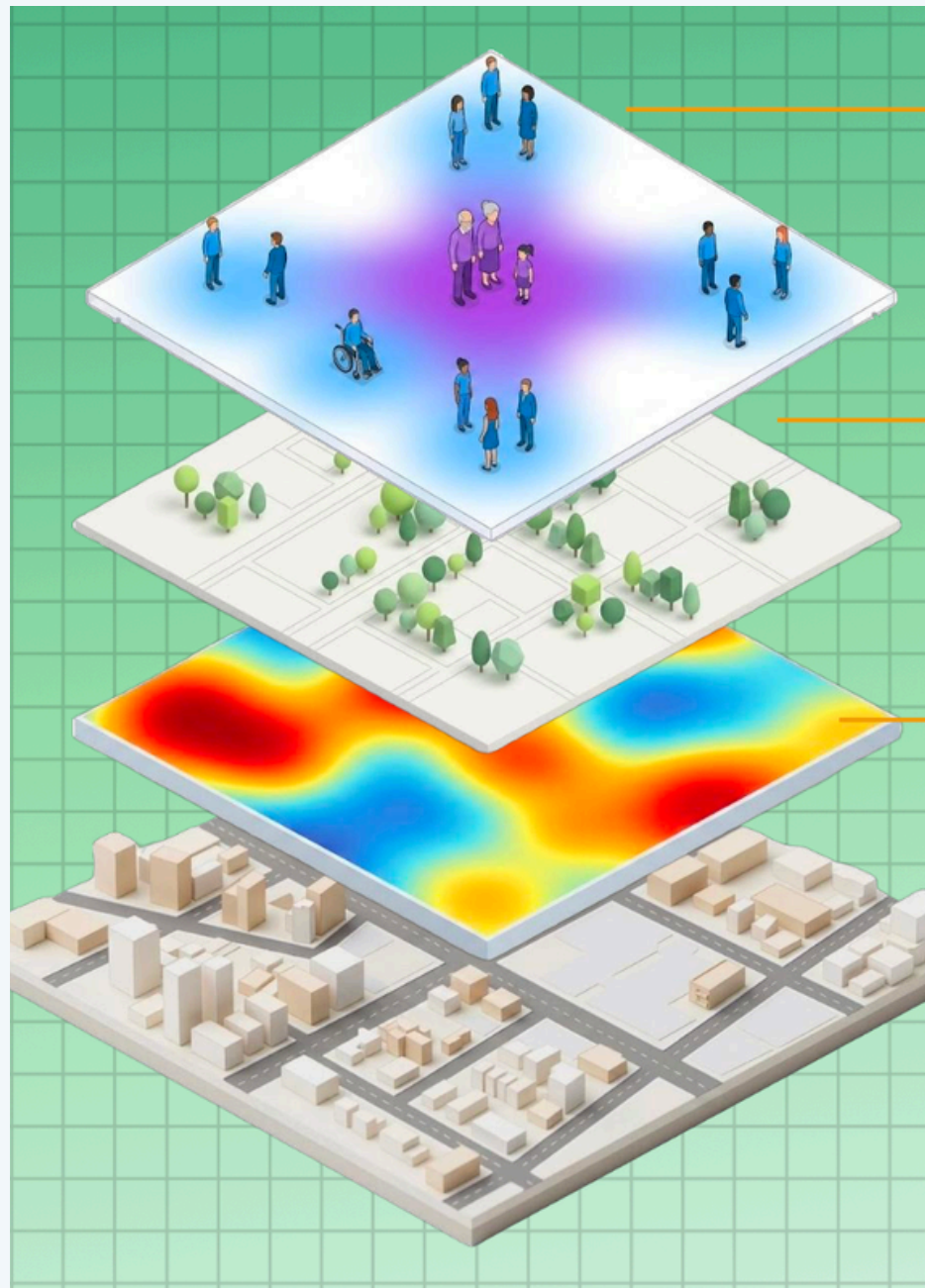
Old House
Renovation

Source: National Land Management Agency, Ministry of the Interior

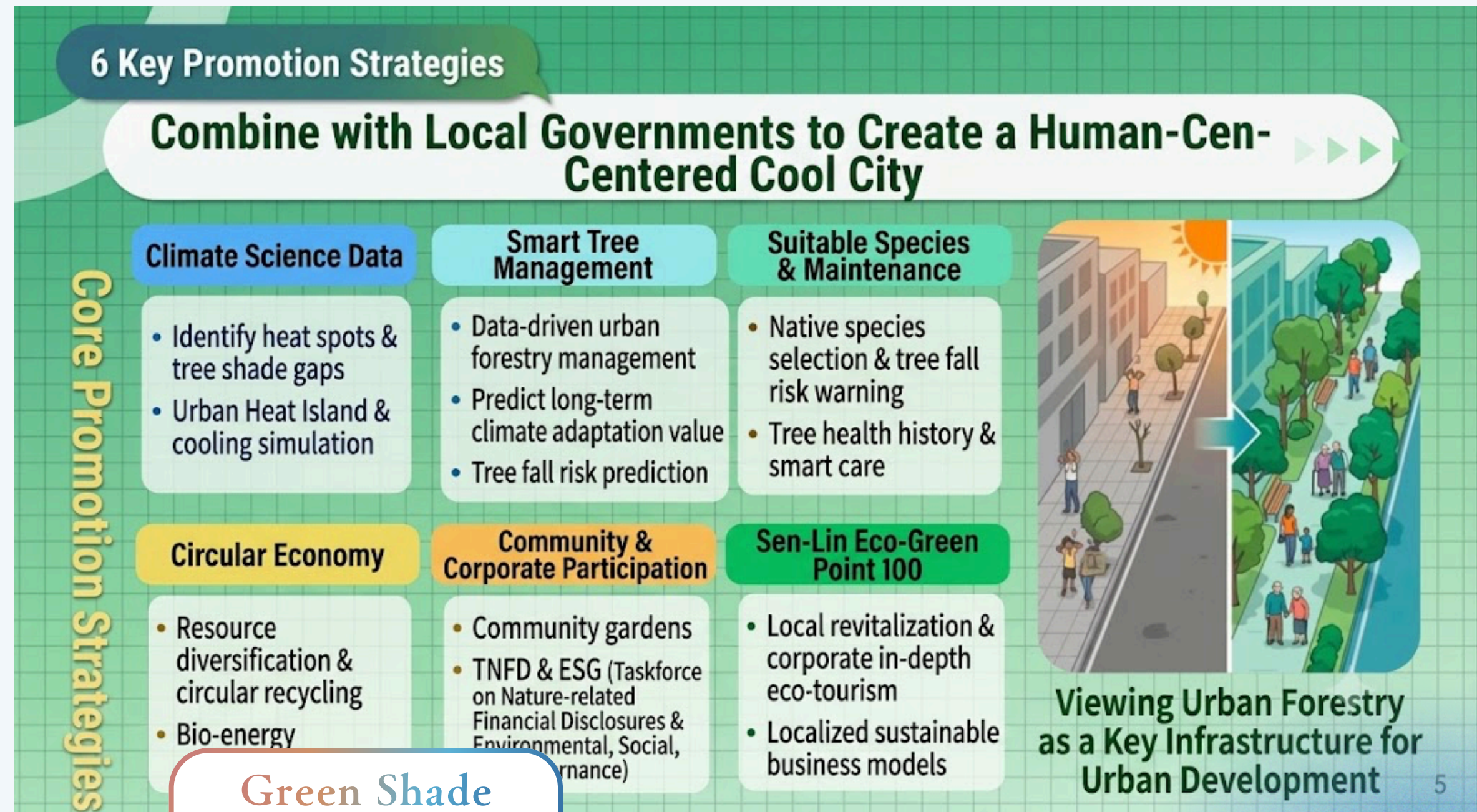
Five Heat Adaptation Concerns in Taiwan

02

Outdoor Mobility, Shade & Greenery



Source: Ministry of the Environment



03

What Is Still Missing?



Health: From Outreach to Protection

Current: Health education, manuals, apps, care visits

Gap: No framework to verify protection effectiveness or assess system capacity for future extreme heat events



Labor: From Guidelines to Accountability

Current: Guidelines and information networks exist

Gap: Weak enforcement; informal, gig, and mobile workers fall outside coverage



Vulnerable Populations: From Existing Services to Heat-Focused Support

Current: Handled by existing social welfare funding and staff

Gap: No dedicated resources or budget; private donations focus on cold-weather impacts



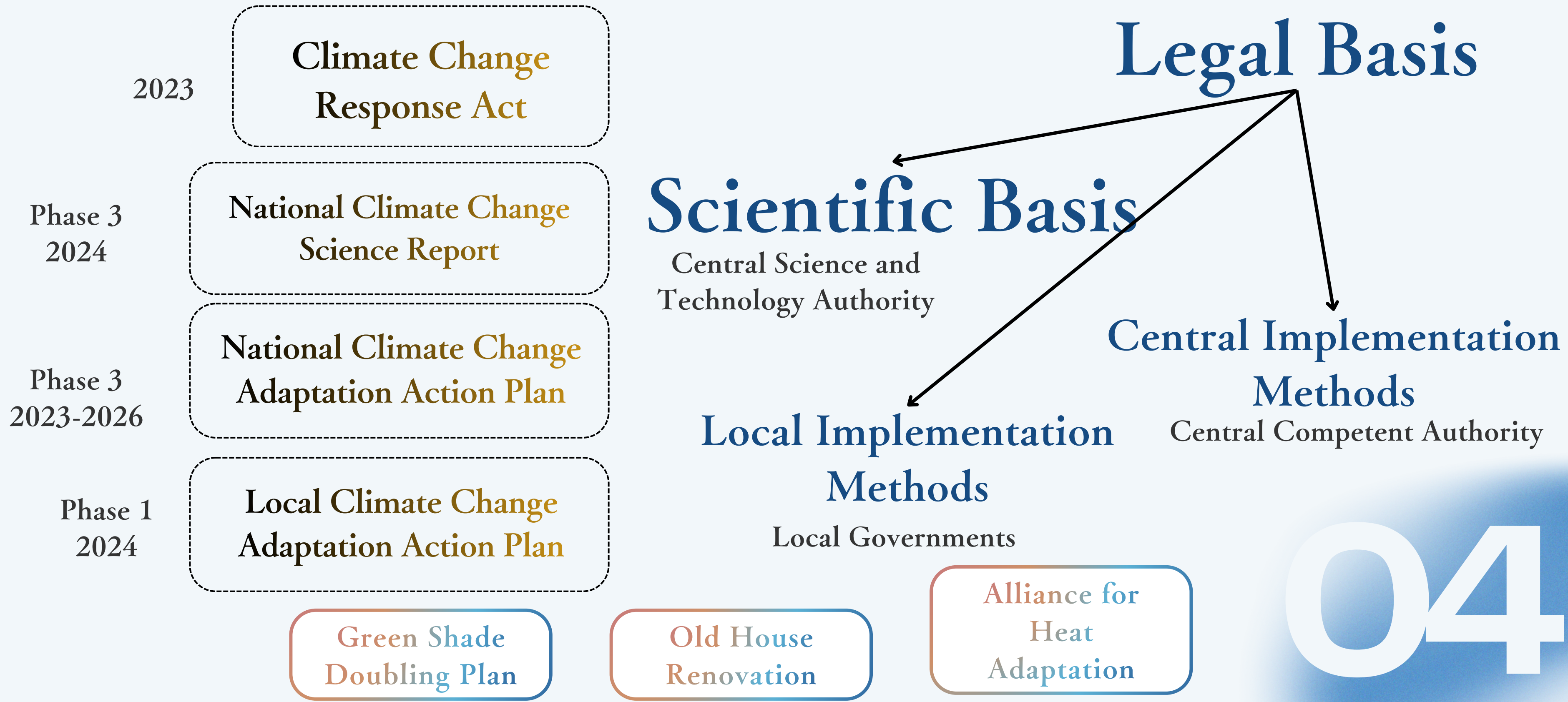
Cities: From Green Patches to Heat Risk Planning

Current: Green space, wind corridors, and building retrofits lack heat-adaptation focus

Gap: Disconnect between heat zones, vulnerability mapping, cooling needs, and other policy initiatives

Where do these actions sit in Taiwan's adaptation framework?

Responsible Agencies, Implementation Timeline, Budget Allocation, and Performance Evaluation Mechanism

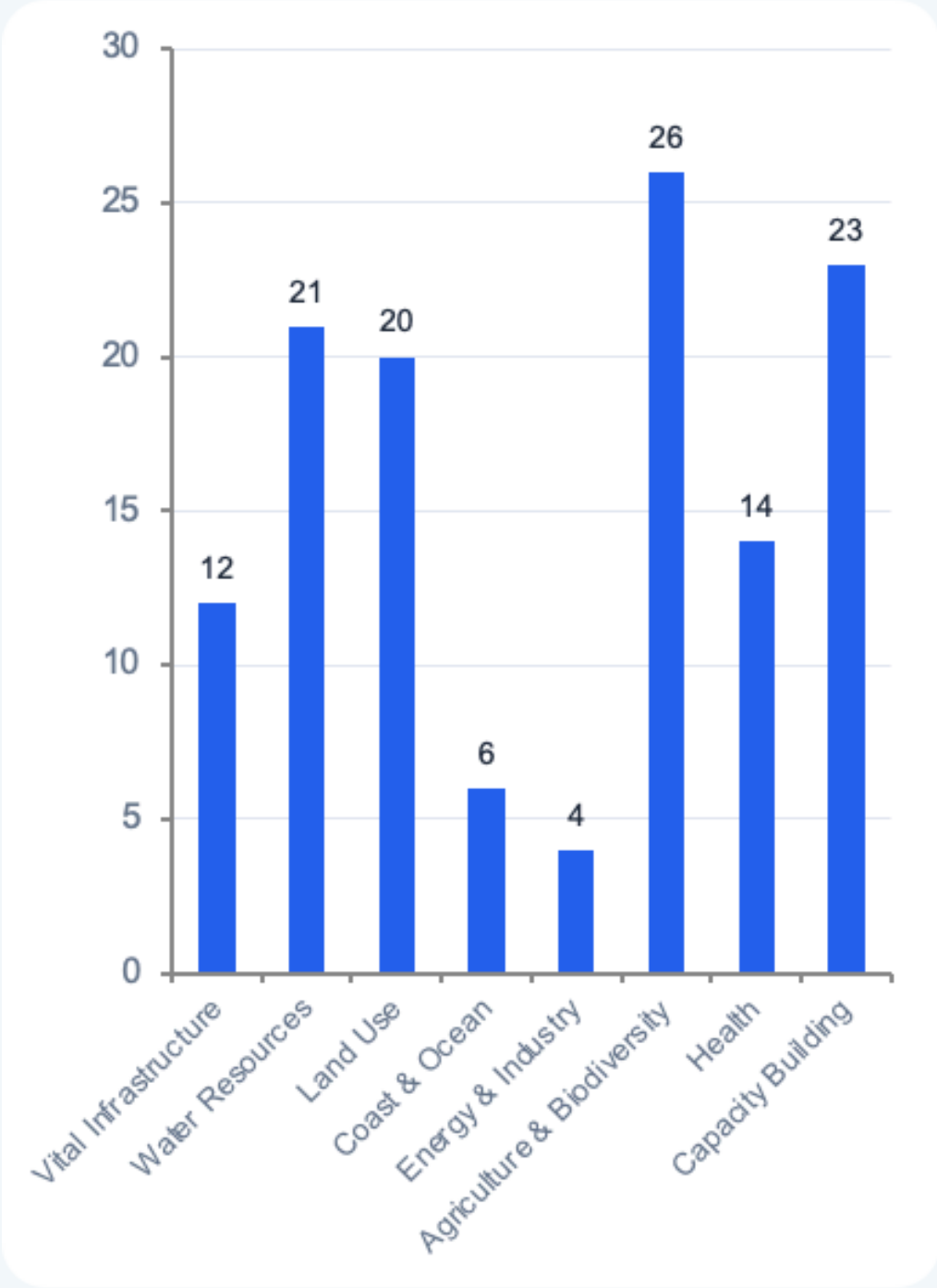


Where do these actions sit in Taiwan's adaptation framework?

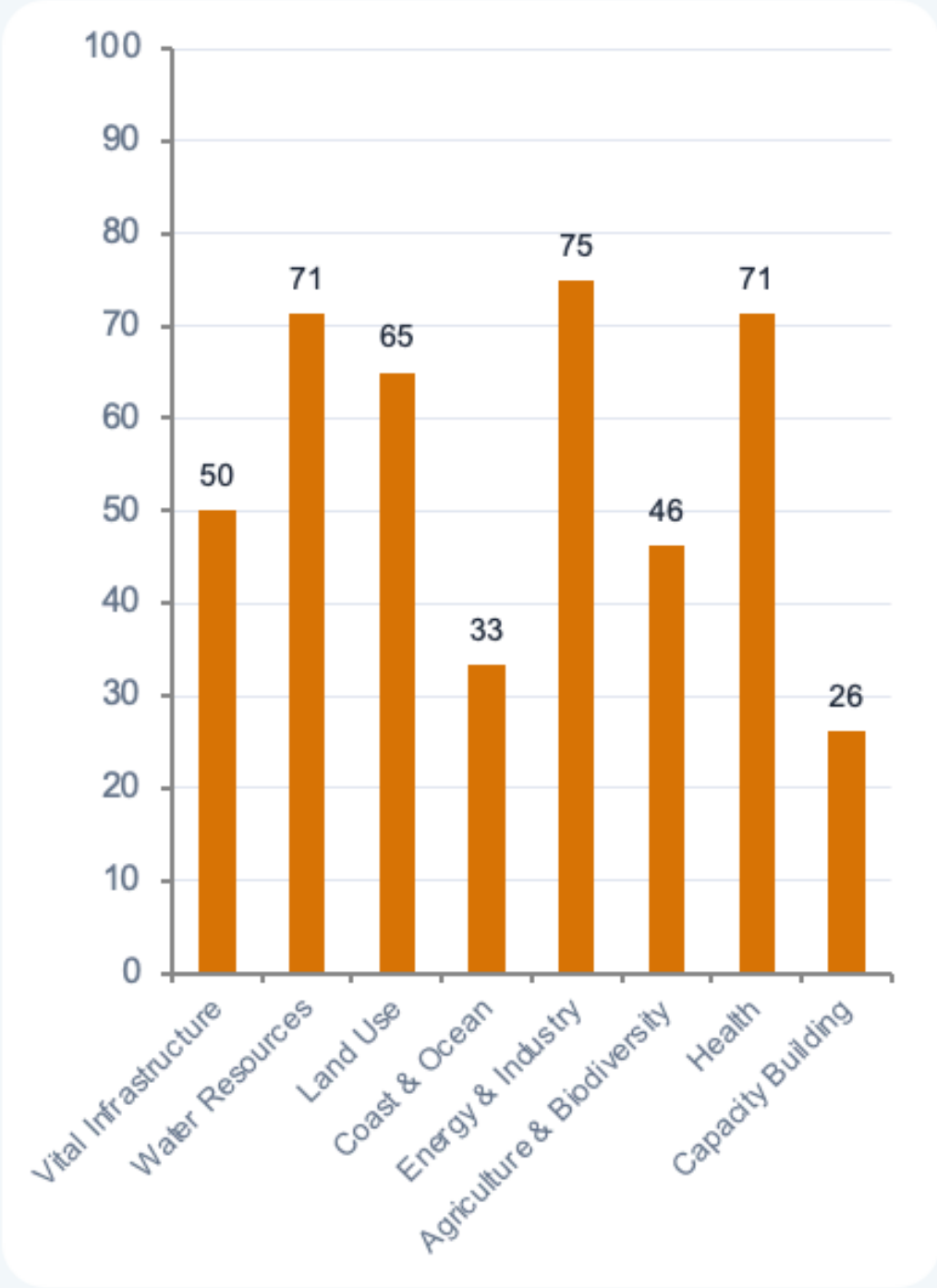
Phase 3
2023-2026

National Climate Change
Adaptation Action Plan

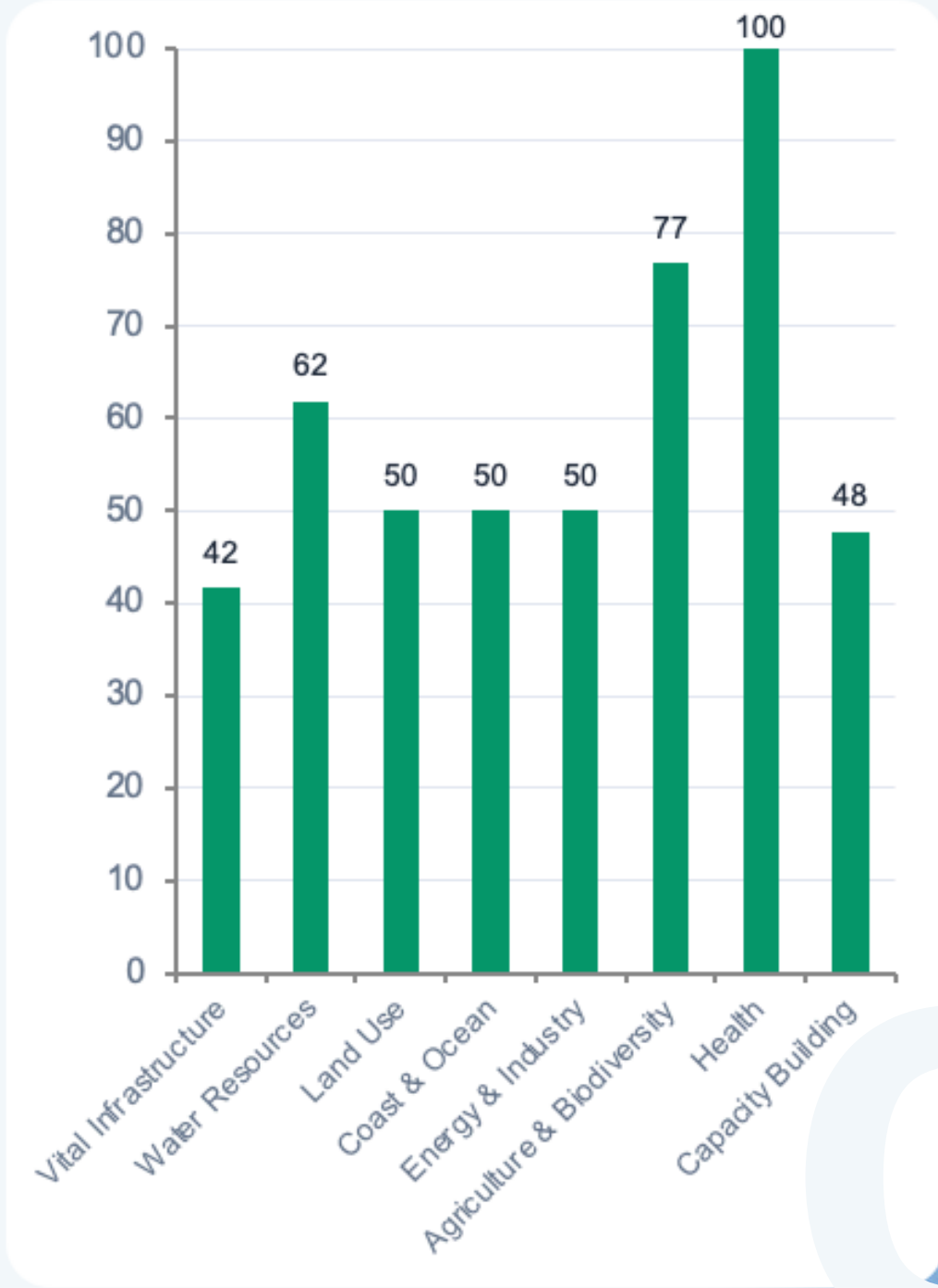
Taiwan · 8 sectors · 126 action plans
Action Plan Count by Sector



Priority Plan Ratio (%)



Continuation Plan Ratio (%)



Where do these actions sit in Taiwan's adaptation framework?

Phase 3
2023-2026

National Climate Change
Adaptation Action Plan

7
Plans Identified

176,800
Total Budget (NT\$ thousand)

0.043%
% of Total Budget

Action Plan Name	Sector	Budget(NT\$K)
Building Energy Conservation Design & Regulation	Land Use	82,700
Park Greening & Landscape Renewal Demonstration	Land Use	80,000
Smart Green Building Implementation Guidelines	Land Use	0
Building Tech Innovation (incl. Urban Heat Island Rsch)	Land Use	1,100
Supervision of Outdoor High-Temp Work & Heat Hazard Prevention	Health	1,000
Extreme Temp Public Awareness & Self-Protection	Health	12,000
Vulnerable Population Care Svcs (incl. Heat Waves)	Health	0

Where do these actions sit in Taiwan's adaptation framework?

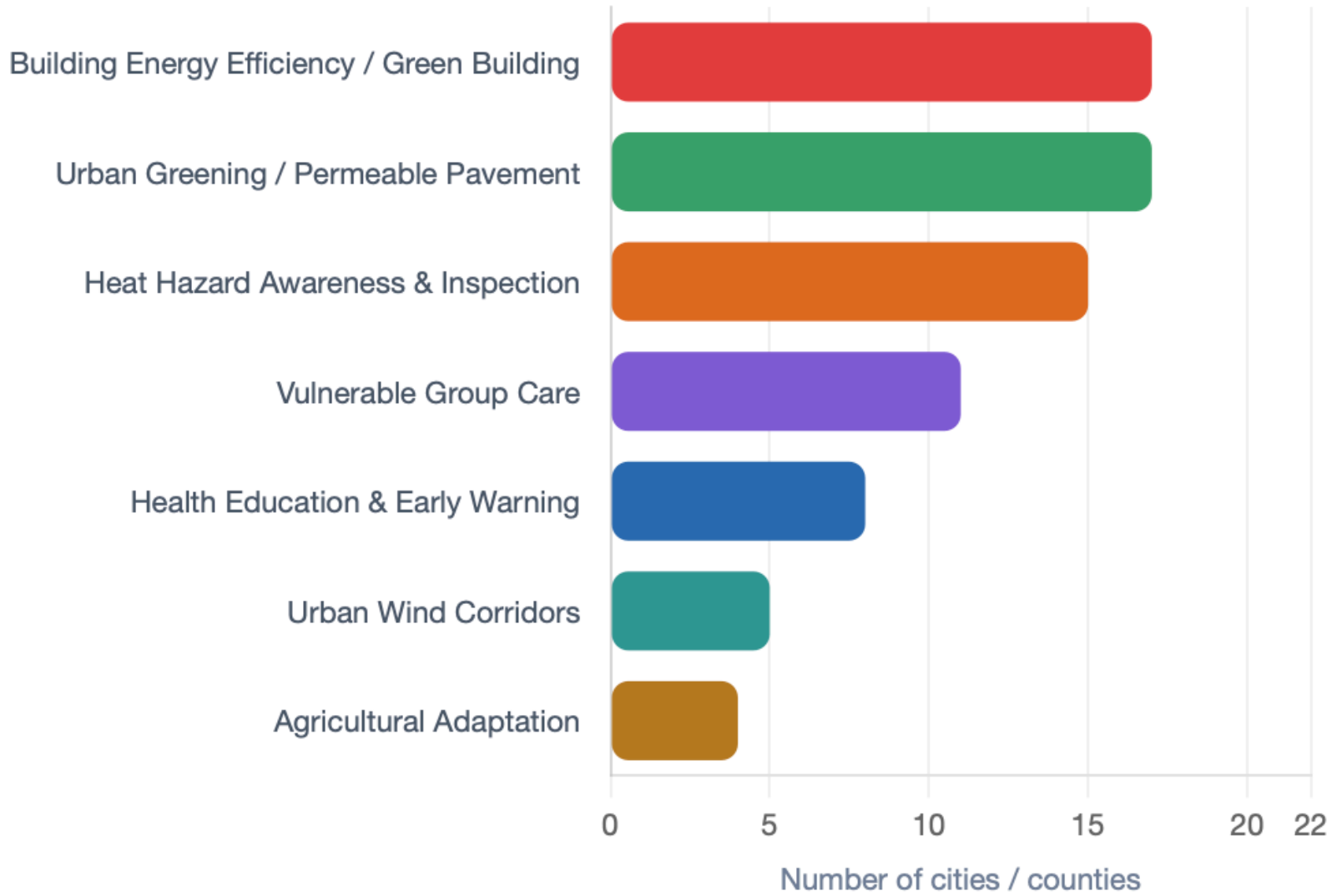
Phase 1
2024

Local Climate Change
Adaptation Action Plan

22 administrative divisions

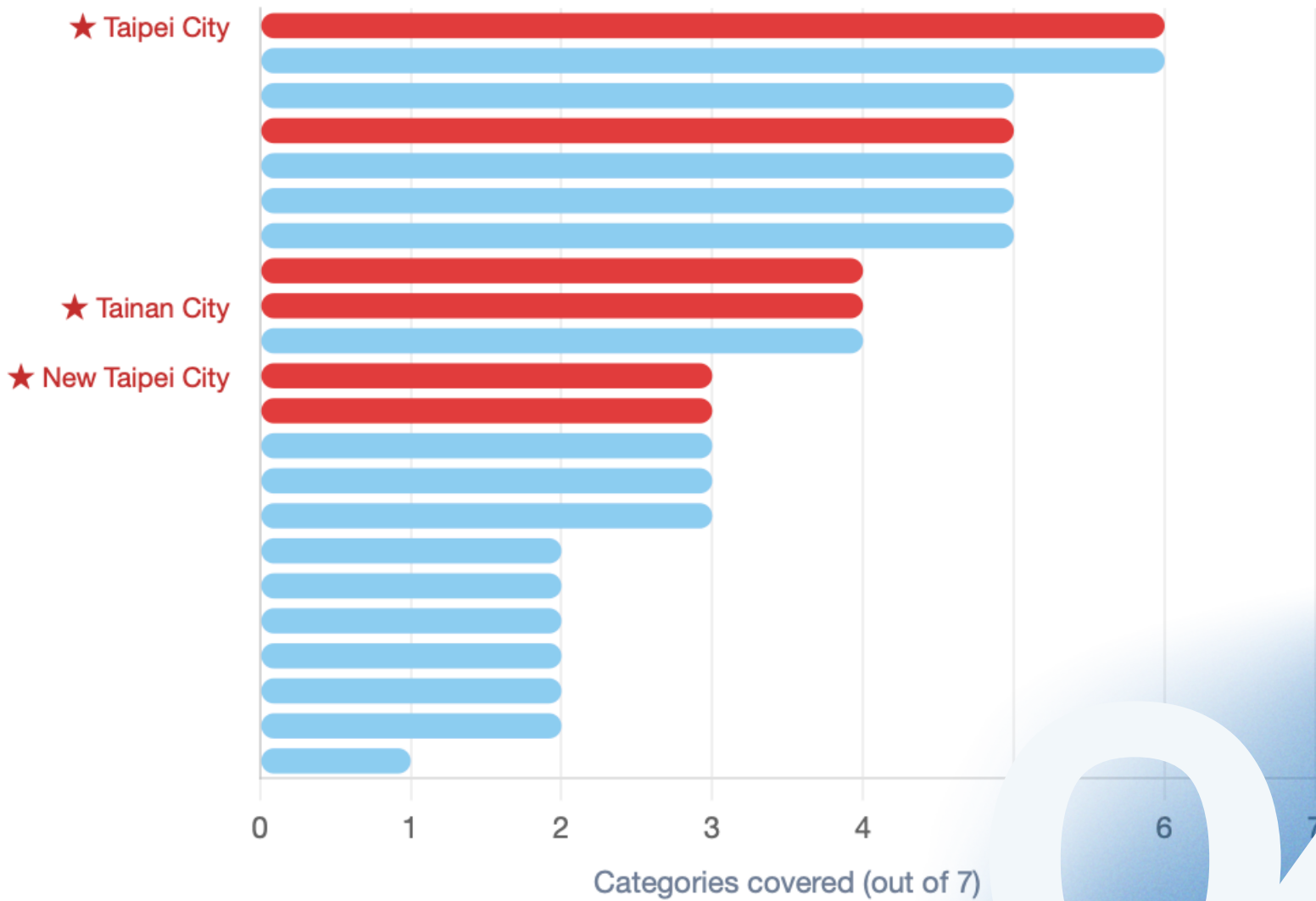
Number of Cities Adopting Each Policy Category

Out of 22 cities/counties total



Policy Richness by City

Number of heat adaptation categories covered (max 7) · ★ = Six Special Municipalities



Using the Global Goal on Adaptation to strengthen Taiwan's heat adaptation review system

Scientific Validity and Actionability

Modeled after the GGA indicator development process

It adopts an expert-led, progressively converging mechanism for indicator construction, Gradually filtering a large pool of metrics to identify core indicators that balance scientific validity and actionability.

Compared to indicators designed internally by government departments, it is better able to:

- Avoid the post-hoc justification of policy goals, and
- Reduce the risk of indicators serving pre-determined policies.

Governance recommendations

05

Using the Global Goal on Adaptation to strengthen Taiwan's heat adaptation review system

Adaptation Finance

10c05 Costs of Adaptation Actions

Costs of adaptation actions identified in adopted national adaptation plans, policy instruments, and planning processes and/or strategies.

10c07 Annual Adaptation Finance Expenditure

Annual adaptation finance expenditure — tracking the flow of funds to adaptation activities each fiscal year.

- Purpose: Track the scale of finance actually spent on adaptation each year, and assess whether adaptation is supported by long-term financial planning.

Using the Global Goal on Adaptation to strengthen Taiwan's heat adaptation review system

Institutional Capacity-Building

10c10 Adaptation Training Institutions

Number of Parties with institutional arrangements for regular adaptation training at national and local levels.

9b03 Knowledge Transfer Frameworks

Number of institutional frameworks for knowledge transfer, R&D, and extension services in food and agriculture.

- Purpose: Measure whether a long-term capacity-building system has been established — not just short-term projects or ad hoc training activities.

Using the Global Goal on Adaptation to strengthen Taiwan's heat adaptation review system

Technology & Information Infrastructure

10a10 Climate Info & Early Warning Finance

Amount of adaptation finance for climate information services and multi-hazard early warning systems.

10c09 Adaptation Technology Implementation

Level of implementation of adaptation technology needs and adaptation technology solutions.

- Purpose: Show whether governments make sustained investments to transform climate data, risk assessments, and adaptation tech into systematic policy decision-making tools.

Localization Assessment

- ① Policy operability**
Institutional fit
- ② Data availability**
Admin. statistics basis
- ③ Ministerial mandate**
Clear responsibility
- ④ Priority selection**
Knowledge transfer & R&D extension → Chosen

Dual-Track Indicator System

Track A — International Alignment

Belém Indicator

- Knowledge transfer, R&D & extension framework
- Adaptation Knowledge & R&D Index

Track B — Sectoral Management

Adaptation Management Tracking Indicators

- 5 Sub-dimensions
- Aligned with Taiwan SDG
- Annual monitoring & budget integration

Sub-dimensions:

Input

Financial,
human &
infrastructure
resources

Output

Completed
assessments,
training &
systems built

Process

Risk-based
policy design
& governance
flow

Outcome

Behavior
change;
adaptive tech
adoption rate

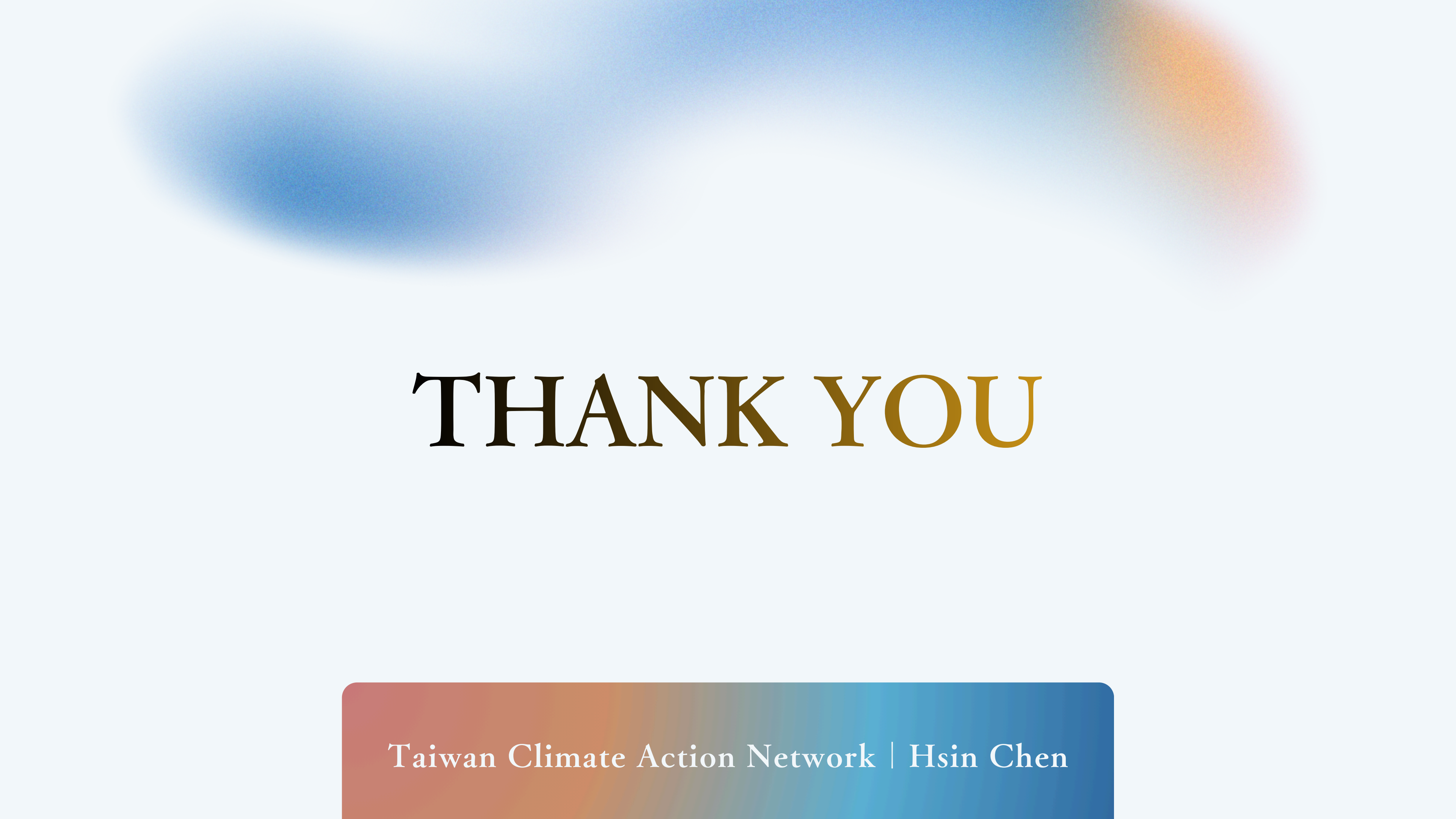
Impact

Reduced
disaster loss,
crop yield
stability

From GGA to Taiwan
Adaptation Indicators

Governance recommendations

05



THANK YOU

Taiwan Climate Action Network | Hsin Chen