

CHAMP Country Case Studies

Asia & the Pacific



In Partnership with





Asia & the Pacific

The Asia-Pacific (APAC) region faces an intensifying convergence of climate hazards, with extreme weather events escalating dramatically across diverse economies. Australia confronts record-breaking bushfires and heatwaves, while South Korea experienced its worst-ever wildfire season in March 2025, and the Philippines endures relentless annual cyclone cycles.

Climate impacts in APAC are now outpacing global trends across multiple measures. Asia is warming nearly twice as fast as the global average, while sea-level rise on the Pacific and Indian Ocean coasts exceeds global rates. The destructive power of typhoons and cyclones is also set to double, and flood losses are likely to increase substantially.

These intensifying climate hazards carry severe economic consequences for the region. Climate change could reduce regional GDP by 17% by 2070 under high-end emissions scenarios, according to ADB projections, with climate damages already consuming significant portions of GDP in the region's most vulnerable economies.

Yet the investment gap to address these challenges remains vast. Meeting climate mitigation and adaptation needs in emerging and developing Asia requires at least \$1.1 trillion annually, while actual investment falls short by approximately \$800 billion. As APAC nations navigate both immediate physical risks and complex economic transitions, the convergence of inadequate climate finance and accelerating impacts threatens to fundamentally reshape the region's development trajectory.

Meeting this challenge will require early and coordinated adaptation investments from both public and private sources, as well as market reforms that can enhance the region's capacity to respond and build resilience.

Asia is warming nearly twice as fast as the global average, while sea-level rise on the Pacific and Indian Ocean coasts exceeds global rates





Country Case: Australia

Australia has strong institutional capacity and a robust economy; however, is facing escalating climate risks, such as record-breaking bushfires and costly flooding that underscore the country's vulnerability to intensifying extreme weather events.

Australian cities disclosing to CDP-ICLEI Track highlighted extreme heat, drought, urban flooding, and wildfire risk as their most pressing climate concerns; meanwhile 1.5 million coastal residents may be exposed to significant hazards from sea-level rise within the next 25 years. Despite these challenges, Australia's position as 10th on the ND-GAIN climate risk index suggests strong institutional capacity to manage climate adaptation as compared to their global peers.

Economic consequences are projected to be severe, with annual climate-related damage potentially reaching roughly A\$40.3 billion (approximately US\$27 billion) by 2050 under moderate emissions scenarios. Real estate markets face unprecedented disruption, with property devaluations estimated to reach A\$611 billion by 2050; over half a million properties may become uninsurable by 2030.

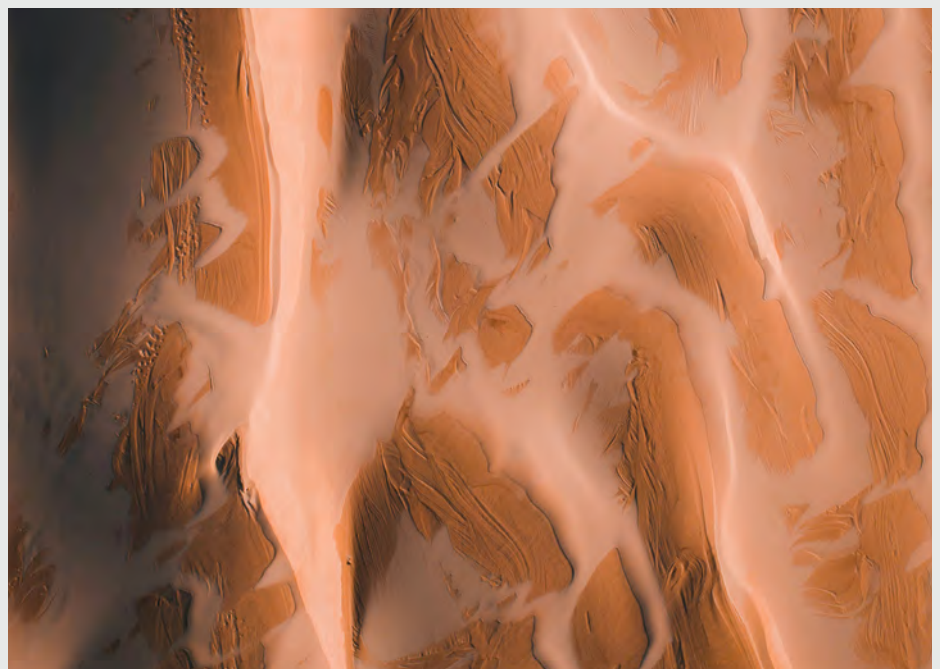
Critical infrastructure across energy, transport, water, and telecommunications faces operational threats that could trigger cascading failures, disproportionately affecting Aboriginal and Torres Strait Islander communities, elderly populations, children, and outdoor workers.

A 2024 report finds significant tension between Australia's climate leadership ambition and its fossil fuel exports, which make Australia one of the countries with the higher per-capita emissions in the world. The nation's 2025 Nationally Determined Contribution (NDC), which includes a 62-70% emissions reduction by

2035 below 2005 levels and carbon neutrality by 2050, reflects this tension. While critics argue these targets fall short of science-based pathways to limit warming to 1.5°C, they nonetheless provide potential for accelerated decarbonization with adequate implementation.

This dual challenge positions Australia as both a major fossil fuel exporter facing stranded asset risks and a climate-vulnerable nation requiring ambitious action, underscoring the complexity of balancing economic transition with climate leadership responsibilities on the global stage.

Cities disclosing to CDP-ICLEI Track highlighted extreme heat, drought, urban flooding, and wildfire risk as their most pressing climate concerns





Insights from CDP disclosure

Nineteen Australian subnational governments publicly disclosed to CDP in 2024, 16 municipal governments and three states. These entities collectively represent 17.2 million residents (more than 60% of the total population). Mitigation planning demonstrates strong momentum across reporting jurisdictions. All but one have climate action plans (CAPs) and 16 (84%) have active emissions reduction targets.¹ Adaptation planning is almost as robust – 15 jurisdictions have set active adaptation goals² and 17 completed climate risk and vulnerability assessments.

Interjurisdictional collaboration is well established, with 16 disclosers actively coordinating across government levels. This strong emphasis on subnational coordination likely reflects Australia's federal governance structure, where environmental responsibilities are shared among state, territory, and local governments.

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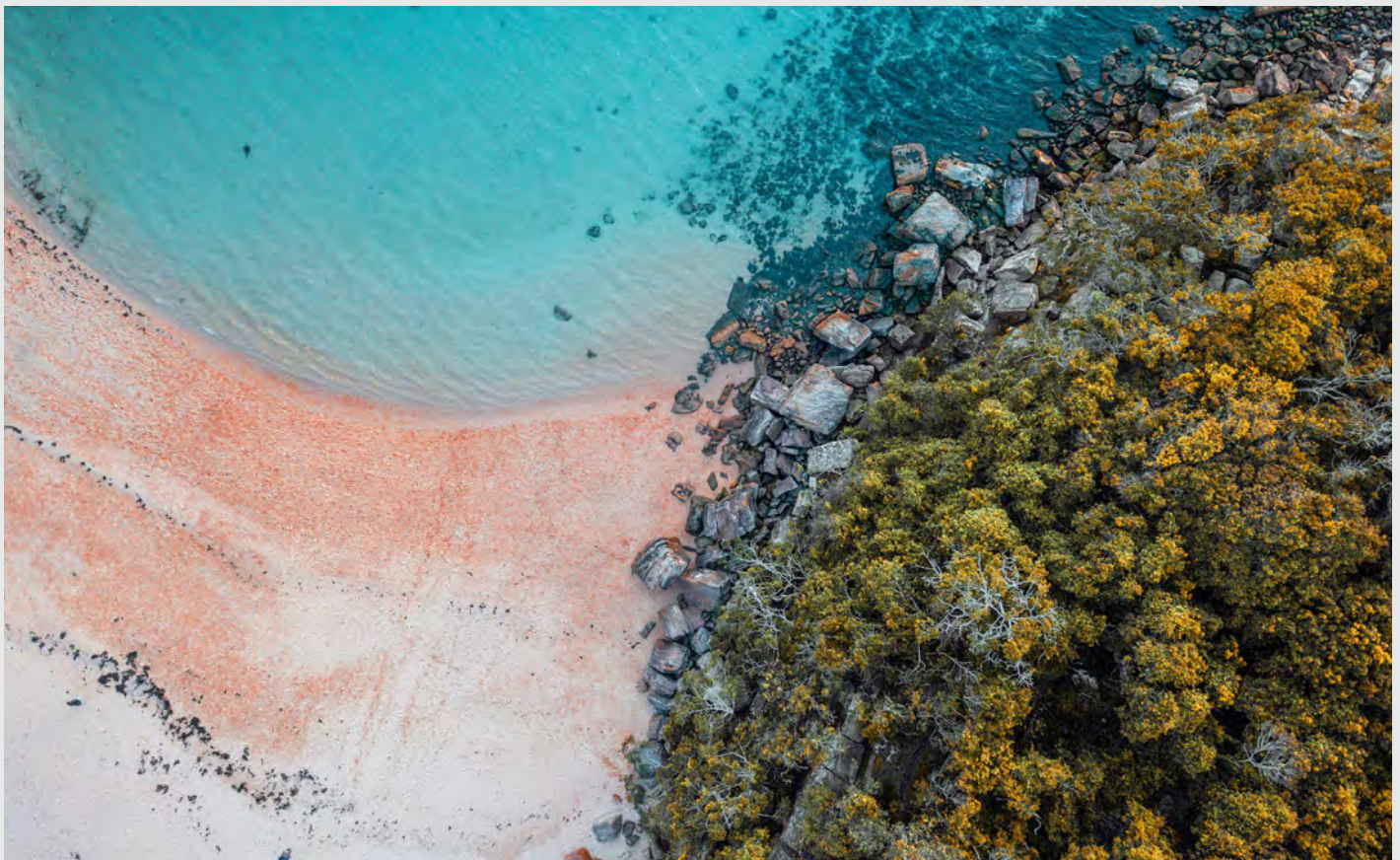


Australian subnational governments publicly disclosed to CDP in 2024

60%



of the country's total population represented (17.2 million residents)



¹ An active emissions target is one that covers key emissions areas and at least the entire jurisdiction.

² An active adaptation goal is one that includes data on the climate hazards addressed by the goal, base year of the goal, and target year of the goal (2024 and beyond).



Spotlight on projects

Fifteen Australian municipal governments reported 35 climate projects seeking US\$230.5 million in investment. Buildings and energy efficiency was the leading project sector, followed by renewable energy, nature-based solutions, biodiversity and urban green spaces, water management, and transport.

Adaptation projects made up 29% of the projects reported, but 63% of the investment needed. This disparity is largely driven by a single water management project in Newcastle requiring US\$131.5 million. Excluding this outlier, the proportion of investment needed for adaptation and mitigation broadly align with the proportion of projects being reported, suggesting parity in project costs across mitigation and adaptation.

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Australian municipal governments reported 35 climate projects

\$230.5m

in investment is being sought for these climate projects

Most common project sectors

Buildings and energy efficiency

12 projects seeking US\$5.7 million

Renewable energy

5 projects seeking US\$74.8 million

Nature-based solutions, biodiversity and urban green spaces

5 projects seeking US\$15.1 million

Water management

4 projects seeking US\$132.8 million

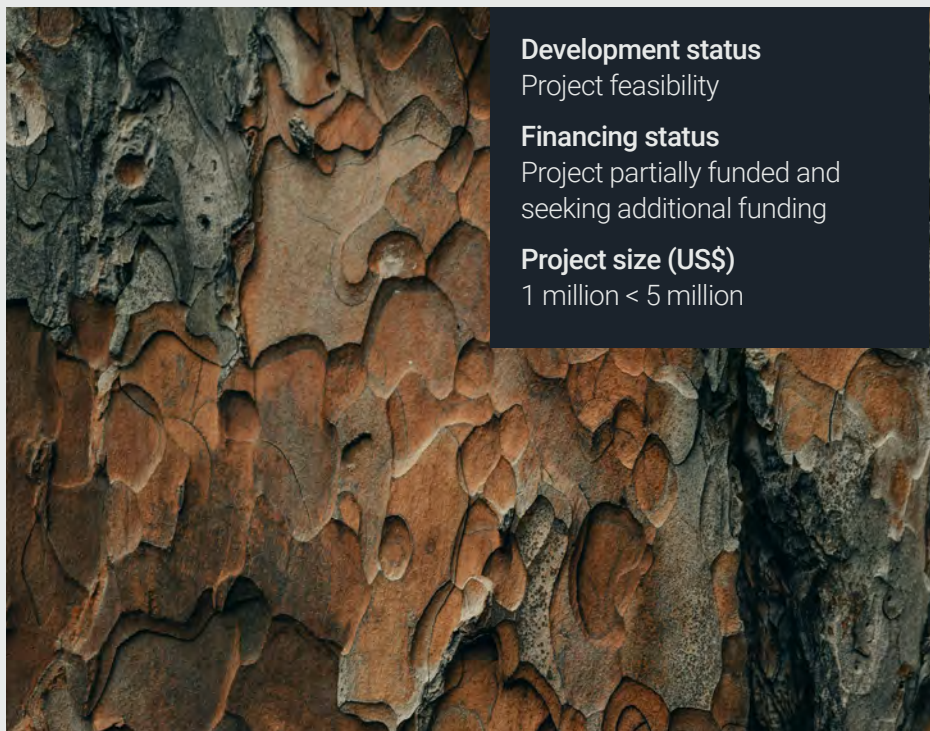
Transport

4 projects seeking US\$2.0 million

Adelaide

Parri Gate/River Torrens Wetlands

This project aims to enhance the ecological health and water quality of Karrawirra Parri (Torrens River) and Torrens Lake while creating community spaces that celebrate Kaurna culture and boost tourism. The initiative will restore biodiversity through innovative wetland design and the reintroduction of native aquatic vegetation, providing essential habitat for local wildlife. By integrating nature, culture, and recreation, the project will establish a community space of deep Kaurna significance that offers and serve as a demonstration site for approaches to water quality management and urban waterway renewal.



Development status

Project feasibility

Financing status

Project partially funded and seeking additional funding

Project size (US\$)

1 million < 5 million



Melbourne

Power Melbourne

This project helps renters, apartment dwellers, and small businesses access renewable energy and storage. The Council partners with an electricity retailer to establish community batteries and a renewable energy retail plan. A pilot phase will operate three batteries (1.1MWh total), with

revenue funding local renewable projects through a Community Energy Fund. Power Melbourne will test a scalable battery network delivery model potentially exceeding 5MW/10MWh. Following pilot results and Council approval, they may seek further funding and joint investment to expand the battery network and develop the retail energy plan.

Development status
Transaction preparation

Financing status
Project partially funded and seeking additional funding

Project size (US\$)
50 million < 100 million

Development status
Pre-feasibility/impact assessment

Financing status
Project not funded and seeking full funding

Project size (US\$)
Under 500,000



Sydney

Mobile Cooling Hubs

This project develops a framework for heatwave mitigation actions and trials a mobile cooling hub for priority groups. It addresses barriers preventing homeless individuals from accessing cool spaces and supports social/public housing residents. The project gathers temperature data, community experiences, and policy information to understand heat exposure and impacts on vulnerable populations. While cool spaces are the priority, additional services like housing support, social services, and health assistance may be offered.

Development status
Implementation

Financing status
Project partially funded and seeking additional funding

Project size (US\$)
Not reported



Wollongong City Council

LED Street Light Upgrade

This project will upgrade street lighting to energy efficient LEDs through a partnership with Endeavour Energy, a network provider, utilizing the Energy Saver Certificate program provided by the State Government.



Country Case: The Philippines

The Philippines³ is one of the highest emitting developing and island states and is facing the dual challenges of decarbonizing its economy while combatting severe climate impacts, including unprecedented numbers of clustered typhoons that displaced over 200,000 people in late 2024 and the strongest global storm of 2025.

Rising sea levels and extreme weather have caused floods, landslides, and erosion that put more than 60% of the population at risk. These dangers are reflected in Filipino local governments' 2024 CDP-ICLEI Track disclosure, which identified urban flooding, extreme heat and hurricanes, cyclones, and typhoons as primary climate hazards. Such severe exposure combined with very high vulnerability to climate threats has contributed to the country earning the top ranking in the 2024 World Risk Index for disaster risk.

The Philippines has developed a set of ambitious targets, including a 75% reduction in emissions by 2030,⁴ and Southeast Asia's first moratorium on new coal; however, it ranks in the top 25% of emitters among low- and middle-income countries, with significant projected increases due in large part to the country's current reliance on coal.

In order to achieve sustainable development, the Philippines requires appropriate technical and financial assistance to accelerate its transition from coal dependence, implement green industrial policies, and develop more climate-resilient infrastructure. This is particularly crucial as urbanization accelerates, with projections indicating that the urban population will surge from 48% to 84% by 2050.

Like many developing and island nations, the country faces significant hurdles in implementing climate adaptation and risk reduction measures. Despite leadership by the country's Department of Housing and Sustainable Urban Development (DHSUD) on urban climate initiatives, a UN Habitat and UNDP report indicates "limited" urban content in the country's 2021 NDC.

Initiatives like CHAMP offer opportunities for the Philippines to enhance coordination across government levels to strengthen urban climate action and reduce fossil fuel dependence. Meaningful progress will also require global support across multiple areas, including financial assistance, capacity-building, institutional development, stakeholder engagement, and technology transfer.



60%

of the population are at risk due to rising sea levels and extreme weather, which have caused floods, landslides, and erosion

³ This case study was originally published in 2024 and updated for this publication.

⁴ Latest NDC submission as of October 9, 2025.



Insights from CDP-ICLEI Track

Seven Filipino cities publicly disclosed to CDP-ICLEI Track in 2024, representing close to 5 million urban residents (9% of the country's total urban population). These municipalities demonstrate a commitment to climate action, with all seven reporting greenhouse gas emissions inventories, active emissions reduction targets, Climate Risk and Vulnerability Assessments, and active adaptation goals.

These municipalities emphasize their commitment to fostering an inclusive and participatory approach to climate action. For example, the city government of Baguio holds organized consultations and planning sessions at the barangay level.⁵ These initiatives effectively disseminate vital information and updates related to climate issues, ensuring that community members are well-informed and engaged.

Cities show high levels of engagement with the national government. Six cities report relying on national funding sources for their climate action plans and all seven engaged with the national government on plan development.

A notable example of local and national partnership can be seen in Quezon City, where the national Biodiversity Management Bureau works closely with the local government on urban biodiversity initiatives and planning, including regular educational visits to a natural cave system in Metro Manila. While these partnerships show promise, there is significant potential to strengthen coordination between different levels of government to enhance climate action.

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Filipino cities publicly disclosed to CDP-ICLEI Track in 2024

9%



of the country's total population represented (close to 5 million urban residents)



⁵ Barangay is the smallest administrative division in the Philippines and is equivalent to a village, district, or ward.



Spotlight on projects

Seven Filipino cities disclosed 24 climate projects seeking US\$63.7 million in investment. Waste management was the leading project sector, followed by projects focused on nature-based solutions, biodiversity, and urban green spaces, water management, and renewable energy. 75% of projects are in early development stages, highlighting the substantial financial and technical support cities need to advance their climate agendas. While mitigation projects make up a larger share of total projects (12 projects), adaptation projects (8 projects) demand more funding, with US\$34.5 million needed for adaptation compared to US\$21.8 million for mitigation.

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Filipino cities disclosed 24 climate projects

\$63.7m

in investment is being sought for these climate projects

Top four project sectors

Waste management

6 projects seeking US\$20.1 million

Nature-based solutions, biodiversity and urban green spaces

5 projects seeking US\$9.3 million

Water management

3 projects seeking US\$24.8 million

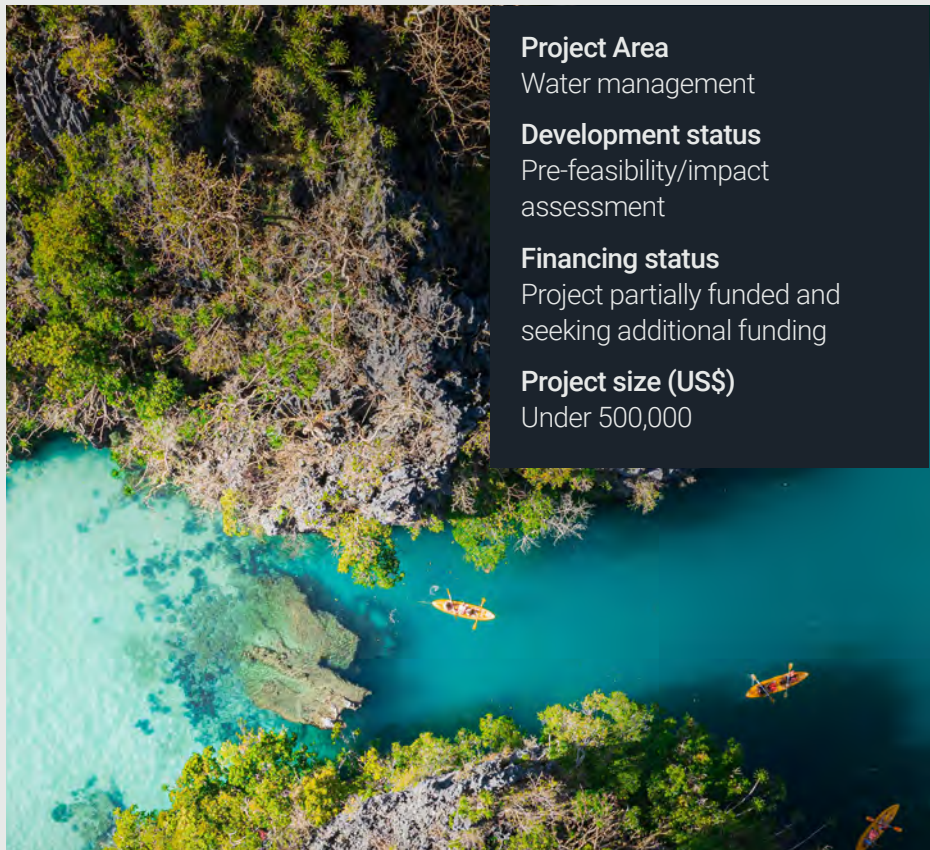
Renewable energy

3 projects seeking US\$3.3 million

City of Puerto Princesa

Installation of Hybrid Solar-Powered Water System

The project will install 15 solar-powered water systems serving a total of 92 hectares of agricultural land, in coordination with the City Agriculture Office. The project will be implemented in three phases and will provide uninterrupted water supply using green energy. This will further boost the production of planting materials of various crops and seedstocks of commercially important freshwater species, which will provide continuous inputs for the development of farms of farmers within the City. It will also demonstrate the sustainable and modern technology in agricultural development, which will support further innovation and implementation by local farmers.

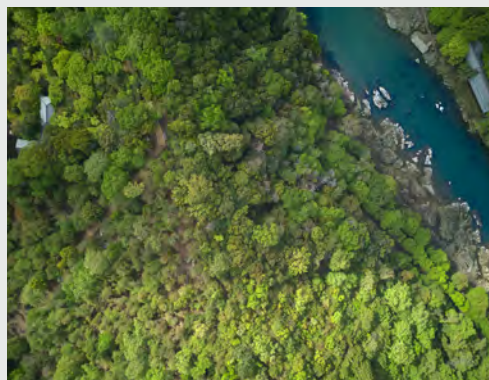


Project Area
Water management

Development status
Pre-feasibility/impact assessment

Financing status
Project partially funded and seeking additional funding

Project size (US\$)
Under 500,000

**Development status**

Pre-feasibility/impact assessment

Financing status

Project not funded and seeking partial funding

Project size (US\$)

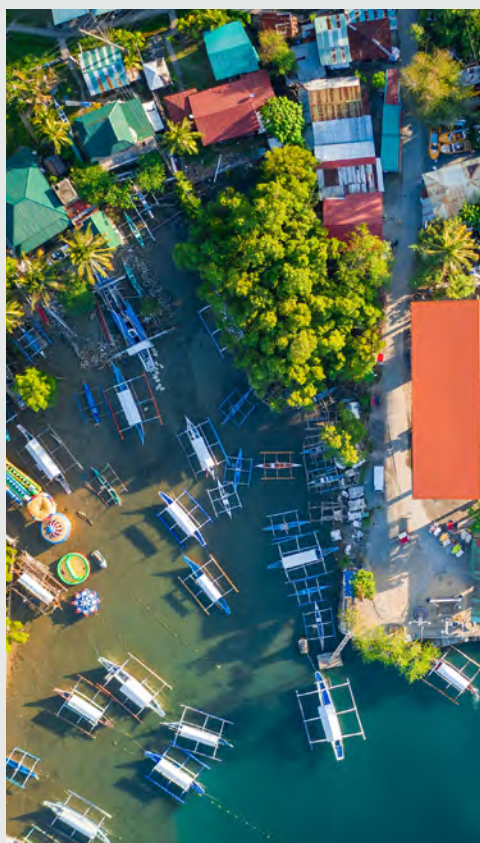
5 million < 10 million

Dipolog City**Water Impounding and Mini-Hydro Power Project**

The project aims to contain the water from the Layawan River that causes flooding during heavy rains in the city's low-lying areas. The contained water will be used for agricultural irrigation and to generate hydropower.

City of Ormoc**Solid Waste Management Facility and Renewable Energy Projection**

This project will improve an integrated waste management facility by developing a waste-to-energy system to increase power supply. The project will improve collection services and SWM facilities to cope with the increasing waste generation due to the growing population and include the construction of a new cell of the sanitary landfill complete with lining system, leachate piping, gas venting, waste treatment ponds, equipment yard, administrative building, guardhouse, and other essential facilities. It also includes procurement of additional equipment for garbage collection, composting, and recycling equipment.

**Development status**

Pre-feasibility/impact assessment

Financing status

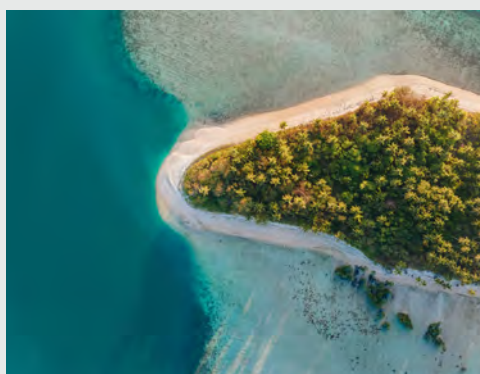
Project not funded and seeking full funding

Project size (US\$)

5 million < 10 million

Quezon City**Conversion of Bus Fleet to Electric Buses**

Under this project, the city purchased eight electric buses to replace conventional buses and ensured bus depots, service stations, and charging infrastructure were in place.

**Development status**

Implementation

Financing status

Other

Project size (US\$)

5 million < 10 million



Country Case: South Korea

South Korea has a strong export-based economy and institutional commitments to combat climate change; however, it is faced with worsening disasters that highlight the urgency to transition away from carbon-intensive industries and accelerate adaptation.

Korea experienced its worst-ever wildfire season in March 2025, reflecting the country's growing exposure to climate-driven disasters. Cities reporting to CDP-ICLEI Track identified extreme heat, heat stress, heavy precipitation, and urban flooding as their primary climate hazards, with projections indicating 65% increases in flood frequency across South Korean agricultural basins. Despite these vulnerabilities, South Korea ranks 15th on the ND-GAIN climate risk index, indicating strong adaptive capacity.

Economic implications are substantial, with the Asian Development Bank projecting severe regional GDP losses under high-end emissions scenarios. South Korea represents a critical middle-income transition challenge, where carbon-intensive industries face mounting competitiveness threats from carbon border adjustments, particularly affecting key export sectors like semiconductors, petrochemicals, iron, and steel. Despite reducing energy supply per GDP unit by 30% since 2000, Korea remains the third most energy-intensive economy in the OECD.

South Korea established ambitious climate commitments in 2021, aiming to achieve 40% emissions reductions below 2018 levels by 2030 and carbon neutrality by 2050.⁶

As the world's 13th largest greenhouse gas emitter in 2023, these targets reflect significant policy ambition backed by comprehensive institutional frameworks. The Korean government's Carbon Neutrality Act and its first Basic Plan for Carbon Neutrality and Green Growth provide twenty-year strategic direction.

Recognizing climate change as a societal threat, Korea mandates adaptation planning across all subnational governments since 2015, with public entities managing climate-vulnerable facilities required to implement adaptation plans since 2022, demonstrating systematic institutional commitment to climate resilience.

Recognizing climate change as a societal threat, Korea mandates adaptation planning across all subnational governments



⁶ Latest NDC submission as of October 9, 2025.



Insights from CDP-ICLEI Track

Sixteen South Korean cities reported to CDP-ICLEI Track in 2024, representing 24.7 million residents (48% of the country's total population). This high level of participation suggests a clear commitment to government transparency on local climate action.

Mitigation planning demonstrates strong momentum across reporting cities. All have completed jurisdiction-wide emissions inventories, and all but one have active greenhouse gas emissions reduction targets, with the remaining city planning to introduce a target within the next two years.

Adaptation initiatives are similarly advanced: all cities have established adaptation goals, and 15 have completed climate risk and vulnerability assessments, with the final city currently conducting an assessment expected to finish within the year. This is likely due to the legal requirement for subnational adaptation planning established in 2015.

Interjurisdictional collaboration is notably strong, with 63% of cities actively engaging with other levels of government. Notably, all cities specifically coordinate with the national government, likely reflecting South Korea's centralized governance structure, where climate policy frameworks are established at the national level with implementation occurring at the local level.

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South Korean cities reported to CDP-ICLEI Track in 2024

48%



of the country's total population represented (24.7 million residents)





Spotlight on projects

Ten South Korean cities disclosed 20 climate projects seeking US\$133.9 million in investment. Renewable energy projects were most common, followed by buildings and energy efficiency, and transport. The sectoral concentration of projects suggests a clear focus on mitigation. However, South Korea’s legal mandate requiring cities to establish adaptation goals suggests that cities may prioritize adaptation in the future.

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South Korean cities disclosed 20 climate projects

\$133.9m

in investment is being sought for these climate projects

Most common project sectors

Renewable energy

8 projects seeking US\$38.8 million

Buildings and energy efficiency

3 projects seeking US\$931.5 thousand

Transport

2 projects seeking US\$90.3 million

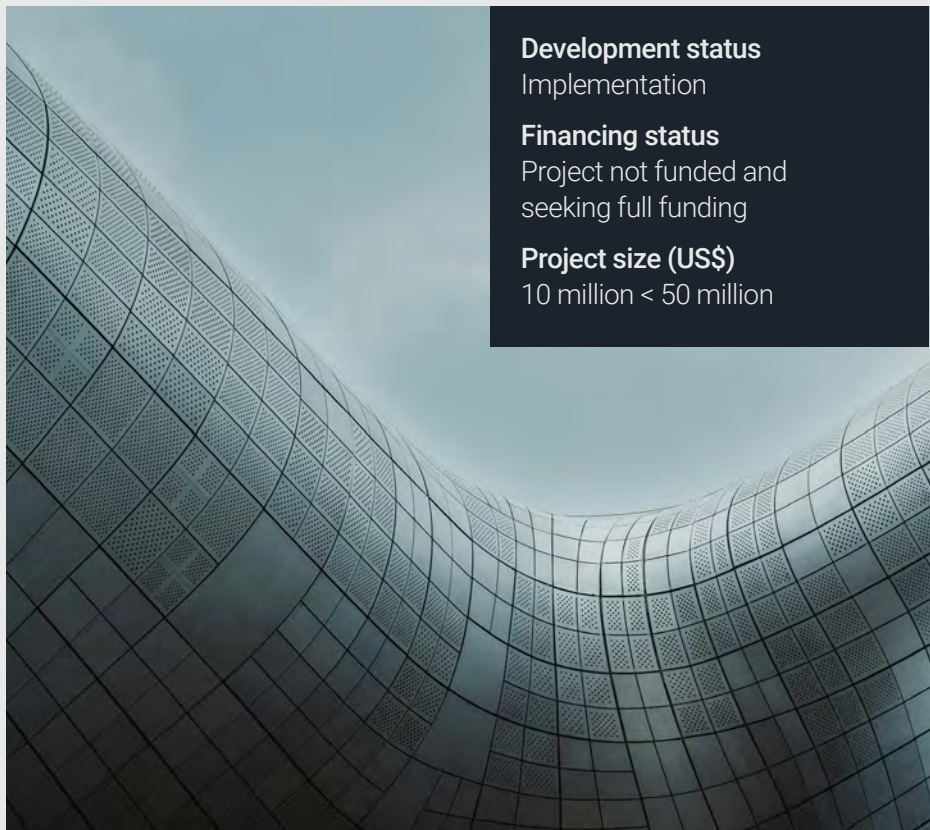
Waste management

2 projects seeking US\$3.3 million

Daegu Metropolitan City

Citizen’s Solar Power Plant

This project makes citizens direct stakeholders in local energy production through community-funded solar installations. Electricity is sold to power companies, generating profit for community development and renewable infrastructure expansion. Solar panels cover buildings, rooftops, and parking lots. Currently, nine solar plants operate with four under development at the Daegu-Gyeongbuk Center (395 kW total capacity). Plans include additional citizen solar plants and cooperatives with 2030/2050 targets. An online platform will enable participation, alongside nurturing 100 solar stores and 50 companies.



Development status
Implementation

Financing status
Project not funded and seeking full funding

Project size (US\$)
10 million < 50 million



Dobong-gu District of Seoul

Smart Factory-Type Public Recycling Sorting Facility

This project will fund a fixed-quantity feeder for large-scale recyclable waste treatment and a particular gravity ballast sorter to sort up to five categories of recyclables. Additionally, the project will introduce automated plastic occupancy control, enhanced facility resilience through appropriate process configuration, maximization of selection rate to achieve optimum efficiency with the fewest number of personnel.

Development status

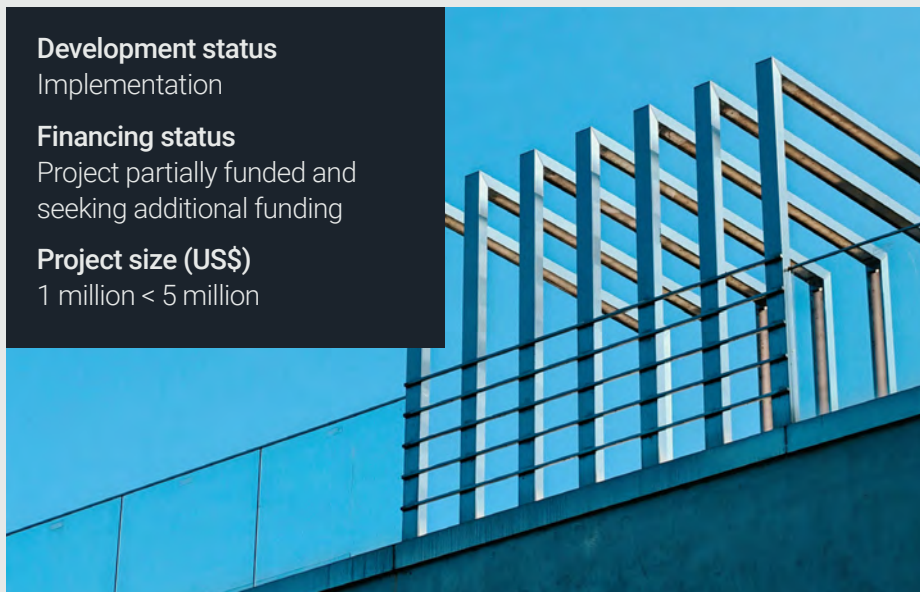
Implementation

Financing status

Project partially funded and seeking additional funding

Project size (US\$)

1 million < 5 million



Yeoncheon County

Jeongok Wetland Park for the GEO&ECO Conservation Tourism in Hantan River

This project focuses on wetland restoration research for spoonbills in the Hantan River to promote ecotourism.

Development status

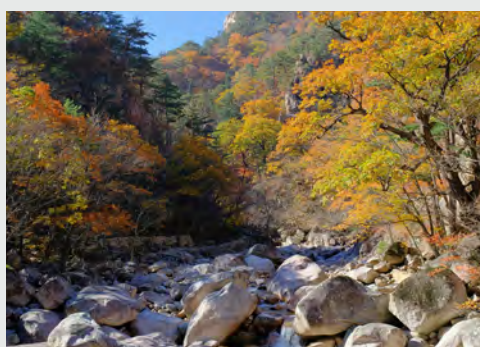
Scoping

Financing status

Project partially funded and seeking additional funding

Project size (US\$)

Unknown



Yeosu City

Yeosu South Sea Offshore Wind Farm Development Project

This project will develop offshore wind power with a facility scale of 6.3 GW. A feasibility study and the business approval process is in progress. This project has been approved by the state to promote related projects led by local governments, and Yeosu City is supporting offshore wind power projects by private companies. Commercial power generation is targeted for after 2030 and has about 12 companies promoting the project.

Development status

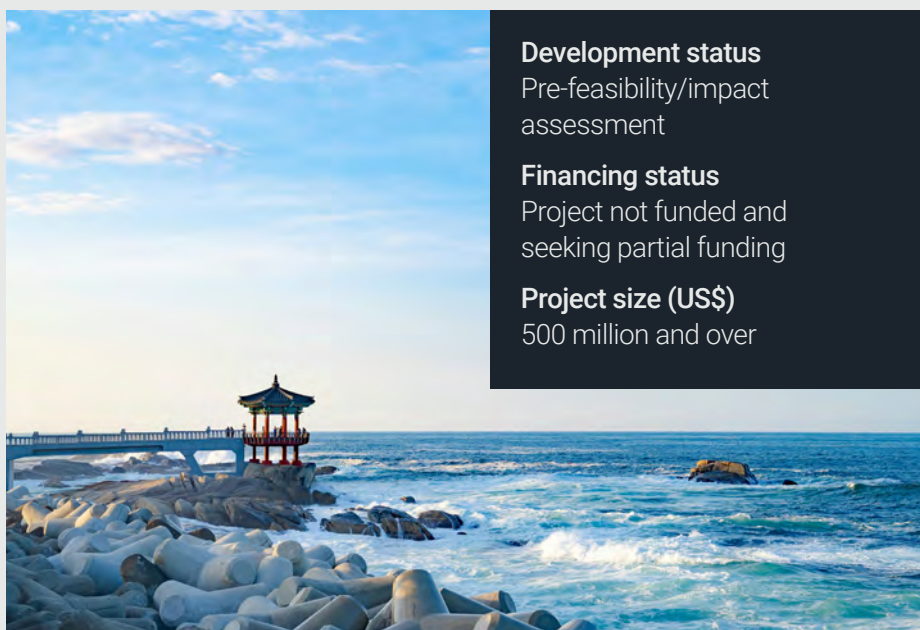
Pre-feasibility/impact assessment

Financing status

Project not funded and seeking partial funding

Project size (US\$)

500 million and over





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About CDP

CDP is a global non-profit that runs the world's only independent environmental disclosure system. As the founder of environmental reporting, we believe in transparency and the power of data to drive change. Partnering with leaders in enterprise, capital, policy and science, we surface the information needed to enable Earth-positive decisions. We helped more than 24,800 companies and 1,100 cities, states and regions disclose their environmental impacts in 2024. Financial institutions with

more than a quarter of the world's institutional assets use CDP data to help inform investment and lending decisions. Aligned with the ISSB's climate standard, IFRS S2, as its foundational baseline, CDP integrates best-practice reporting standards and frameworks in one place. Our team is truly global, united by our shared desire to build a world where people, planet and profit are truly balanced.

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