Japan's Initiatives to Address Climate Change 2026

Climate-related disasters are causing severe damage in Japan and around the world. **Climate change is an urgent challenge shared by all humanity.**

- **Adaptation:** An urgent priority to protect lives and assets. **Japan will share its expertise and technologies** in adaptation and disaster risk reduction with the Asia-Pacific and beyond
- **Solutions: Technologies from Japan** can advance climate action, inclusive economic growth and energy security at the same time
- **Partnerships: Stronger international networks** will accelerate implementation worldwide through Japanese solutions

- **Extreme weather is occurring worldwide**
- **Japan is also seeing greater flood and agricultural damage**

Flood



Levee breach at Lake Inba, Chiba Prefecture caused by Typhoon Dujuan (September 2026) (Photo: MLIT)

Agricultural impact



Apples showing poor and delayed coloration at maturity (Photo: NARO)

Drought



Reservoir storage fell to 0% for the first time at Ure Dam, Aichi Prefecture (March 2026) (Photo: MLIT)

Japan's Contribution to Global Climate Action

- **Adaptation is the foundation of sustainable economic growth**
- **Accelerating IMPLEMENTATION by simultaneously achieving decarbonization and economic growth**

1 Scaling up ADAPTATION measures to prepare for intensifying natural disasters



Network for EWS (NEWS) |Implemetation of EWS and adaptation plans



2 SOLUTIONS that simultaneously advance climate action and economic growth

Zero Waste | Climate-Resilient Cities | Clean Energy | Satellites

3 Solving challenges through PARTNERSHIPS



ASEAN-Japan "CAMPUR" cooperation | "Build and Cool" meetings 2028 | JCM

1. Adapting to intensifying natural disasters

- Focusing on Asia-Pacific countries, Japan will launch the new **Network for EWS in the Asia-Pacific region (NEWS) to accelerate the deployment of Early Warning Systems (EWS)** by expanding the use of EWS technologies and advancing rule-making
- To **contribute to the global implementation of EWS**, Japan will promote its expansion by leveraging the deployment of EWS in Asian countries as a model, providing Japan's **advanced EWS technologies and expertise** to address challenges in developing countries

Challenges

- **Floods and heavy rains are intensifying due to climate change**
- **Protecting lives and livelihoods must be prioritized**

→ **Reliable forecasts and warnings are required**

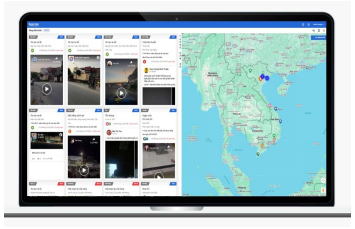




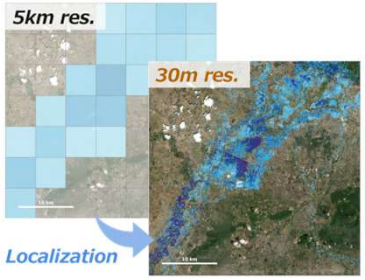
Technologies in Action



Weather stations improve forecasting
(Photo: Weathernews)



Early alerts
(Photo: Spectee)



More accurate flood forecasts
(Photo: Aqunia)



Strengthening operational capacity
(Photo: Otowa Electric)

Early Warning System (EWS) for weather disasters:
a system that predicts disasters from heavy rains, floods and other climate-driven hazards, and alerts individuals and businesses early to limit damage

NEWS

Network for Early Warning Systems in the Asia-Pacific Region

- **Deployment and application of technology**
- **Sharing operational expertise**
- **Strengthening operational capacity and collaboration**

- **Working with ASEAN member states** through a Japan-ASEAN Integration Fund (JAIF) project on climate risk management
- Building on the **EWS Public-Private Partnership Initiative** launched at COP27
- Alongside building NEWS, supporting **the introduction of EWS, adaptation planning and other measures**

2. Climate solutions that advance economic growth

環境省

- Contributing to global climate action by **deploying outstanding Japanese technologies and products**
- Advancing sustainable societies through **climate action that addresses diverse socio-economic challenges**
- **Solutions to The World:** Japan Pavilion at COP31 showcases technologies across the following four themes

Zero Waste

- Circular material manufacturing using underutilized resources and hard-to-recycle waste
- Chemical recycling through waste gasification and waste-to-energy generation
- Plastic and aluminium recycling technologies and resource circulation ecosystems



Cups and bottles made from biomass materials using spent coffee grounds
Heiwa Kagaku Industrial Co., Ltd.



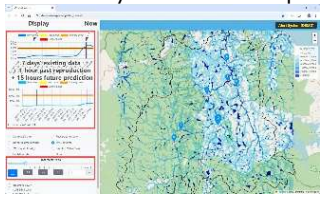
Small-scale demonstration furnace for waste-to-energy generation
JFE Engineering Corporation
(NEDO Green Innovation Fund Projects)

Climate-Resilient Cities

- Integrated mitigation and adaptation: renewable energy, water security, resource circulation and disaster prevention and mitigation
- Reducing whole life carbon of buildings via energy efficiency, electrification and refrigerant recovery
- Fire-resistant glulam and hybrid timber systems for urban timber construction and a circular forest economy
- Flood and drought early warnings via a watershed water-cycle simulation platform



Seawater desalination plant in the Maldives powered by renewable energy
Kanadevia Corporation



Early Flood and Drought Warning System interface
Geosphere Environmental Technology Corp.

Clean Energy Transition

- Membrane materials that improve the production of low-carbon hydrogen through water electrolysis and its use in fuel cells
- Next-generation efficient vessel operation using rigid sails, data and AI
- Agrivoltaic and urban solar-sharing applications using flexible perovskite solar cells
- Energy-management technologies for low-temperature heat recovery and optimal use of renewable energy
- CO_2 geological storage near major cities designed to avoid impacts on the marine environment and fisheries



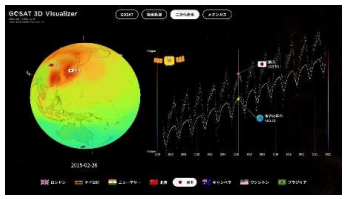
Illustration of a mounting system fitted with perovskite solar cells
TERRA Inc. / Earth Sherpa Organization for Sustainable Society Partnerships



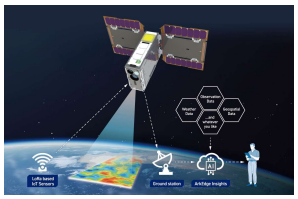
The world's first LNG carrier equipped with two Wind Challenger sails
Mitsui O.S.K. Lines, Ltd.

Enhanced Transparency through Satellites

- Integrated climate-action solutions using satellites, IoT and AI
- Supporting decarbonization and the energy transition through satellite-based GHG data
- GOSAT 3D Visualizer for greenhouse gas concentrations



GOSAT 3D Visualizer display
Ministry of the Environment



Small satellites for a wide range of missions
ArkEdge Space Inc.

3. Solving challenges through partnerships

- ASEAN Member States and Japan release Interim Report on **"Climate Action for Mutual Prosperity Under Regional Cooperation (CAMPUR)"**
- **Japan will host international assemblies in 2028** to advance decarbonization and climate resilience in the buildings and cooling sectors where GHG emissions are projected to rise
- Japan continues to deploy tailored technologies and experience globally through **partnerships such as the JCM**

ASEAN-Japan Cooperation: CAMPUR

- ASEAN member states and Japan release a report setting out **policy directions for the simultaneous achievement of decarbonization and economic growth, energy security and solutions to socio-economic challenges, contributing an Asian regional perspective to GST2** completed in 2028



Ministerial-level kick-off event at COP30



CAMPUR Interim Report cover

Hosting the GlobalABC and Global Cooling Pledge assemblies in Japan

- **Japan will host the 2028 assemblies of two UNEP-led initiatives**: the Global Alliance for Buildings and Construction (**GlobalABC**), which advances energy efficiency and decarbonization in buildings, and the **Global Cooling Pledge**, which promotes climate-resilient and sustainable cooling
- Japan will contribute to discussions by **sharing leading practices and solutions** in both policy and technology

JCM (Joint Crediting Mechanism)

Japan and its JCM partner countries will strengthen cooperation to expand effective emission reduction and removal activities that combine environmental integrity and flexibility, consistent with Article 6.2 of the Paris Agreement. The JCM now has 32 partner countries, with a strategic focus on Asia

MIDORI∞INFINITY

This package supports the international deployment of GX technologies, including mitigation and adaptation solutions, to attract GX investment in agriculture, forestry and food systems and strengthen climate resilience

PaSTI (Partnership to Strengthen Transparency for co-Innovation)

Drawing on Japan's experience with corporate GHG accounting, reporting and disclosure systems, PaSTI supports ASEAN member states in developing accounting and reporting frameworks and strengthening transparency

AIM (Asia-Pacific Integrated Model)

AIM uses country and sector-level models to assess the deployment of GHG mitigation technologies and their emission reduction impacts, supporting Asian countries in developing long-term strategies and NDCs

WEF Japan Accelerator Network

Working with the World Economic Forum, Japan is developing an action plan for decarbonization and circular economy in the built environment

Satoyama Initiative

Support is being provided in 27 countries for community-based action to conserve and sustainably use natural resources, helping strengthen local resilience to climate change and other challenges

GREEN×EXPO 2027

GREEN×EXPO 2027 will be held in Yokohama as a showcase for green technologies and a platform for exploring pathways to sustainable development