

Japan's Non-Market Approach in the Field of Adaptation

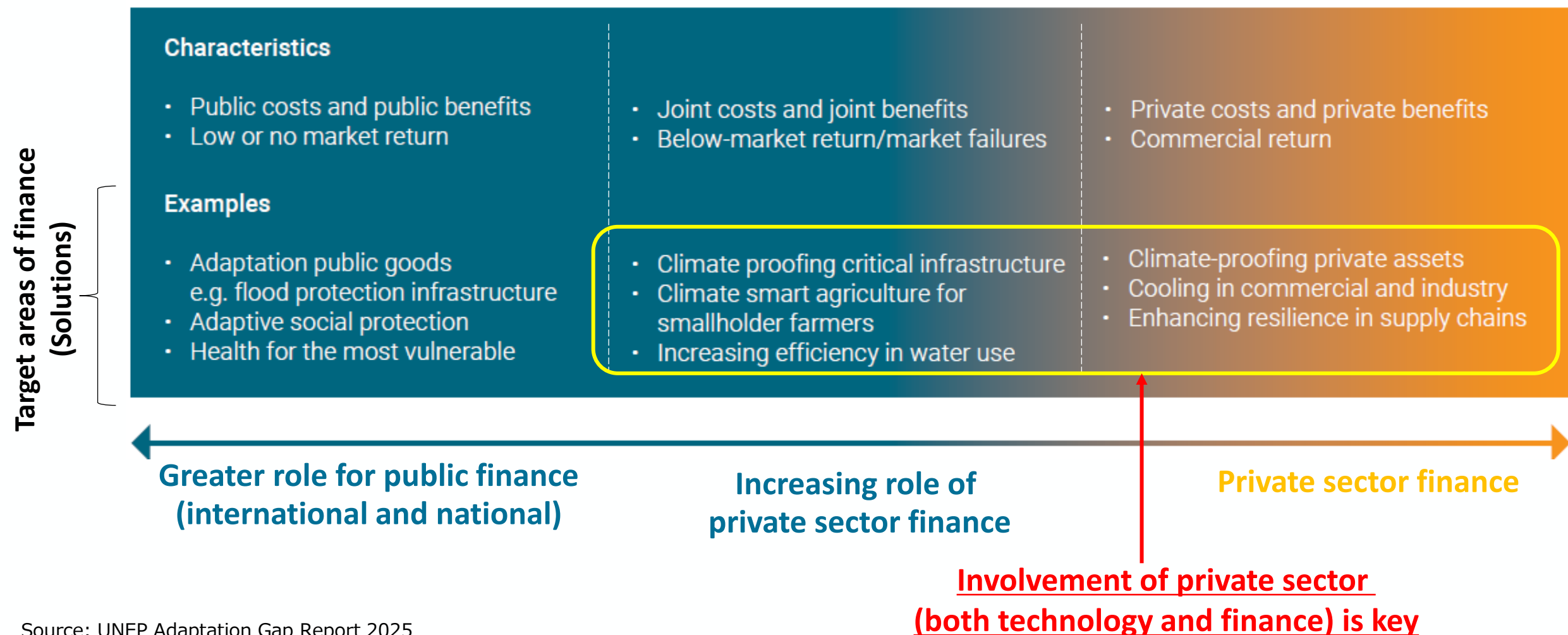
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Challenges in the Field of Adaptation

- As climate change intensifies, adaptation has become a pressing challenge for many countries
- Addressing the growing demand for adaptation technologies requires promoting **the deployment of innovative technological solutions and to mobilize financing from both the public and private sectors.**

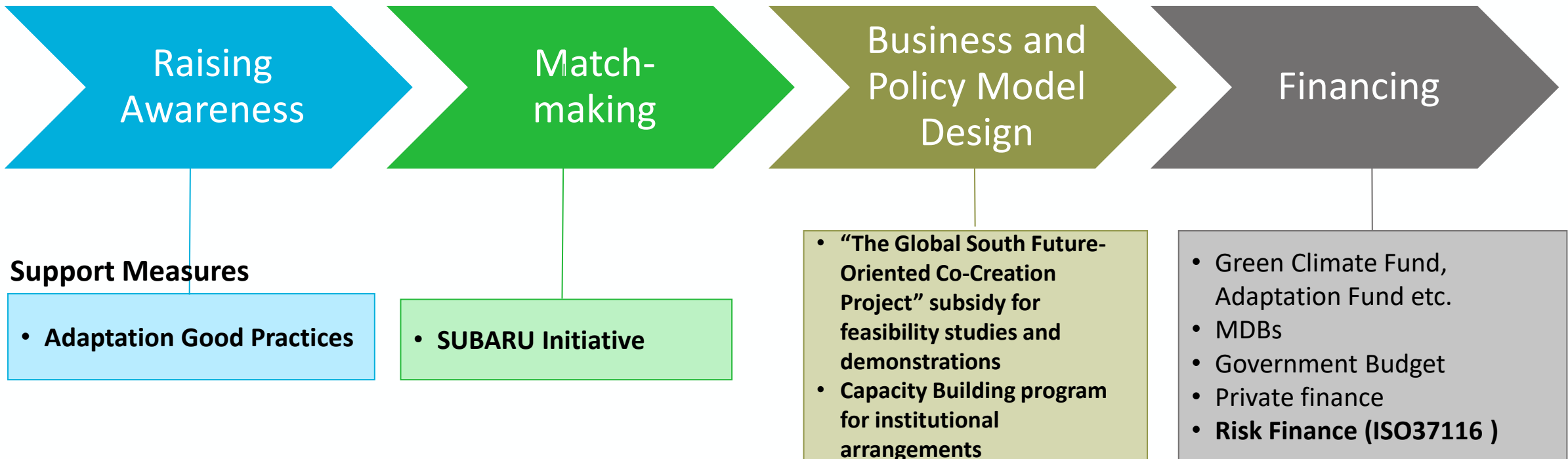


Ministry of Economy, Trade and Industry (METI)'s Efforts

- Contribute to climate change adaptation in developing countries by promoting private-sector participation.
- Support Japanese companies in expanding their adaptation businesses overseas.

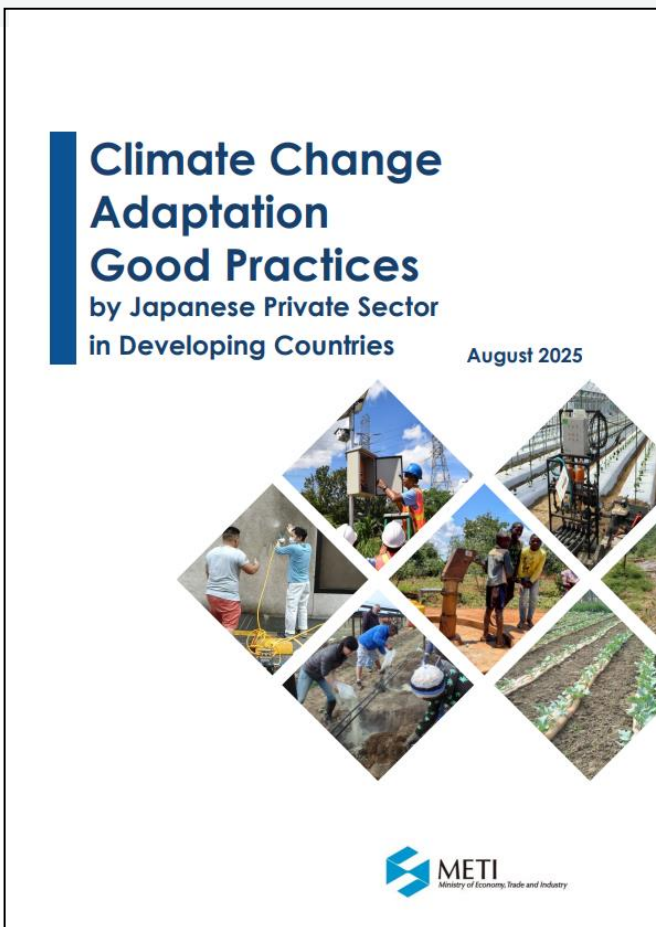
METI's policy support to Adaptation Business

Challenges

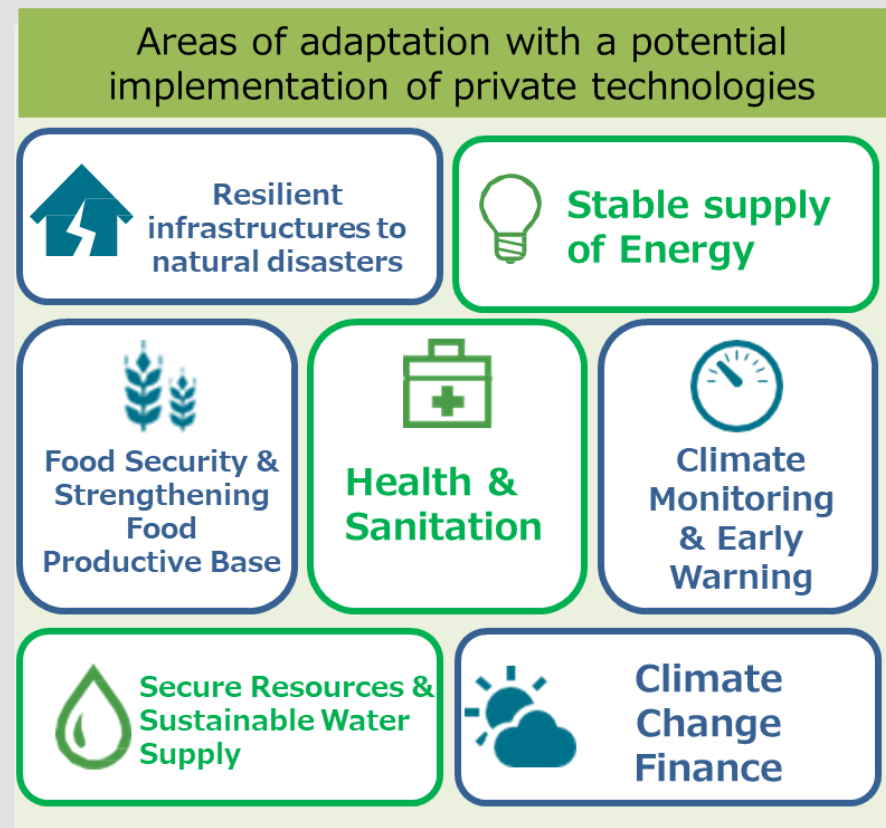
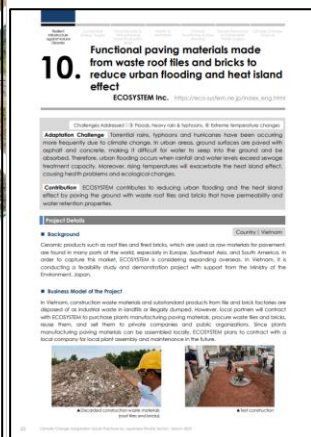


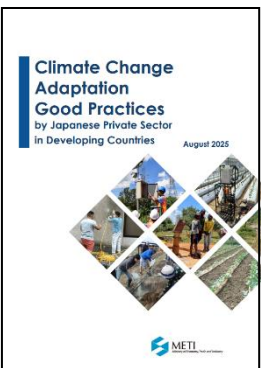
Climate Change Adaptation Good Practices

- To promote the dissemination of Japan's advanced adaptation technologies, METI has published a collection titled *Climate Change Adaptation Good Practices*.
- The case studies cover a **wide range of sectors, including infrastructure, energy, and agriculture.**"



- **58 cases** (Latest published in August 2025)
- Japanese and English version available





Examples of *Climate Change Adaptation Good Practices-1*

Challenergy Inc (Philippines)

Enhancing resilience in anti-disaster infrastructure through the world's first "Typhoon Power Generation" and communications satellite

- ◆ In remote islands, delays in dissemination of disaster information is a serious issue coupled with shutdown of power supply and communications after typhoons.
- ◆ Challenergy's wind turbine is a resilient generator that operates safely in typhoons and can be paired with satellite communication.
- ◆ It enables power and communication even when infrastructure is damaged during disasters.
- ◆ A demonstration project is underway in the Philippines in collaboration with local partners.



◀ Magnus x Vertical Axis
Wind Turbine 10kW
Demo Unit
(Batanes, Philippines)

Examples of *Climate Change Adaptation Good Practices-2*

Kawashima Co., Ltd. (Sri Lanka, Nepal)

Greater harvest through compost soil improver

- ◆ Compost is a technology that ferments household and agricultural waste to produce organic fertilizer.
- ◆ Kawashima Co., Ltd.'s composting solution improves soil quality, making farmland more resilient to drought.
- ◆ Through a JICA (Japan International Cooperation Agency) project, nine composting plants have been introduced to the Sri Lankan government.



▲ Compost plant



▲ Vegetable cultivated using compost

Collaboration with UN Habitat Fukuoka Office:

SUBARU initiative ~Sustainable Business of Adaptation for Resilient Urban future~

Registered Project on the
NMA Platform

- Launched in partnership with the UN-Habitat Fukuoka Office at COP27 (2022)
- The SUBARU Initiative aims to strengthen urban resilience across the Asia-Pacific region through public-private partnerships and technology matching between Japanese companies and local governments

◆ Matching Event (October 17, 2025)

Participating Companies:

Japanese companies with advanced adaptation technologies (Inspiration+, Honda, etc.)

Asian Participating Municipalities:

Multiple municipalities from Cambodia, Laos, Malaysia, Maldives, Mongolia, Nepal, the Philippines, Thailand, and Vietnam



▲ Meeting



■ UN Habitat offices in 17 countries

Afghanistan, Cambodia, China, Fiji, India, Iran, Japan, Laos, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Solomon Islands, Sri Lanka, Thailand, Vietnam

*Solomon Islands is closed due to vacancy

Capacity Building program

- Several companies that took part in the SUBARU Initiative's matching event are now in active discussions with governments in Asia on deploying their technologies.
- This year, to promote the deployment of composting technology, **the Governments of Japan and Nepal jointly held site visits and seminars in both Nepal and Japan.**

Activities in Nepal (January 2025)

- **Government Dialogue:** Discussed composting challenges with national and local authorities
- **Site Visit:** Visited Bharatpur's waste facility and identified key issues
- **Seminar:** Gave a talk on waste management technologies



▲ Bharatpur city site visit



▲ Seminar

Activities in Japan (October 2025)

- **Seminar:** Lecture on methane emission reduction from organic waste and sustainable resource recycling systems.
- **Site Visit in Japan:** Visit to compost plants and waste recycling facilities.
- **Discussion:** Meeting between METI and the Governments of Nepal.



▲ Meeting between METI and the Governments of Nepal



▲ Compost plant site visit

Through the *Global South Future-Oriented Co-Creation Project*, METI promotes international cooperation by conducting technology demonstrations and feasibility studies to deploy Japan's advanced adaptation technologies addressing climate-related disasters. (※Currently implementing 13 adaptation projects.)

Project Example

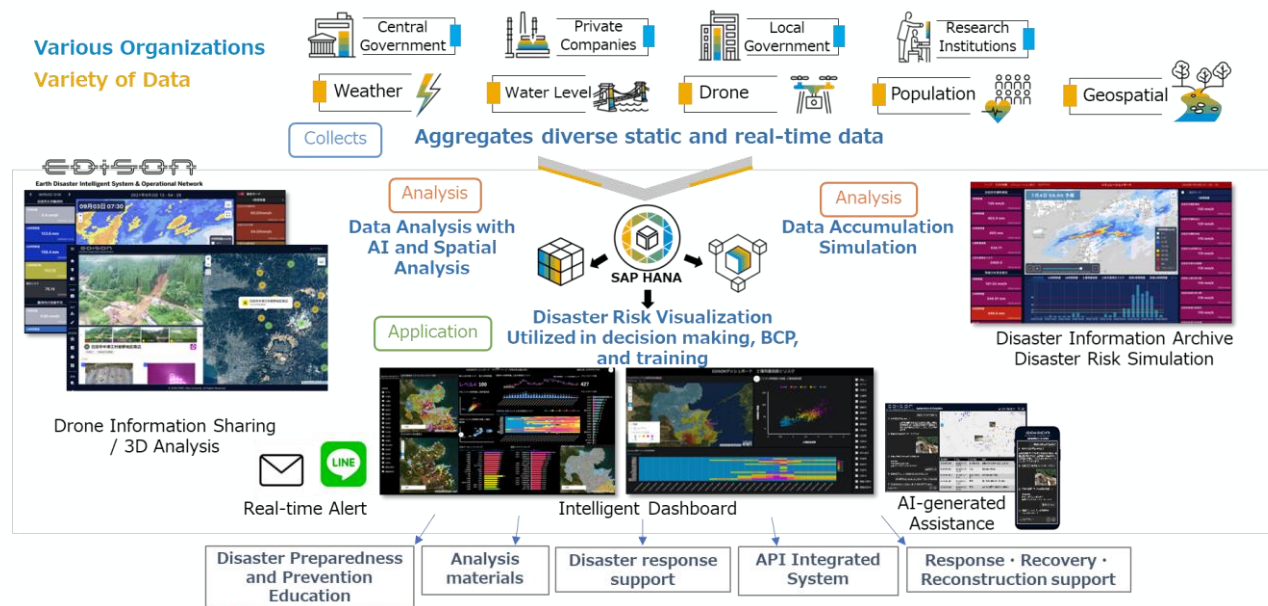
INSPIRATION PLUS Inc.

- ◆ Location : Indonesia
- ◆ Technology : Platform for early decision-making and rapid initial response

The project is jointly implemented by Japanese companies and Indonesian local governments to develop a master plan for a disaster risk information system. It will establish a platform that connects sensors to a central data hub, enabling real-time information sharing. This will enhance the accuracy of climate disaster prevention and accelerate recovery efforts.



EDISON
Earth Disaster Intelligent System & Operational Network



Elevating disaster prevention and response, and enabling highly efficient, optimized operations that are not dependent on intuition or past experience

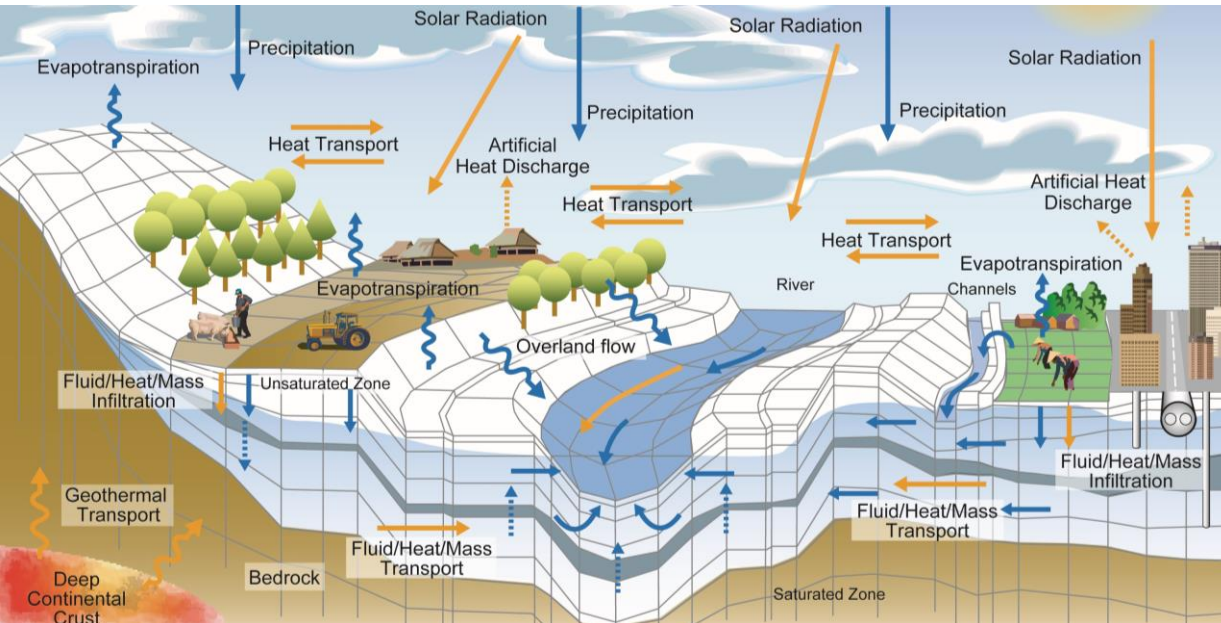
Project Example

Geosphere Environmental Technology Corp.

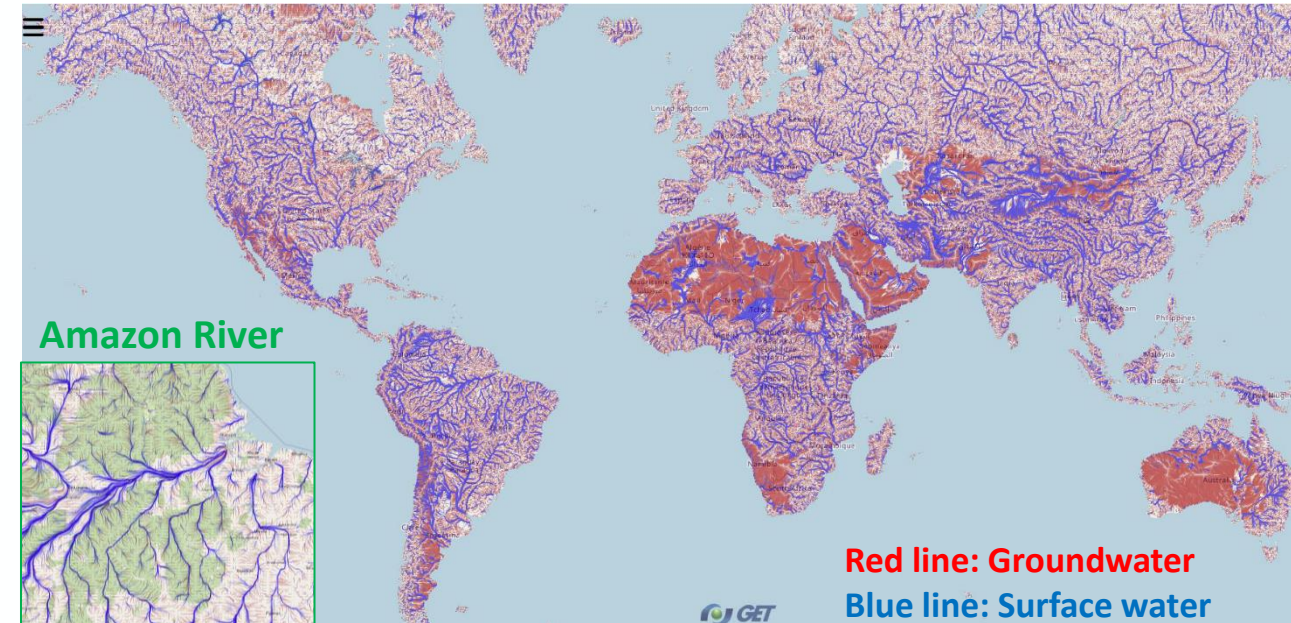
- ◆ Location : Malaysia
- ◆ Technology : Water cycle simulation system name of “GETFLOWS”

This technology digitalizes and visualizes all water flows — including groundwater, river water, rainfall, and evaporation — based on geological data and 3D topography, enabling highly accurate flow and precise forecasts of flood-prone areas.

Visualization of water flows



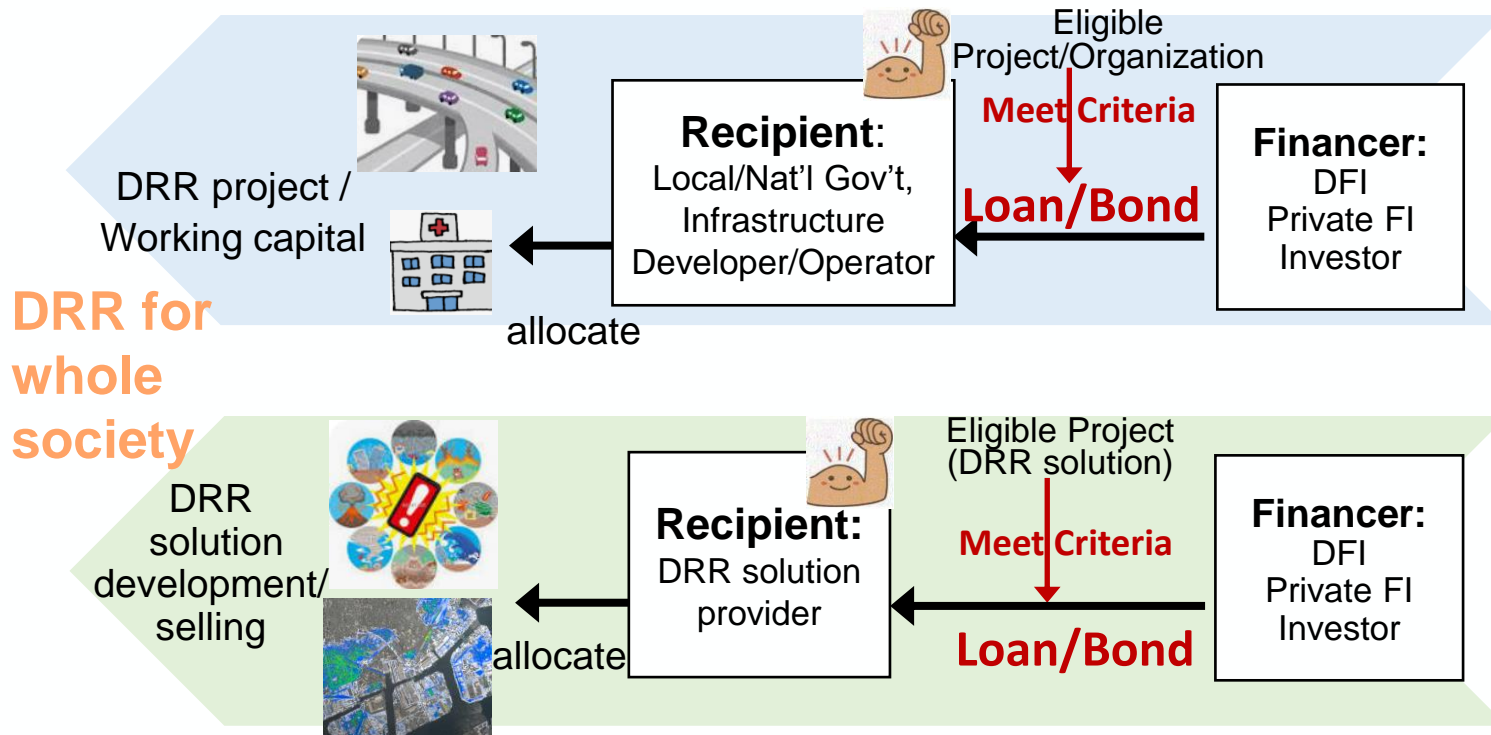
Global water flows



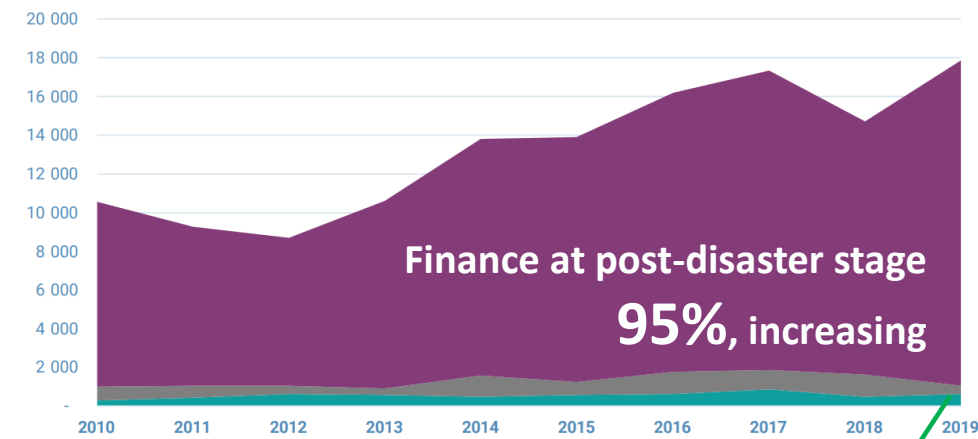
Rule-making for the Promotion of Adaptation and Disaster Risk Finance

- Financing for adaptation and disaster-risk reduction remains severely limited.
- To promote finance in the fields of adaptation and disaster risk reduction, Japan is taking the lead in developing **ISO 37116: “Disaster risk finance-Principles and general requirements for financing ex-ante investment in risk reduction”**.
- This standard is designed to be applicable to **all forms of financing, including loans, bonds, grants, and equity investments**, and sets the eligibility criteria that must be met when receiving funds.

Conceptual Framework of ISO 37116



Disaster-Related Financing (2010-2019, US\$ Million)



Source: UNDDR

Finance for pre-disaster prevention & preparedness:

Only 5%

Lessons Learned for Promoting Adaptation Technologies

1 . Identify and Disseminate Adaptation Technologies

- ▶ Develop and promote a compendium of good practices.

2 . Match Technologies with Local Needs

- ▶ Implement the SUBARU Initiative in collaboration with UN-Habitat.

3 . Strengthen Capacity and Institutional Frameworks in Developing Countries

- ▶ Organize technical site visits and capacity-building seminars.

4 . Design Business Models

- ▶ Conduct demonstration projects and feasibility studies.

5 . Mobilize and Activate Financing

- ▶ Encourage loans, bonds, grants, and equity investments through ISO on risk finance