

JICA's Cooperation on Climate Change

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- 1. Introduction of JICA
- 2. JICA's cooperation strategy on climate change
 - a. JICA Global Agenda
 - b. Approach1 Paris Agreement Implementation
 - c. Approach2 Co-Benefit Approach
 - d. Good practices



Who we are?





JICA contributes to...

Human Security: Aiming for a society where all people can protect themselves from various threats and live

their daily lives in security and with dignity.

Quality Growth: Promoting sustainable growth with less disparity and without harming the environment.



People

A society where all can live healthy, safe lives

■ Education■ Health■ Social Security



Prosperity

A prosperous, sustainable economy at harmony with nature and prepared for promoting social development

- Agricultural and Rural Development
- Private Sector Development
- Urban and Regional Development
- Ensure Access to Affordable and Clean Energy
- Development of Transport Infrastructure



Peace

A peaceful, just society without fear or violence

- State-Building to Prevent the Outbreak and Recurrence of Conflicts
- Governance Support
- Gender Equality and the Empowerment of Women and Girls



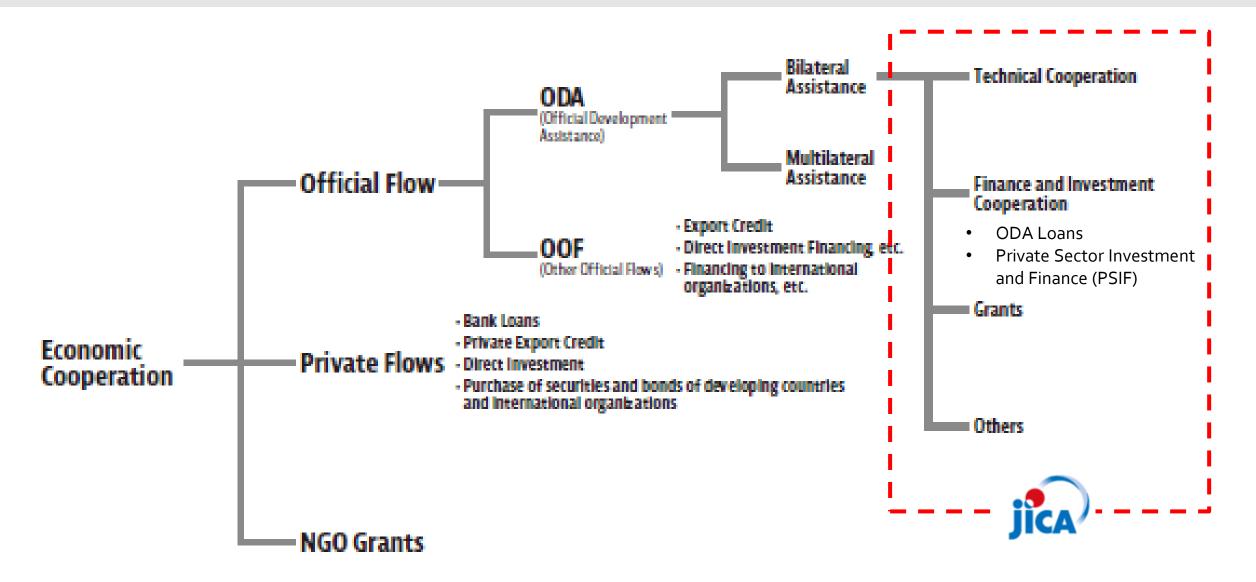
Planet

Care for the Planet

- Environmental Conservation and Management
- Water Resources Management
- Disaster Risk Reduction
- Climate Change



Types of Cooperation





Overview of operations

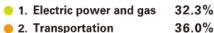
Finance and Investment Cooperation (ODA Loans)(*2)

Lending or investing of funds under concessional terms to developing countries for their development

Scale of Operations

¥1,523.2 billion





 3. Agriculture, forestry 4.1% and fisheries

 4. Social services 22.5% (Water Supply and Sanitation/Education etc.)

 5. Program loans 2.4%

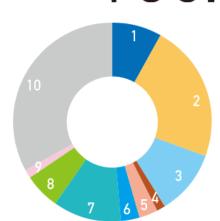
6. Others 2.7%

Grants(*3)

Financial assistance with no repayment obligation; it mainly targets developing countries with low levels of income.

Scale of Operations

¥85.6 billion



 1. Planning and administration 2.4% 2. Public works and utilities 51.0%

 3. Agriculture, forestry and fisheries

5.1% 4. Energy

 5. Business and tourism 0.8%

14.9% 6. Human resources (Education/Vocational Training etc.)

17.5% 7. Health and medical care

8. Others 1.5%

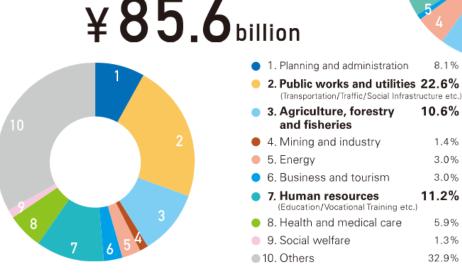
(In fiscal year 2019) (Unit: %)

Technical Cooperation(*1)

Dispatch of Japanese experts to developing countries and acceptance of training participants and students to disseminate Japanese technologies and knowledge

Scale of Operations

¥175.1 billion



6.7%

JICA's climate change cooperation in numbers

JICA integrates climate actions in various regions and sectors.



Number of projects (2019)

VBy sector -----

#The data includes training programs in Japan that accept participants such as administrative officials and technical officers from developing countries to acquire technical

15_{projects}



12 projects

Waste management



31 projects Forests



20 projects

(transportation, construction)

37 projects

water, sanitation

and hygiene



46projects



17 projects

and desertification



62projects reduction



37 projects

Agriculture and fisheries



277 projects

111 countries

Number of projects

Number of countries



Total aid amount (2019)

▼By amount sector ······



5.4 100 million yen

Waste management



100 million yen Clean water and sanitation



6.6 100 million yen





100million yen Disaster prevention



2,986.7 100 million yen Infrastructure (transportation,construction)

capacity building, etc.

24.5_{100 million yen} 11.8 100 million yen



and fisheries

Energy

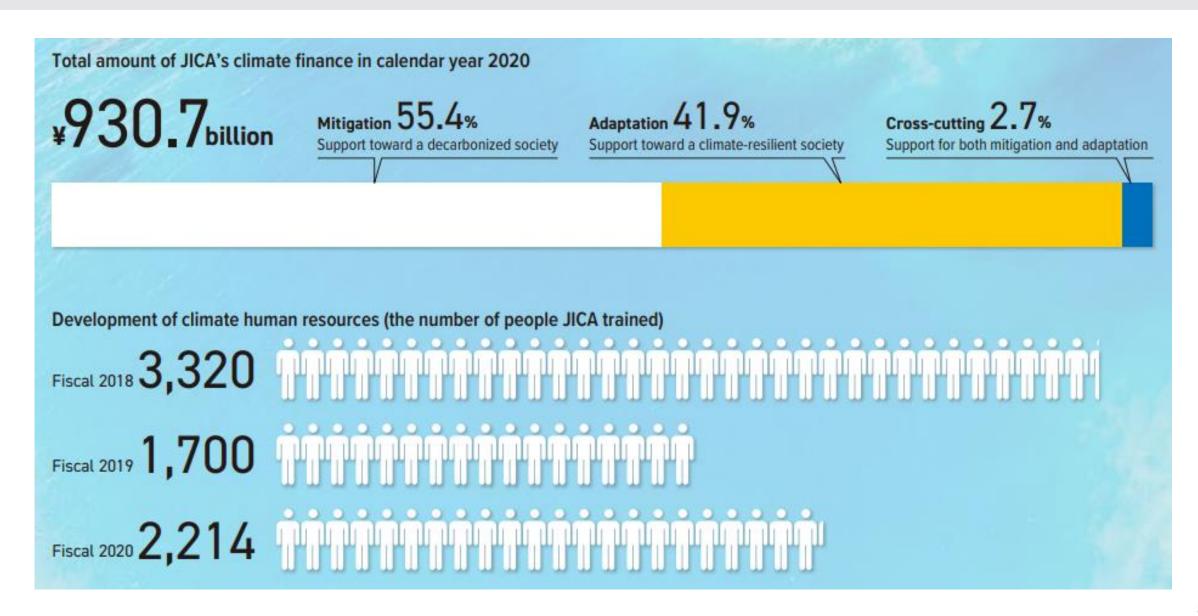
▼By amount region



17 countries 18countries 3countries Oceania 5countries Middle East 4countries Latin America 12countries Grand total 59countries



Overview of JICA's Climate Finance





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2. JICA's cooperation strategy on climate change

JICA cooperates on climate change actions consistent with international framework conventions and Japanese government policy.

International Frameworks



Paris Agreement



Sustainable Development Goals (SDGs) Goal 13: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters (13.1), Integrate climate change measures into national policies, strategies and planning (13.2)



 Sendai Framework for Disaster Risk Reduction 2015-2030: Integrated the actions to reduce disaster risk as part of development assistance programs associated with climate change adaptation.

Japan Govt.

- NDC, Long-term Strategy under the Paris Agreement
- Infrastructure System Export Strategy 2025 etc.
- Development Cooperation Charter (2023 June)

JICA Cooperation Policy



- JICA Global Agenda No.16: Climate Change
- JICA's policy paper on climate change



JICA Global Agenda

JICA's 20 Strategiesfor Global Development Issues



Climate Change

Confronting the threat of climate change with Partner countries

JICA is committed to provide support for climate change that requires immediate action, to enhance the ability to cope with climate change, and to help achieving a sustainable society.

In order to stop the enormous negative impact of climate change on the economy and society, we must drastically reduce greenhouse gas emissions. JICA will contribute to solving global issues in cooperation with partner countries that are having difficulty combating climate change and promoting sustainable development at the same time.









challenge?

JICA's cooperation strategies for global development issues

JICA Global Agenda

Contributing to the goals of UNFCCC and building sustainable and resilient societies through

- strengthening capacity development to respond to climate change
- promoting co-benefit that pursue both development issues and climate change measures.





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JICA Global Agenda: Approach 1

Approach

- Promote implementation of the Paris Agreement
 - **1** Supporting for the development and implementation of plans
- Formulating, implementing, and monitoring Climate Change Plan
- Promoting the transition to a decarbonized and climate change resilient society
- 2 Strengthening the greenhouse gas inventory and transparency framework
- Biennial Transparency Reports
- GHG inventories
- Progress on national reduction targets
- 3 Introduction and use of climate finance
- Programme loans and the Green Climate Fund
- Combination of financial and technical cooperation support



Approach 1: Promote implementation of the Paris Agreement

Promote implementation of the Paris Agreement

Specific Efforts

- Support for the development and implementation of plans
- Strengthen the greenhouse gas inventory and transparency framework
- Introduction and use of climate finance



[Grant] Project for Construction of the Pacific Climate Change Center [Technical Cooperation] Project for Capacity Building on Climate Resilience in the Pacific (Samoa)



[Technical Cooperation] Project for capacity development to establish a national GHG inventory cycle of continuous improvement (Mongolia)





Support for Planning and Implementation of the Nationally Determined Contributions in Vietnam



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How to address challenges? : Approach 2



Definition

JICA's Co-benefit of climate change refer to:

Measures that support both Climate Change and Development to realise **Climate Resilient and Sustainable** Development. To achieve this, adaptation and mitigation measures are considered the main pillars to minimize the climate change risks, and at the same time pursuing maximum consideration to the natural environment, biodiversity, etc., in order to maximise synergies and minimise potential trade-offs with Sustainable Development.



JICA Global Agenda: Approach 2

Approach

2

Co-benefits of climate change

Mitigation

Greenhouse gas emissions reduction and enhancement of absorption



▶ Energy

Sustainable use of stable and affordable energy (Transmission and distribution networks, renewable energy, energy conservation)

- ► Urban development, transportation and traffic
- Low-carbon and environmentally friendly cities (Public transportation systems, comprehensive services from planning to infrastructure development)
- ► Conservation of forests and other natural environments Biodiversity conservation and prevention of desertification (Conservation of the natural environment and forests)



Approach 2: Co-benefits of Climate Change

(Mitigation)

• Clean energy, transportation and building low-emission, climate resilient infrastructures will have a significant effect on climate change

Specific Efforts

- Improving energy efficiency (power generation, power loss reduction, energy conservation)
- Development and use of renewable energy sources
- Expansion of public transportation
- Support for cities to develop and implement plans to achieve carbon neutrality



{Loans} Delhi Mass Rapid Transport System Project in India



[Loans] Kampala Flyover Construction and Road Upgrading Project (Uganda)





[Loans] Olkania V Geothermal Power Plant (Kenya)



JICA Global Agenda: Approach 2

Approach

2

Co-benefits of climate change

Adaptation





Examples for this approach

▶ Disaster risk management

Flood risk assessment based on climate change impact projections

▶ Water resource management

Planning for comprehensive water resource management based on climate risk

- Groundwater conservation
- Drought-resilient water supply system
- Agriculture
- •Participatory Irrigation Management
- •Diversifying livelihood options through multi-crop cultivation and multiple management
- Introducing agricultural insurance



Approach 2: Co-benefits of Climate Change

(Adaptation)

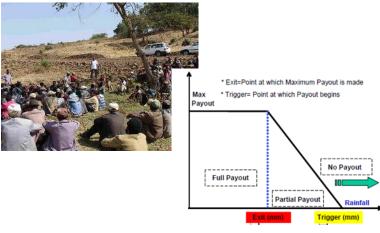
Assessment of climate risks and enhancement of adaptation measures

Specific Efforts

- Capacity building and facility development for
 - > Climate risk assessment
 - Prediction and early warning
 - Rapid response preparedness
- Proactive investments in
 - Climate risk prevention and reduction
 - Infrastructure development
 - Resilience contributing to Build Back Better
- Develop risk financing



(Grant) Improvement of meteorological radar system (Mauritius)



[Technical Cooperation] Pilot project of weather index-based crop insurance promotion (Ethiopia)



[Grant] Project for Reconstruction on Nippon Causeway on Tarawa to Adapt Climate Change (Kiribati)



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Good practice for partnership with national and sub-national actors Comprehensive Support to Low-Carbon and Build Climate-Resilient City

Policy framework



Bangkok Master Plan on Climate Change (2015)

- The MP aims to reduce the amount of GHG emissions by 13.57% by 2020, compared to the BAU scenario in the 4 sectors (Transportation, Energy, Waste and Wastewater, and Green Urban Planning).
- Established the strategy office for climate change.

Strengthening the organization to implement the MP

Supporting to monitor and evaluate the progress of the MP

Promoting to implement the mitigation plan defined in the MP

Supporting to formulate the new MP of BMA

Scientific Data

ADAP-T: Collaborative research to identify appropriate technologies and measures for adaptation strategies, contributing to the National Adaptation Plan (NAP) process.

Infrastructure

Urban railways & Smart Transport Technology (next slide)

Capacity building

Establishment of Climate Change International Technical and Training Center (CITC)

A one-stop technical training center and network hub, offering a variety of training courses on climate change



Southeast Asian countries

&

Thailand

Low-Carbon and Climate-Resilient City



Good practice

Comprehensive Support to Low-Carbon and Build Climate-Resilient City

Urban railways

Blue Line

- Opened in 2004
- Total Project Cost: 358 Billion JPY
- ODA Loan Amount: 222 Billion JPY
- · Civil Work, Depot, Track by ODA Loan
- E&M, O&M by Private Investment

Purple Line

- Opened in Aug 2016
- Total Project Cost: 210 Billion JPY
- ODA Loan Amount: 79 Billion JPY
- Civil Work, Depot, Track by ODA Loan
- E&M, O&M by Private Investment

Red Line

- Under construction (to be opened in Nov 2021)
- Total Project Cost: 332 Billion JPY
- ODA Loan Amount: 268 Billion JPY
- Civil Work, Depot, Track, E&M by ODA Loan





Smart Transport Technology

The Project of Smart Transport Strategy for Thailand 4.0

Background

- Traffic congestion, air pollution and GHG emission in Bangkok
- Announcement of Thailand 4.0

Technologies

- Proposal of Smart mobility strategic integration method
- Implementation of Smart
 Transport System (Sukhumvit Model)

Traffic congestion in Bangkok



Expected outcome

By implementing the Smart mobility strategic integration method,

- traffic congestion will be resolved
- Quality of Life will be enhanced (with new travel behaviors and life styles)

Smart City where QOL is enhanced

