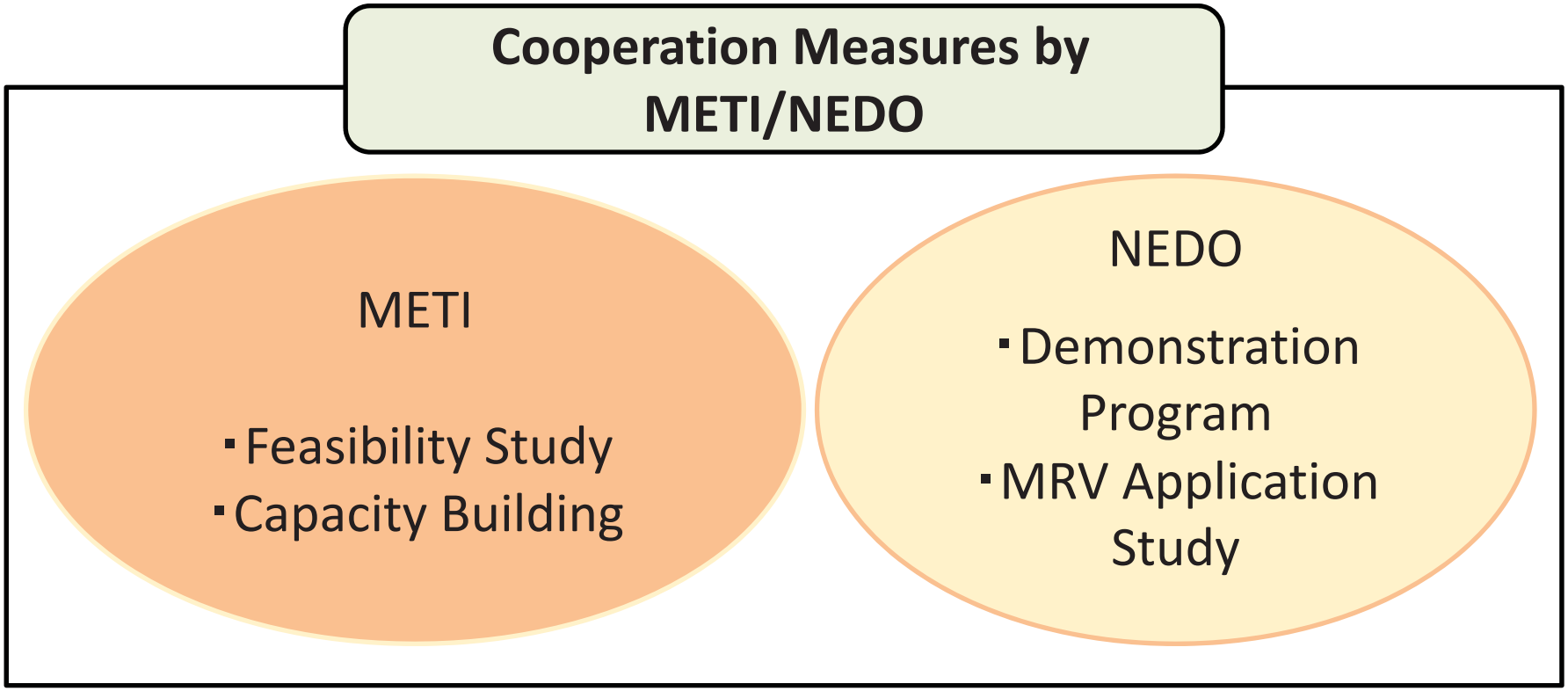
METI
Ministry of Economy, Trade and Industry

January 2020

METI's cooperation for GHG emission reduction

Global Environment Partnership Office
Ministry of Economy, Trade and Industry

Roles of METI and NEDO

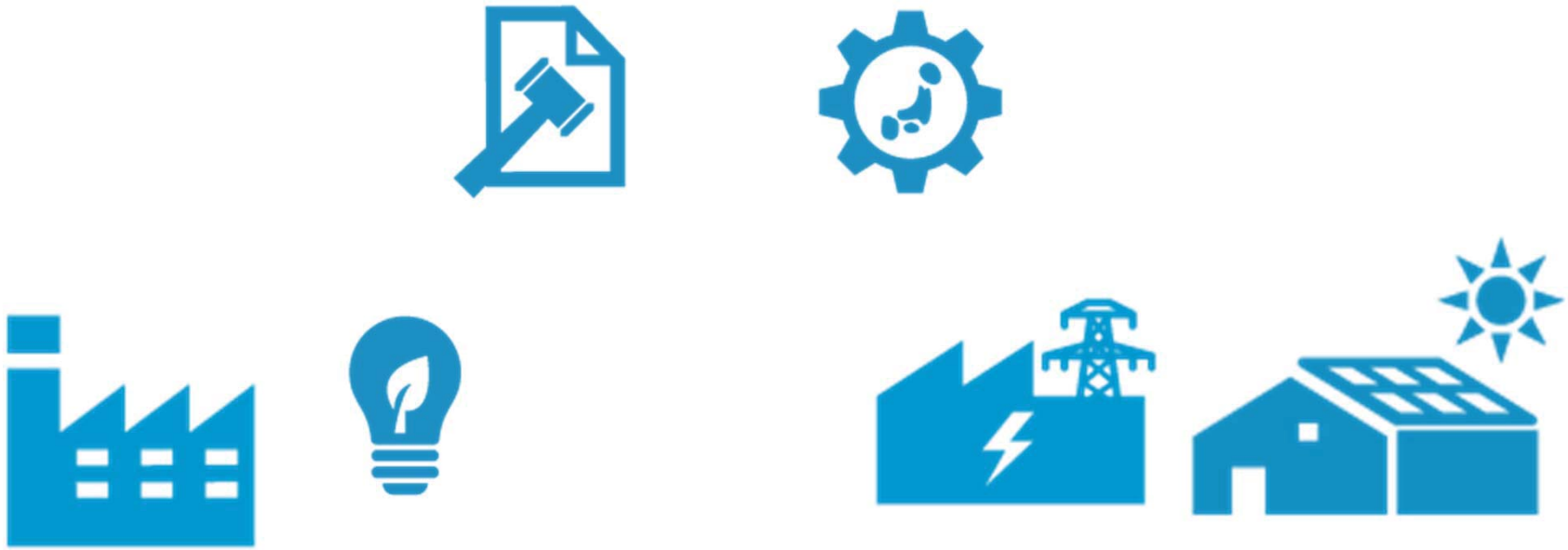


- METI conducts feasibility study and capacity building, with emphasis on policy recommendations to partner countries.
- NEDO conducts demonstration program and MRV application study, with particular focus on advanced technologies to be demonstrated.

Objectives of Feasibility Study by METI - 1

(1) To make policy recommendations to partner countries to promote GHG emission reduction.

(2) To propose project plans for disseminating low-carbon technologies and products, in combination with the policy recommendations



Objectives of Feasibility Study by METI - 2

Policy recommendations to partner countries means….

Recommendations on policy tools to be established or improved in partner countries in relation to advanced low-carbon technologies, products and services

Examples of combination of technology to be introduced and policy tool to be established in the following areas:

I. Energy efficiency in transport sector- Energy efficiency standards and labelling

II. High efficiency home appliances - Energy efficiency standards and labelling

III. Renewable energy – e.g. DR(Demand Response), EMS(Energy Management System), ESS(Energy Storage System)

Feasibility Study Selection Criteria (Excerpts)

- Will the study contribute to the development of a project which utilizes advanced low-carbon technologies and widely disseminates them?
- Are the Government of partner country and the relevant stakeholders including companies willing to cooperate with the study proponent for smooth implementation of the study?
- Will the study result in a project which contributes to i) GHG emission reductions, ii) improved environment, iii) dissemination and promotion of environment- and energy-related technologies, and iv) improvement of energy efficiency, in the partner country?
- Is the study backed up by clear strategy to mitigate risks and costs associated with the project investment and competitiveness issues?

Capacity Building Program by METI

Objective

Improving understanding on solution of GHG emission reduction

Target

Government officials, companies, research institutes, etc.

Program description

Workshops/Seminars, Sight visits, etc.

Benefits

- Through workshops/seminars, Japan can introduce solutions for problems which countries face when disseminating low carbon technologies.
- Through sight visits, the partner country can deepen their understandings by directly seeing Japan's technologies.

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Thank you.

January, 2020

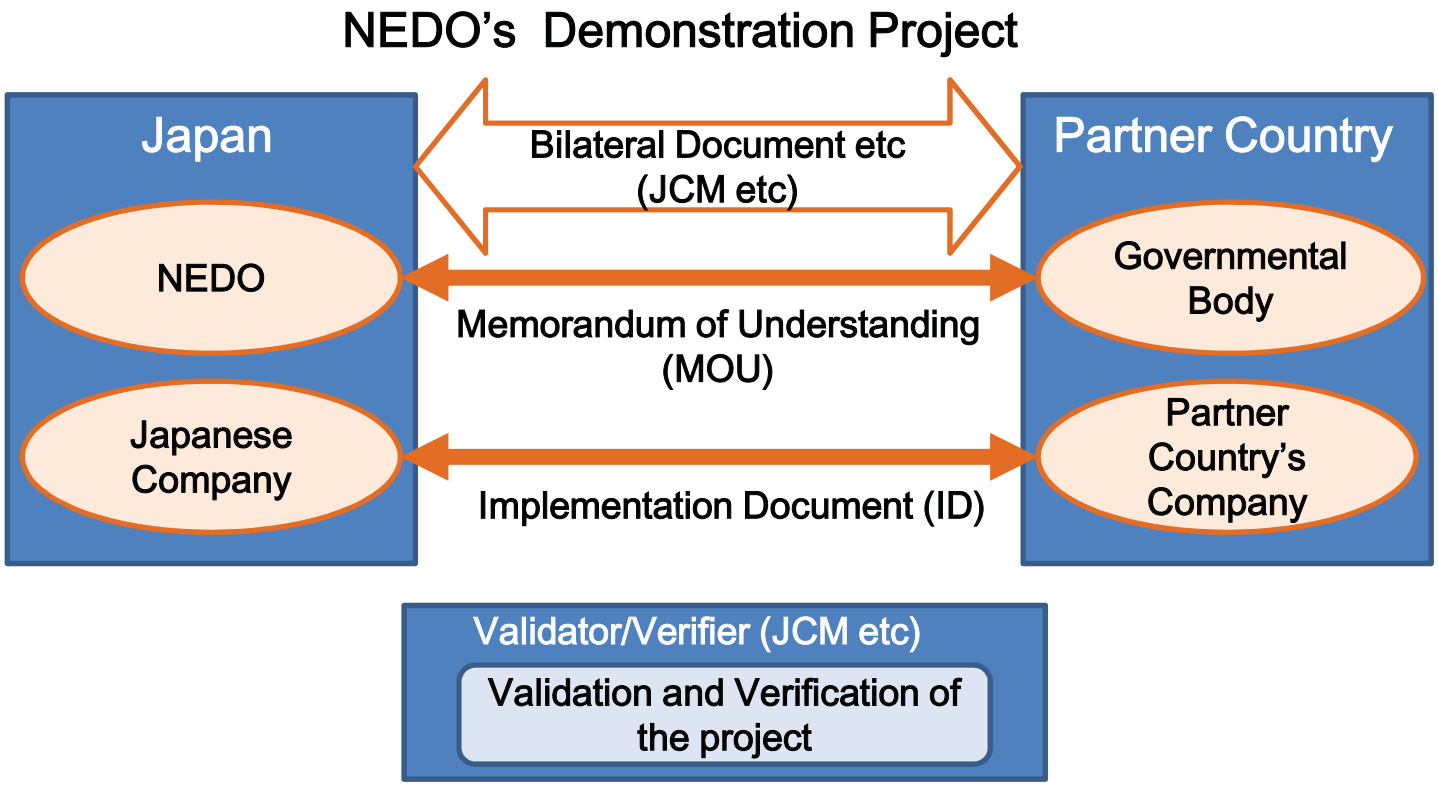
Global Environment Partnership Office,
Ministry of Economy, Trade and Industry(METI)

Recent Development of METI/NEDO's Low Carbon Technology Promotion Scheme

Global Environment Technology Promotion Division

International Affairs Department, NEDO

Outline of Low Carbon Demonstration Program



NEDO establishes MOU with ministry / agency of the partner country

- To develop a better communication channel between project participants
- To coordinate with related ministries to conduct demonstration project
- To provide solutions when any trouble occurs during demonstration period

Benefits of Low Carbon Demonstration Program

Find and realize the solution through low-carbon technologies
-Technical Solution-

- To find and realize the technical solution of the problem in efficient use of energy such as optimization of plant operation, stability of the grid against large scale of renewable energy penetration, etc. with reducing the risk of first-adapting advanced technology
- To acquire know-how

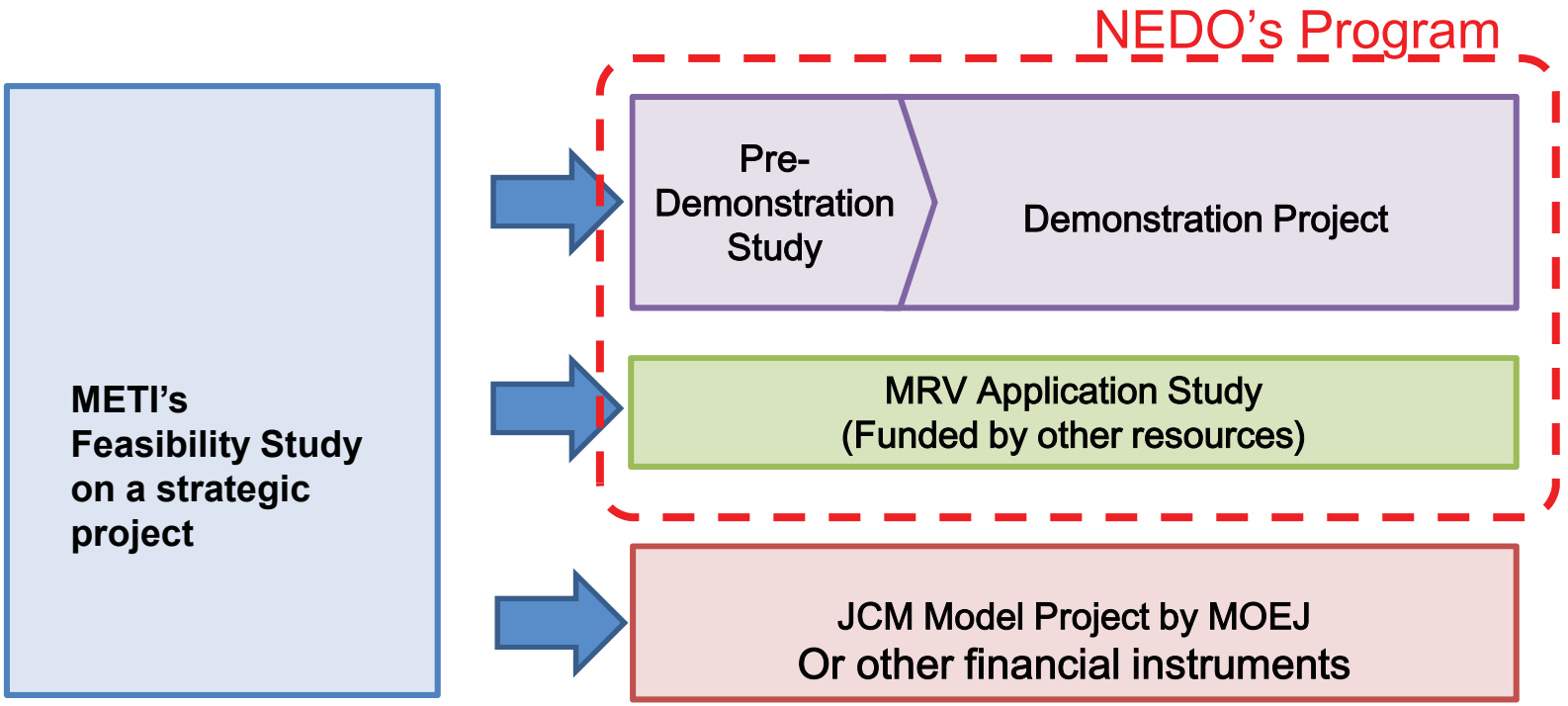
Implement the project smoothly and foster
-Project Formation-

- To provide solutions of any troubles in project implementation during a project period
- To promote the diffusion of the technologies
- To contribute to the development of public policies against climate change challenges

Confirm the quantitative effect of GHG reduction
-JCM Utilization-

- To gain support for the process of JCM
- To be verified the quantitative effect of GHG emission reduction

Basic Framework of METI/NEDO's Program



In order to develop the Low Carbon Growth Partnership (JCM)

- Enhancing more mitigation action initiated by private investment
- Focusing low carbon technologies that are necessary to develop and optimize for the partner country in order to reduce the technical risk and to realize the large scale and /or broader deployment in accordance with economic development
- Visualizing and verifying contribution of more mitigation action
- Close linkage to the government's policy and/or official program in the Partner's Country

Electrification of communities using Ultra Low Head Micro Hydro Power Generation system

In this project, we evaluated Ultra Low Head Micro Hydro Power system (ULH-MHP), which can generate at low head around 1m to 3m and small canals. This technology is “state-of-arts” technology from Japan and enhance the possibility of hydro power in irrigation canals.

Partners

Republic of Kenya

-Steering Committee of ULH-MHP
-NIB (National Irrigation Board)
-Kiuria Village
-Ministry of Environment and Forestry
-Ministry of Energy

Site

ULH-MHP was installed at Kirinyaga county, 120km from Nairobi.

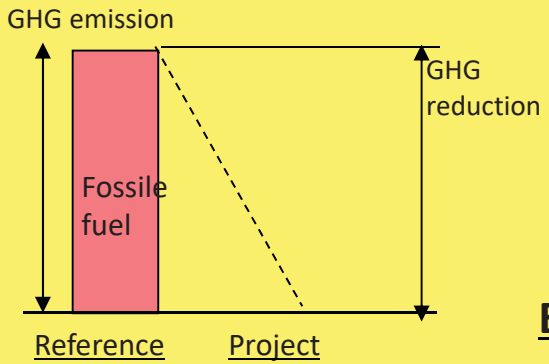
When this project started, Kirinyaga county was not connected to the grid.

Estimated Reduction amount

Expected reduction rate; 82.6t-CO2/Year(Assumption)

- Reference emission is Power generation by fossil fuel
- Reference emission (Assumption)：82.6t-CO2/Year

Current (Reference scenario)



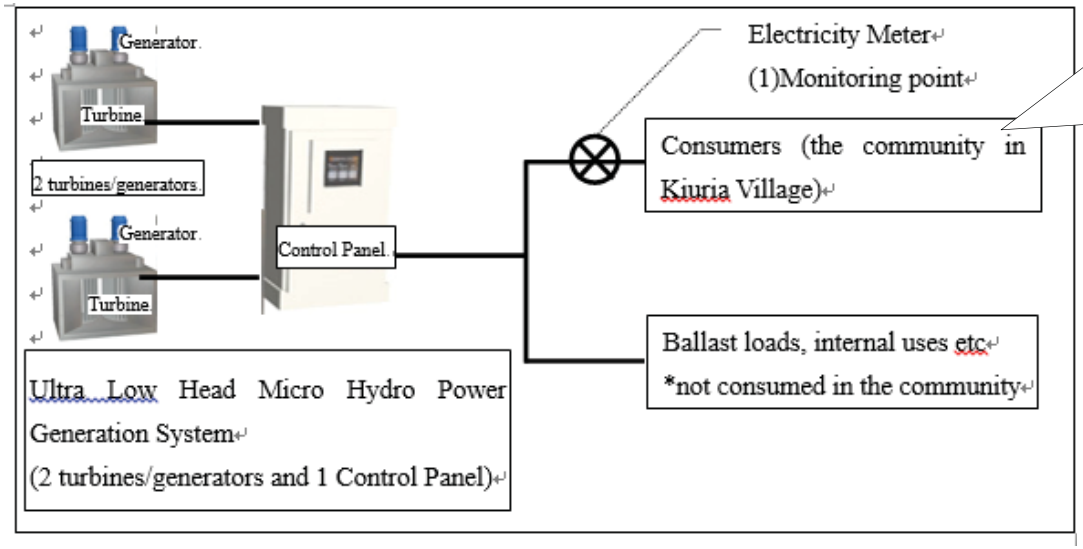
- After implementation of ULH-MHP, GHG emission will be 0.
- Amount of GHG emission by reference will be GHG reduction.

Emission reductions by project

[Site Detail]

- 2 systems of ULH-MHP were installed by cascading at the water in canal.
- The electricity loads which consume electricity from ULH-MHP were procured by community.

【Introduced System】



[Electricity Loads]

- Beauty Saloon
- Refrigerator
- Workshop (welding, grinding etc.)
- Lighting etc.

METI/NEDO would like to co-operate with you under the low carbon development partnership!

http://www.nedo.go.jp/english/index.html

askJCM@ml.nedo.go.jp