

# NEDO's Activities Promoting Renewable Energy and Energy Efficient Technologies

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### **NEDO Profile and Activities**



Ministry of Economy, Trade and Industry (METI)

Council for Science and Technology Policy

Budget: US\$1.5 billion (\$1 = \forall 80) Number of personnel: Approx. 1,000



Coordination with policy making authorities



Domestic activity: Advanced technology development through R&D project funding in all industry areas

Overseas activity: Demonstration project for Japanese technology in the energy and water areas

### History

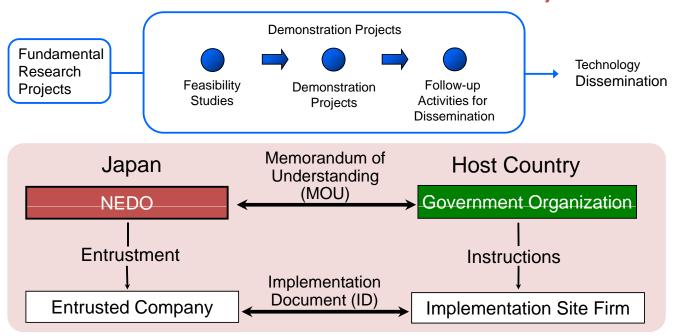
Oct. 1980: Established as the "New Energy Development Organization"

Oct. 1988: Activities expanded to include industrial technology R&D; name changed

to the "New Energy and Industrial Technology Development Organization"

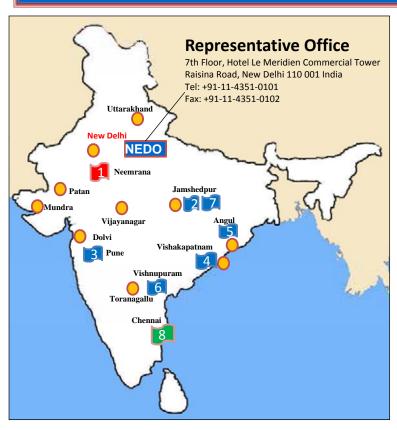
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## Framework for International Demonstration Projects



Host country consent to make ongoing efforts to disseminate the technology in the host country is required.

## **NEDO Activities in India**



### <u>Demonstration Project for Renewable</u> <u>Energy</u>

Microgrid System Using Large-scale PV Power Generation

### <u>Demonstration Projects</u> for Energy Efficiency

As of June 2012 Completed

- Increasing the Efficient Use of Energy Using a Coke Dry Quenching System
- Converting a Diesel Generator to Dual-fuel Operation
- 4 Sinter Cooler Waste Heat Recovery
- Highly Efficient Coal Preparation Technology
- Waste Heat Recovery System of Cement Plant
- Utilization of Sensible Heat from Blast Furnace Hot Stove Waste Gas

### **Demonstration Project for Capacity Building**

Regional Energy Efficiency Centre

#### Bilateral Offset Credit Mechanism FS

Steel (3), Power plants (3), PV (1), Hydropower plants (1), Data centre (1): **9 projects (10 sites)** 

## The Model Project for a Microgrid System Using Large-scale PV Power Generation and Related Technologies



### **Project Overview**

The objective of this project is to contribute to efficient use of energy and protection of the environment in India by installing a large-scale (5 MW) PV power generation station and advanced control system for diesel generators at Neemrana Industrial Park and demonstrating a microgrid system using diesel power generators.

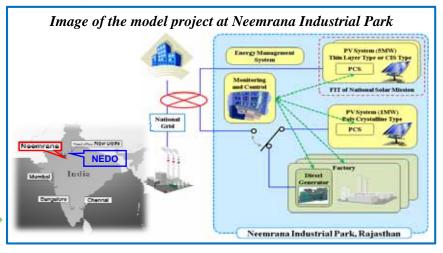
Entrusted Companies: Hitachi, Ltd. Itochu Corp.

### **Project Term**

FY2012 - FY2014

Demonstration Dissemination

Implementation site	Neemrana Industrial Park
Counterparts	Department of Economic Affairs/Ministry of Finance Ministry of New & Renewable Energy DMICDC
Alternative energy savings	Approx. 3000 t/yr (Crude oil equivalent)
CO <sub>2</sub> reduction volume	Approx. 8000 t/yr
Estimated budget (NEDO's share)	3.4 billion yen (2.8 billion yen)



# **Energy Conservation: The Model Project for Converting a Diesel Generator to Dual-Fuel**



### **Project Overview**

A diesel engine for power generation was converted to a dual-fuel diesel engine which can be operated using natural gas with a small amount of diesel oil as a pilot fuel.

Companies owning diesel captive power plants in India will now be able to realize a power generation cost reduction through energy alteration and India will be able to achieve a reduction of environmentally unfriendly gas emissions.

Entrusted company: JFE Technos Co., Ltd.

### **Project Term**

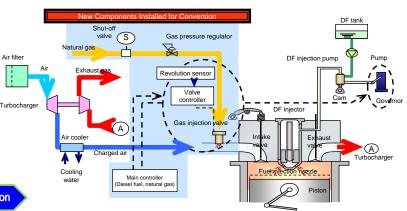
FY2008 - FY2011

FS MOU

Demonstration

Dissemination

Implementation site	Tata Motors, Ltd. (Pune)
Counterpart	Department of Economic Affairs/ Ministry of Finance, Ministry of Power
Energy Conservation Effect	110 t/yr (Crude oil equivalent)
CO <sub>2</sub> reduction volume	Approx. 1,330 t/yr
Estimated Budget	0.3 billion yen
(NEDO's share)	(0.2 billion yen)



The Model Project for Highly Efficient Coal

**Preparation Technology** 

### **Project Overview**

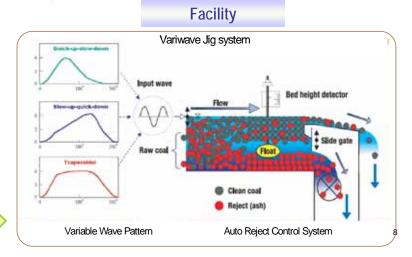
Indian coal tends to be low in sulfur and phosphor content while containing a large amount of ash. The objective of this project is to contribute to resolution of energy and environmental problems caused by coal utilization in India through widespread dissemination of highly efficient coal preparation technology.

### **Project Term**

FY2008 - FY2011

Dissemination

Project site	Utkal B-2 Coal Mine (Orissa, India) Monnet Ispat & Energy, Ltd.
Counterpart	Department of Economic Affairs / Ministry of Finance, Ministry of Coal
Entrusted company	Japan Coal Energy Center Nagata Engineering Co., Ltd.
Estimated Budget (NEDO's share)	1.7 billion yen (0.55 billion yen)





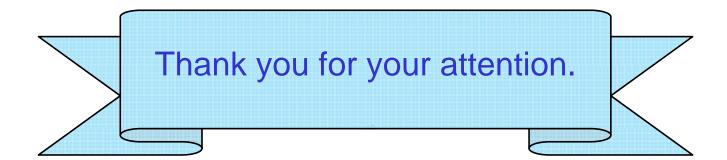
## Dissemination of Green Technologies for Environmental Improvement in India

NEDO is helping to introduce Japan's leading-edge technologies to India and is continuing efforts to disseminate such technologies.

Policy support is indispensable for implementation of demonstration projects and the dissemination of green technologies.

- Generous feed-in tariff scheme for renewable energy electricity
- Subsidies for green technology installation
- PR activities for green technologies
- Development of adequate environmental regulations





More information can be found on NEDO's website at

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