Expression of Interest (EOIs)
for
Readiness to implement projects with dual outputs: GHG Emission Reduction and Air Pollution Reduction
(potential of financial support for select projects)

Invited by

National Productivity Council

National Productivity Council
5-6 Institutional area, Lodi Road
New Delhi – 110 003

About the Project (1/2)

- NPC has undertaken a task sponsored by UNEP under **"Asia Pacific Clean Air Partnership (APCAP)"** in Asia and Pacific.

- The objectives of the task are:

  1) To explore and identify Industry-specific PROJECTS which can reduce GHG emissions and air pollution.

  2) To identify sectoral interventions addressing air pollution with potential co-benefits for climate action.

Inviting Expression of Interest

- Expression of interest is invited from industries, government organizations, industry associations, institutions etc. having potential project ideas that focus on mitigation of **air pollution** and **GHG emissions**.

- These potential ideas may include technological intervention, R&D measures, process modifications, energy efficiency measures, renewable energy etc.

- An indicative list of project ideas that have been supported under JCM in the recent past in various Asian countries is placed as **Annexure 1**.

(https://www.mofa.go.jp/ic/ch/page1we_000105.html)

•Last Date for receiving expression:5th August 2024

Objective of inviting EOI

i. **Sector specific Innovation and Technological Advancement:** Encouraging different industries to propose ideas promotes innovation and technological advancement leading to the development of new technologies, processes, and solutions that can effectively reduce emissions.

ii. **Diverse Perspectives:** Industries across various sectors may have unique insights and approaches to emissions reduction. The expression received shall be collated to have a diverse range of perspectives, leading to a broader pool of potential solutions for mitigating GHG emissions.

iii. **Customized Solutions:** Different industries face different challenges when it comes to emissions reduction. The EOIs shall enable us identify and prioritize solutions that are tailored to the specific needs and circumstances of concerned industry.

iv. **Collaboration and Partnerships:** Encouraging participation from various sectors shall foster collaboration and partnerships. This can involve collaboration between industries, research institutions, government agencies, and other stakeholders, leading to more comprehensive and effective solutions.

Applicability of EOI

- Applicable to all industrial sectors (eg. cement, iron & steel, fertilizer, glass, pulp & paper, aluminum, textile, chemical, fertilizer, metal, mining, pharma, TPP, sugar, automobile etc.) including SMEs

- EOIs may include any new project ideas, R&D initiative, process modifications, technological interventions, energy efficiency, renewable etc.

Support available under JCM

- Technical and financial assistance towards implementation of the select projects, as and when JCM is signed.

Template for Expression of Interest (EOI) for interested applicants

1	General Information	
a	Name of the entity :	
b	Focus industrial Sector:	
c	Contact Address:	
d	Contact Person with e-mail/phone)	
e	Products manufactured	
2	Project Idea with dual output : Air Pollution Reduction and GHG Emission Reduction	
3	Details of project idea including activities to be taken up with total duration for implementation (R&D initiative/process modification/technological intervention/ renewable energy application etc.)	
4	Envisaged reduction in GHG emissions and air pollution	
5	Readiness to implement the project with financial support as and when JCM is signed between India & Japan (Yes / No)	

Queries & Assistance

- EOIs as per the format provided may be emailed to:

  nikita@npcindia.gov.in

  For any clarifications of the EoI, please write to us or contact:

  011 -24607341/313/310

Annexure 1

Reference Projects Supported Under Joint Crediting Mechanism (JCM) in Various Countries (1/5)

Saudi Arabia

❖Introduction of High Efficiency Electrolyzer in Chlor-Alkali Production Plant.

❖Introduction of High Efficiency Electrolyzer in Chlor-Alkali Processing Plant.

Costa Rica

❖ Introduction of High Efficiency Centrifugal Chiller and Electric Heat Pump Type Water Heater in Hotel.

❖ 5MW Solar Power Project in Belen.

❖Energy Saving by Introduction of High Efficiency Centrifugal Chiller and Installation of Electric Heat Pump Type Water Heater for Hot Water Supply Systems.

❖Installation of Solar PV System.

Maldives

❖Introduction of Smart Mini Grid System at Addu City.

❖Installation of Energy Management System and Battery Energy Storage System (EMS-BESS) with Solar PV System.

❖Solar Power on Rooftop of School Building Project.

Ethiopia

❖Introduction of Biomass Combined Heat and Power Plant

❖Electrification by photovoltaic power generation in Ethiopia.

❖Electrification of communities using Micro hydropower generation

Reference Projects Supported Under Joint Crediting Mechanism (JCM) in Various Countries (2/5)

Indonesia

❖Rehabilitation Project of Power Generation System at Karai 7 Mini Hydro Power Plant .

❖Energy Saving by Introducing High Efficiency Autoclave to Infusion Manufacturing Factory.

❖4.2MW Rooftop Solar Power Project to Pharmaceutical Factories, Vehicles Dealers, and Timber Factories.

❖Introduction of CNG-Diesel Hybrid Equipment to Public Bus in Semarang .

❖Installation of Aerator for Industrial Wastewater Treatment Facility, in Rubber Factory .

❖Installation of all-electric injection molding machine with power regeneration to plastics & packaging manufacturing plants.

❖Installation of closed drain recovery system and utilization for boiler feed water (Indonesia)

❖Introduction of Gas Co-generation System and Absorption Chiller to Motor Parts Factory .

❖10MW Mini Hydro Power Plant Project in North Sumatra.

❖Electricity generation by a biomass power plant.

❖ Energy saving by introducing waste hot water recovery system to autoclave in infusion manufacturing process line.

❖Introduction of LED Lighting to UNIQLO Sales Stores

❖Energy Saving by Introducing High Efficiency Autoclave to Infusion Manufacturing Factory.

Reference Projects Supported Under Joint Crediting Mechanism (JCM) in Various Countries (3/5)

Viet Nam

❖Introduction of Biomass Boiler and Introduction of Biomass Cogeneration System

❖Introduction of HFCs destruction facilities in Viet Nam.

❖Modal shift from truck to cargo ship with freshness preservation reefer container

❖106MW Solar Power Project in An Giang Province and Introduction of Amorphous High Efficiency Transformers in Northern, Central and Southern Power Grids II

❖Installation of High Efficiency Kiln in Sanitary Ware Manufacturing Factory

❖Energy Saving in Factories with Air-Conditioning Control System

❖Installation of Energy Saving Equipment in Lens Factory

❖Introduction of Non-Inverter Type High Efficiency Centrifugal Chiller, Energy Saving by Introduction of High Efficiency Boiler,.

❖Energy Saving by Introduction of High-efficiency Inverter Type Multi- Stage Oil-Free Air Compressor and Energy Saving by Introduction of High Efficiency Screw Chiller(s)

❖Installation of compressor control system(s) for split type air conditioner(s)

❖Introduction of high-efficient wire stranding machines to the factory of YAZAKI EDS VIETNAM CO., LTD.

❖Introduction of Amorphous High Efficiency Transformers in Northern, Central and Southern Power Grids

❖Introduction of High Efficiency Water Pumps in Da Nang City

Reference Projects Supported Under Joint Crediting Mechanism (JCM) in Various Countries (4/5)

Thailand

❖Low-carbon Operation for Power Grid Utilizing Online Voltage-var(Q) Optimal Control (OPENVQ) with ICT

❖Introduction of digital solution (Al analysis, etc.) to improve boiler combustion efficiency Installation of gas engine cogeneration system with absorption chiller to supply electricity, heating energy and cooling energy

❖Waste heat recovery and utilization by installing heat exchanger to heat recovery steam generator of gas co-generation system

❖ Introduction of Biomass Boiler

❖ Energy Saving by Introduction of High Efficiency Inverter Type Centrifugal Chiller, Ver 02.0 (revisions to TH AM003),

❖Energy Saving by Introduction of High Efficiency Non-Inverter Type Centrifugal Chiller, Ver 03.0 (revisions to TH AM005)

❖ Introduction of 3.4 MW Rooftop Solar Power System in Technical Center and Office Buildings

❖Introduction of 0.8MW Solar Power System and High Efficiency. Refrigerator to Food Factory and Introduction of High Efficiency lon Exchange Membrane Electrolyzer in Caustic Soda Production Plant

❖Energy saving by installation of evaporator with mechanical vapor recompression and high-efficiency chiller.

❖Low-carbon Operation for Power Grid Utilizing Online Voltage-var(Q) Optimal Control with ICT

❖Energy Saving by Introduction of High Efficiency Chilled Water Supply System in Milk Factory and Installation of Energy-efficient Refrigerators Using Natural Refrigerant at Distribution Centre of Better Foods Co., Ltd.

❖Introduction of High-efficiency Boiler System to Rubber Belt Plant

❖Introduction of 0.95 MW Rooftop Solar Power System in Cigarette Lighter Factory and Introduction of 0.97 MW Rooftop Solar Power System for Fishery Net Factory

Reference Projects Supported Under Joint Crediting Mechanism (JCM) in Various Countries (5/5)

Myanmar

❖Introduction of Energy Efficient Refrigeration System in Logistics Center.

❖Introduction of cascade cooling system and temperature stratification tank at the beer factory and Introduction of heat recovery system and high efficiency once-through boiler at the beer factory Power Generation by Waste Heat Recovery in Cement Industry (Myanmar).

❖Installation of Energy-efficient Refrigerators Using Natural Refrigerant at Cold Storage.

❖Energy Saving by Introduction of High Efficiency Once-through Boiler and Installation of rice husk power plant in Ayeyarwady region.

❖Yangon Waste to Energy plant by introducing power generation and avoidance of landfill gas emissions through combustion of municipal solid waste (MSW).

❖Power generation and avoidance of landfill gas emissions through combustion of municipal solid waste (MSW) .

Bangladesh

❖Installation of energy-saving conductors for transmission lines in the Bangladesh grid .

❖Energy Saving for Air Conditioning & Facility Cooling by High Efficiency Chiller.

❖Energy Saving by Introduction of High Efficiency Centrifugal Chiller.

❖Introduction of PV-diesel Hybrid System at Fastening Manufacturing Plant.

❖Installation of High Efficiency Loom at Weaving Factory.

❖Installation of High Efficiency Centrifugal Chiller for Air Conditioning System in Clothing Tag Factory.

❖Plant Air Conditioning and Production Equipment Cooling Using Energy-saving Centrifugal Type Refrigerators (Dhaka Suburbs)


Thank you