



Webinar for JCM in Africa

Cases of JCM Projects & Key Points for Utilizing Financing Programme for JCM Model Project in Africa

15 September 2022

Pacific Consultants Co., Ltd.



P R O D U C I N G
T H E F U T U R E

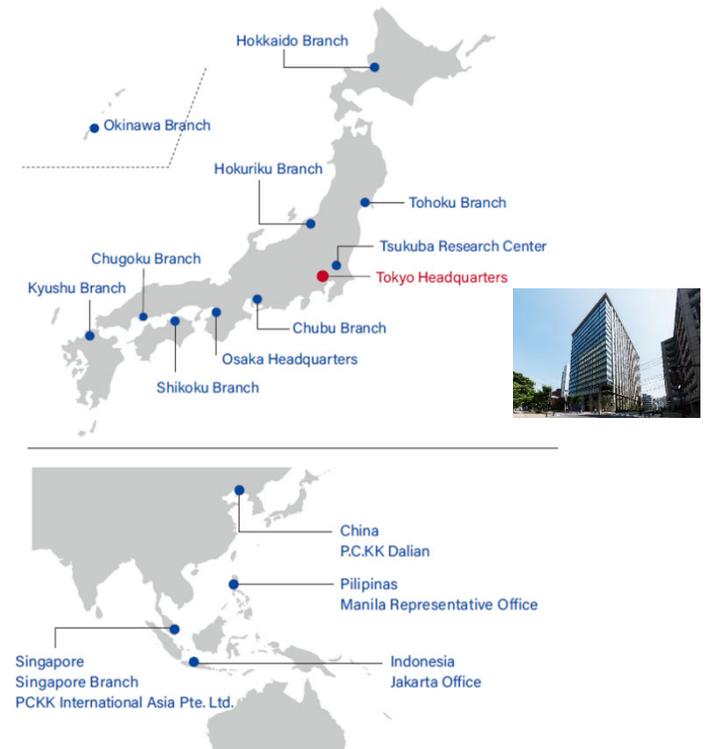
Company profile

Who we are?

PACIFIC CONSULTANTS CO., LTD.

- ✓ Established: 4th September 1951
- ✓ 2,112 employees (as of 2021.10.01)
- ✓ Civil engineering consultants

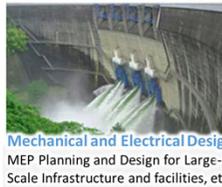
Domestic and Overseas Business Locations



Environmental Management
Riverine and Coastal Management, Dams, Ports, Natural Disasters, etc.



Transportation Infrastructure
Roadways, Railways, Airports, Tunnels, Bridges, Structures, etc.



Mechanical and Electrical Design
MEP Planning and Design for Large-Scale Infrastructure and facilities, etc.



Public Sector Management
PPP, PFI, Bidding Support, Public Asset Management, etc.



Information System
GIS and Remote-Sensing, ITS, e-Government, etc.



Urban Development
Transportation Planning, Urban Planning and Design, etc.



Environment and Energy
Water and Sewage, Renewable Energy, Waste Disposal, etc.



Geotechnical
Slope Stabilization, Soil Liquefaction, Soil Analysis, etc.



Overseas Projects
ODA, Foreign Government, Private-Sector Clients, etc.



New Project Development
Smart Community, Wellness, Regional Energy Management, etc.



Research and Development >

Company profile

Experiences on JCM Financing Programme



Introduction of Solar PV System at Salt Factory (Kenya)

Solar Power on Rooftop of School Building Project (Maldives)



Small Scale Solar Power Plants for Commercial Facilities in Island States (Palau)

JCM Model Project Formation Study in Kenya, Ethiopia, and Africa

Our Mission of the Project Formation Study

Commissioned by Ministry of the Environment Japan :

- To **identify possible JCM Model projects,**
- To **advise** to project owners with necessary information to develop proposals for JCM Financing Programme,
- To **assist** the participating companies of JCM project candidates to **develop proposal for JCM Financing Programme,**

JCM Financing Programme

How can I use this grant?

Budget for projects starting from FY 2022 is 17.1 billion JPY (approx. USD 158 million) in total by FY 2024 (1USD = 108 JPY)

Finance part of an investment cost (up to half)

Government of Japan

*Includes collaboration with projects supported by JICA and other governmental-affiliated financial institute.

Conduct MRV and expected to deliver JCM credits issued

International consortiums (which include Japanese entities)



- Scope of the financing: facilities, equipment, vehicles, etc. which reduce CO₂ from fossil fuel combustion as well as construction cost for installing those facilities, etc.
- Eligible Projects: starting installation after financing is awarded and finishing installation within three years.

Tips!

- To apply and utilize JCM Model project well, understanding this program is very important
- Pacific Consultants Co.,Ltd. can support the project owner to understand the JCM Financing Programme

JCM Model Projects - Kenya & Ethiopia

Year Selected	Project Title	Applied Technology	Expected GHG Emission Reductions (tCO2/year)	Status
Kenya				
2015	Introduction of Solar PV System at Salt Factory	Solar (991kW)	630	Active Registered Credit issued
2022 New!	Introduction of 3.1MW Rooftop Solar Power System to Food Processing Facilities	Solar (3.1MW)	2,454	Installing
2022 New!	Introduction of 2.3MW Rooftop Solar Power System to Hatchery, Meat Processing and Battery Facilities	Solar+battery (2.3MW)	1,735	Installing
Ethiopia				
2019	120MW Solar Power Project in Metehara, Oromia Region	Solar (120MW)	30,007	Installing

Source: Global Environmental Centre Foundation Project search
<https://gec.jp/jcm/projects/>

Highlights before application

- start making proposal 3 months in advance -

- Proposal for a concrete project started in 6-9 months
 - Installation starts within 6 - 9 months after application
 - Quotation aggregated by equipment & installation cost
 - Financial support calculated on emission reduction
 - ➔ = either smaller of 'tCO2' for durable years of equipment
or 50%* of financial support
 - JCM Financing Programme ≠ project finance

- Loans & finances other than JCM financing programme
 - ➔ • Loans arrangement to cover Capex before application
 - Financial close right before/after GEC's official selection notice followed by contract with GEC

- Merits and demerits of utilizing the JCM
 - Internal evaluation of feasibility, cost benefit & risks
 - ➔ Time required for internal decision-making

*Maximum percentage of financial support shall be determined according to the number of already selected project(s) using a similar technology in each partner country.

Steps for Developing Application - For utility scale power project -

	Subjects	Suggestions
Pre-requisite	<p>Permissions & Licenses</p> <ul style="list-style-type: none"> ❑ Regulatory authority provides clear steps <p>Government guarantees</p> <ul style="list-style-type: none"> ❑ Lender of the IPP project may require a government guarantee & currency conversion Guarantee 	<ul style="list-style-type: none"> ✓ Follow the EIA recommendations ✓ Study governance of Regulatory Authority <p>Check at the outset for</p> <ul style="list-style-type: none"> ✓ Government guarantees for the utility's payments & currency conversion of revenue
Step 1	<p>Calculations of CO2 emission reduction and financial support & feasibility</p> <ul style="list-style-type: none"> ❑ Quote & layout developed, spec decided ❑ Based on the equipment to be installed, using GEC's templates ❑ Assess economic benefits and risks <p>Permissions & Licenses</p> <ul style="list-style-type: none"> ❑ Obtain 80+% of permissions & licenses before application, ❑ Process may take longer than expected <p>Land leasing</p> <ul style="list-style-type: none"> ❑ Secure land leasing agreement on the site ❑ Secure land use rights of land b'n the site and transmission line 	<ul style="list-style-type: none"> ✓ Calculate emission reduction by concrete number & spec of equipment ✓ Operations for durable years of the equipment is required ✓ Project plan needs to be developed allowing sufficient time to absorb possible changes ✓ Stakeholders need to agree Select land with as few landowners/stakeholders as possible. Approval by State authorities may take time

Steps for Developing Application

- For energy efficient equipment & commercial scale solar-

	Subjects	Suggestions
Factories & farms	<p>Calculations of CO2 emission reduction and financial support & feasibility</p> <ul style="list-style-type: none"> ❑ Spec of new equipment determined ❑ Quote & layout design developed by EPC ❑ Based on the equipment to be installed, calculate emission reduction by template ❑ Assess economic benefits and risks <p>Permissions & Licenses</p> <ul style="list-style-type: none"> ❑ Obtain permissions compliant to building and landscape management standards ❑ Procedures might differ from municipality to municipality. 	<ul style="list-style-type: none"> ✓ Energy consumption data (BAU) obtained for the past 3 years ✓ Conduct feasibility study to determine the spec of equipment & check reductions in energy consumption ✓ Need to confirm the procedures in detail at the local government offices well beforehand.
Others	<ul style="list-style-type: none"> ❑ Lack of foreign currency reserves of the country might affect importation of goods 	<ul style="list-style-type: none"> ✓ Project plan needs to be developed allowing sufficient time to identify possible challenges in foreign currency allocation, customs clearance, etc.

For Enquiries

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Pacific Consultants Co., Ltd.
Project Management and Engineering Dept.
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Thank you so much for
allowing us to make a presentation.

 Pacific Consultants

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