

The JCM experiences and project development support

Aryanie Amellina
Analyst
Climate and Energy Area
Institute for Global Environmental Strategies (IGES)

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The JCM
has been
rapidly
growing

- **17 partner countries**
(Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Indonesia, Mexico, Saudi Arabia, Chile, Myanmar, Thailand, and the Philippines)
- **10,331 JCM credits issued**
(8,279 credits to Japan, 2,052 credits to partner countries)
- **25 registered projects**
(projects that already started monitoring)
- **>100 financially supported Model Projects in the pipeline**
(projects that already approved for funding)
- **50 approved GHG MRV methodologies**

(Source: IGES JCM Database as of 31 January 2018)

Companies and government entities can receive JCM support

JCM aims to address the high initial cost barrier for introducing advanced low-carbon technologies in developing countries:

JCM Model Project

- Finances up to half of initial investment costs to facilitate dissemination of low-carbon technologies.
- For projects that reduce energy-related CO₂ emissions.
- Budget for FY2018: approx. USD 71 million

ADB Japan Fund for JCM (JF JCM)

- Grant for incremental cost of technologies for public and state-owned entities projects.
- Interest subsidy to ADB-financed loans for non-government projects, to private sector borrowers and financial institutions.
- Budget for FY2014-2017: approx. USD 58 million

(Programmes by Ministry of the Environment Japan)

What are the selection criteria?

Proposal assessment criteria are public

Technology superiority and inadequate utilization in Indonesia

Not receiving other financial support/grant from the Government of Japan

Project can collaborate with JICA or other government-affiliated financial institution

Form international consortium (participants from Japan and Indonesia)

(excerpts)

Find Japanese partner:
Use [IGES JCM Matchmaking Platform](#), consult with Indonesia JCM secretariat or OECC
(info@mmechanisms.org)

Robustness of project implementation (40%)

Amount of energy-related CO2 emission reductions of and cost-effectiveness of emission reductions (40%)

Potential of technology dissemination (10%)

Concept and development of JCM methodology (10%)

(excerpts)

Call for Proposal on the GEC website: <http://gec.jp/jcm/kobo/>

More than 100 projects are in the pipeline

Examples:

Energy efficiency	REDD+
Loom	Controlling Slash and burn
Steam boiler	
Burner	Renewable Energy
Electrolysis tank	Solar
LED	Micro hydro
Production line	Biomass
Optimization	Waste
Pump	Waste to Energy
Water heater	
Air-conditioning	Transport
Refrigerating	Digital Tachographs
Transmission/Transformer	
LED Streetlights	
Boiler (heating)	
Smart Grid	

Some projects have received awards



Project in Alfa Midi Indonesia received Minister of Environment Japan's "Commendation for Global Warming Prevention Activity" 2015

MinebeaMitsumi was awarded Cambodian Environment Minister's Prize for its project "High-efficiency LED Streetlight using Wireless Networks"



Examples: advanced low-carbon technologies for energy conservation

JCM Model Project

- Amorphous High Efficiency Transformers in Power Grid (Vietnam and Lao PDR)

Hitachi Metals (Japan) supplies amorphous alloy to be used as core of transformers. THIBIDI (Vietnam) fabricates the transformers. The projects cover >1,000 transformers for Lao and >5,000 transformers for Vietnam.

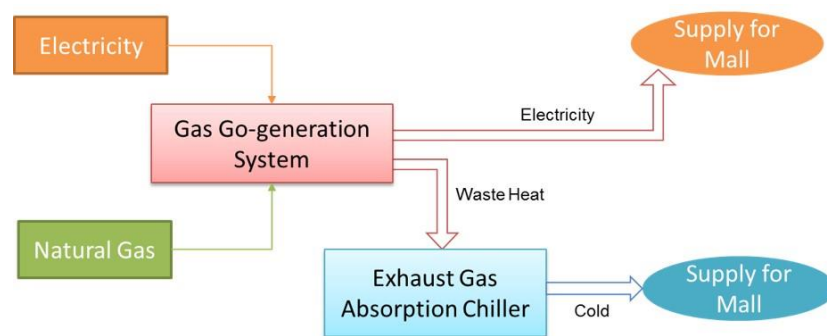
Transformers will reduce no-load losses by transformers by 60%



JCM Model Project

- Co-generation systems combined with efficient chillers (Thailand, Indonesia)

Electricity by gas co-generation system reduces consumption of grid power. Absorption type refrigerating system uses waste heat to generate cool water for air conditioning.

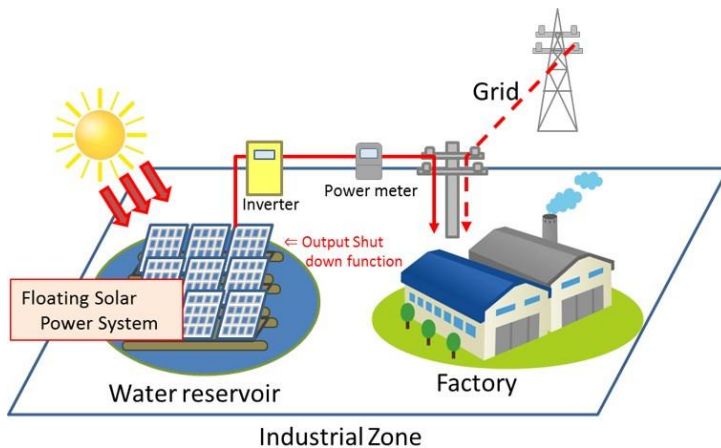


Examples: advanced low-carbon technologies for solar power generation

JCM Model Project

- Floating solar power system
(Thailand, Laos)

For industrial park in Thailand (5 MW),
for grid supply in Laos (14 MW)



JCM Model Project

- Large-scale solar power plants
(Mongolia, Bangladesh, Mexico, etc.)

Mongolia (10 MW, 15 MW),
Bangladesh (50 MW), Mexico (20 MW),
etc.

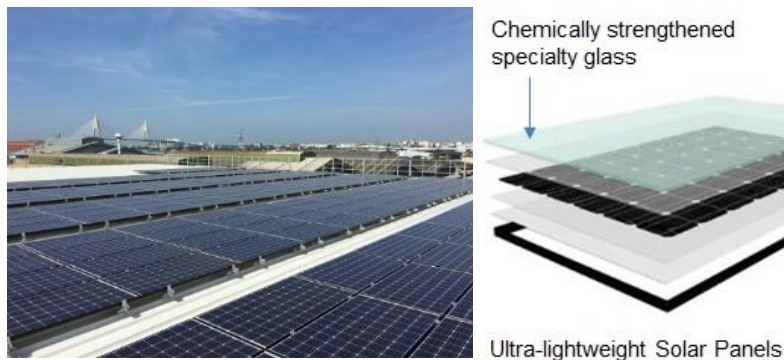


Examples: advanced low-carbon technologies for solar power generation

JCM Model Project

- **1 MW ultra-lightweight solar panels at international school**
(Asian Gateway Corp. and International School Phnom Penh)

Chemically strengthened specialty glass makes the solar panel weigh 50% lighter than conventional type.



JCM Model Project

- **Other rooftop solar power systems at commercial buildings** (Cambodia, Thailand, Indonesia, etc.)

1 MW on shopping mall (Cambodia),
3 MW on factory (Thailand),
0.5 MW (Indonesia), etc.



Examples: advanced low-carbon technologies for waste management

JCM Model Project

- **Waste to Energy Plant**
(Myanmar)

Pilot project conducted by Yangon City for municipal solid waste, at a relatively small capacity (60 t/day)



JCM Model Project

- **Methane gas recovery system**
(Mexico)

4.8 MW power generation by gas engine, using collected methane gas from three landfill sites. Captured methane gas is transported to the gas engine power generation facilities through pipelines and filters.

Examples: advanced low-carbon technologies for water treatment systems

ADB JF JCM

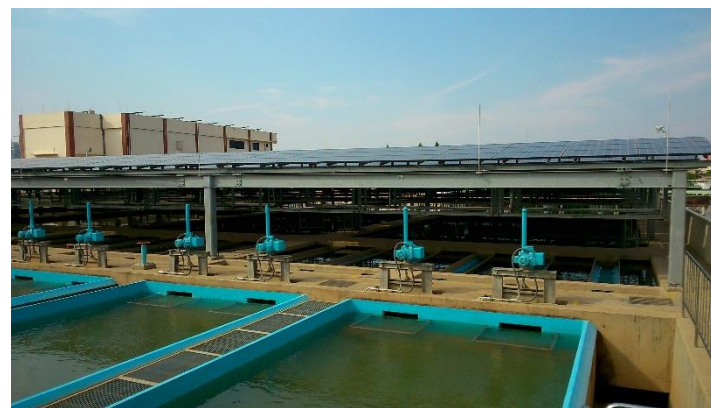
- Energy saving type wastewater treatment system
(Ministry of Industry & Handicrafts and Ministry of Public Works & Transport Cambodia)
 - In four Cambodia provincial cities:
 - new water treatment plants
 - new wastewater treatment plants
 - new distribution networks
 - septage management system
 - expansion of existing systems

Received ADB JF JCM grant (USD 10 million) in addition to ADB loans etc.

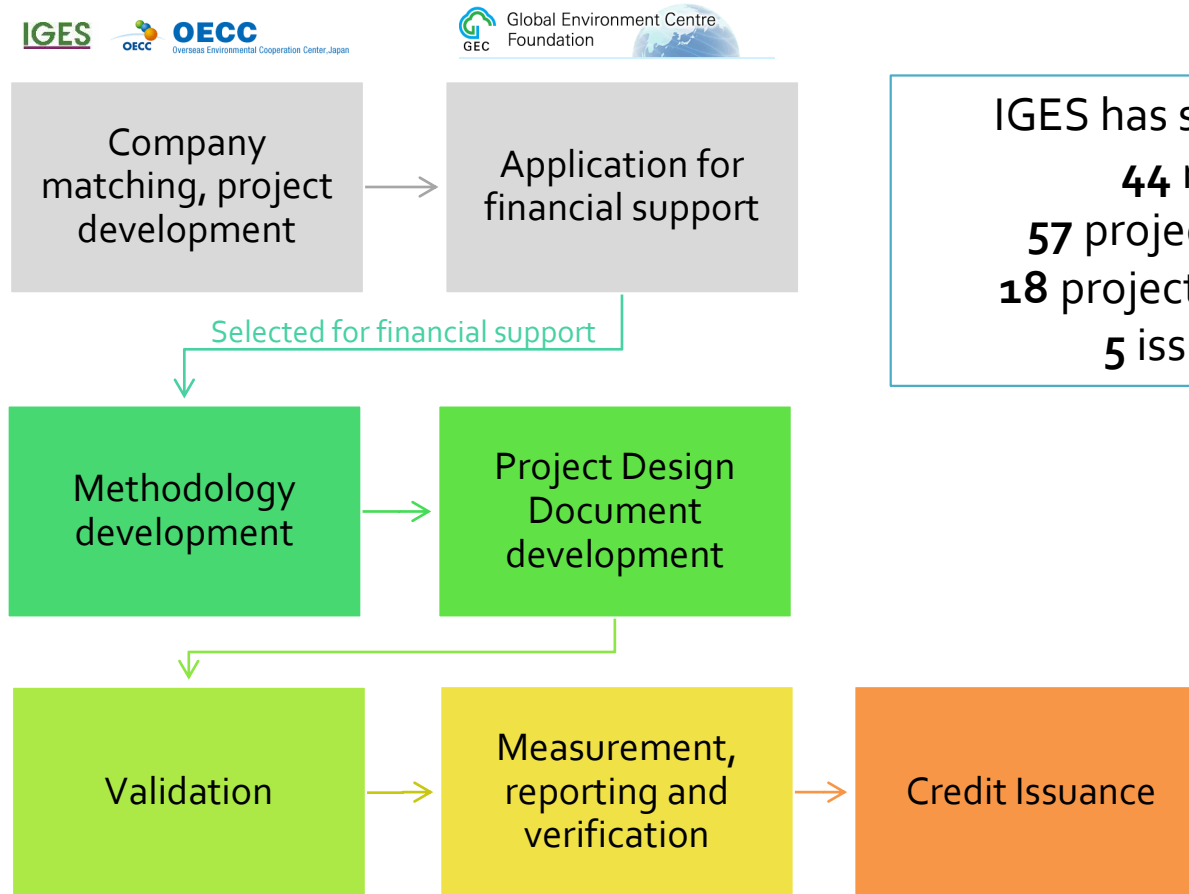
JCM Model Project

- Inverters for water distribution pumps (Phnom Penh Water Supply Authority and Metawater)

Install inverters for existing distribution pumps at municipal water supply system.



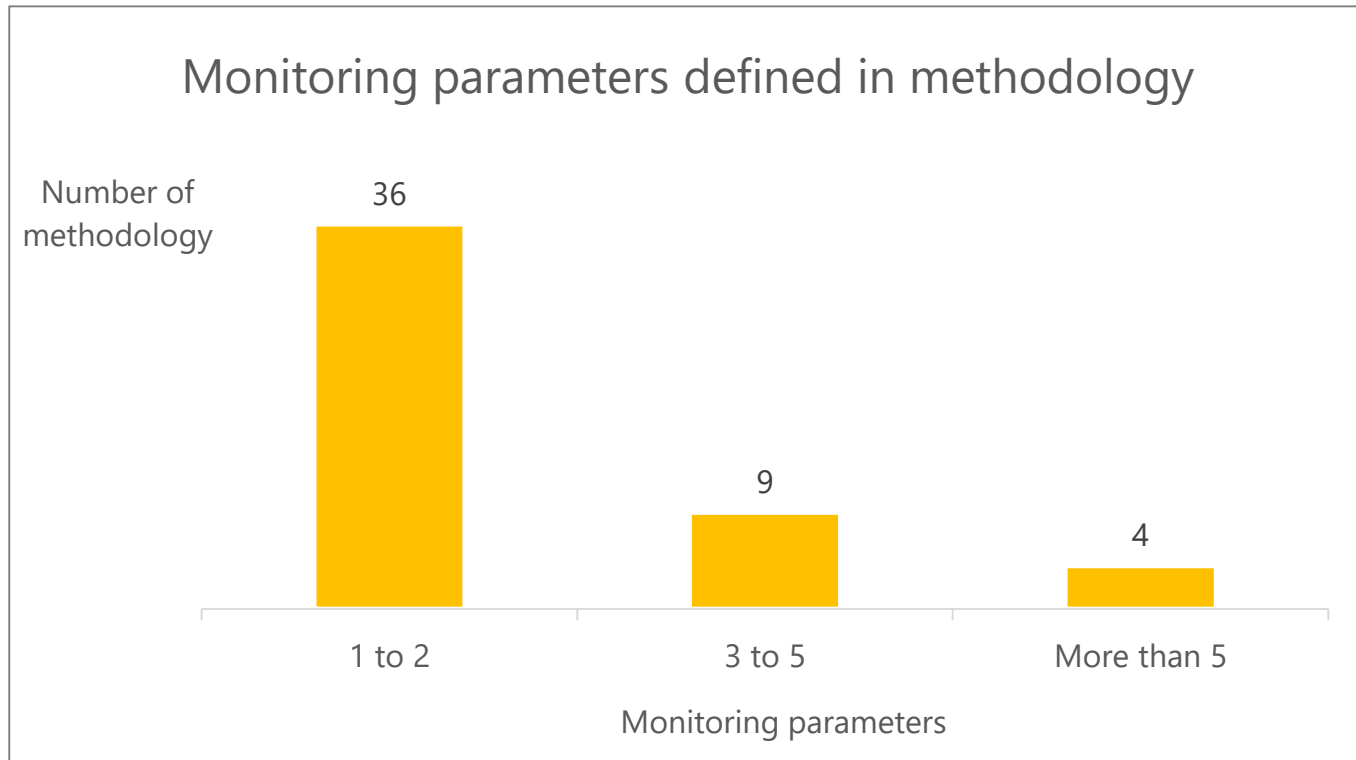
Selected entities also receives technical support throughout project cycle



IGES has supported more than:

- 44** methodologies
- 57** project design document
- 18** projects monitoring reports
- 5** issuance of credits

Project monitoring is practical...

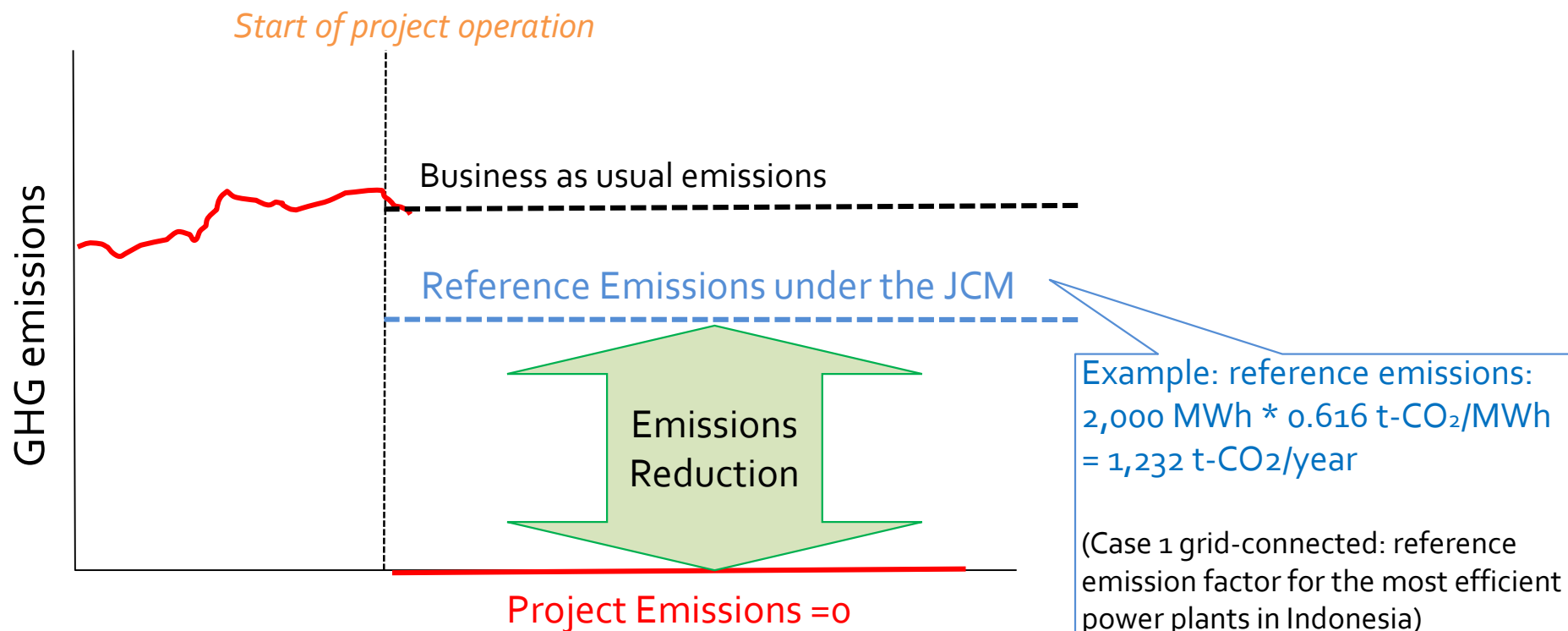


Among approved methodologies:

- Average number of project monitoring parameters is two.
- Average number of project eligibility criteria to be validated is four.

...and net decrease of GHG emissions will be achieved

Example: emission reductions from solar PV project



Estimated emission reductions = $1,232 - 0 = 1,232 \text{ t-CO}_2/\text{year} \rightarrow \text{credits}$

Do you want to use low-carbon technologies?



LED street lighting system with wireless network control



Eco-driving with Digital Tachographs



Air-saving loom at textile factory

Create your project now!

For any question:

amellina@iges.or.jp
jcm-matchmaking@iges.or.jp

Call for Proposal on the GEC website:
<http://gec.jp/jcm/kobo/>

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