

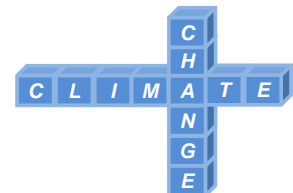
ISAP 2015, Parallel Session
“Showcasing Successful Partnerships for
Low Carbon Technology Transfer”

Opportunities and challenges under the JCM scheme

From a consultant’s point of view

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Opportunities and challenges under the JCM scheme



- Major achievements of Nippon Koei
- Any barriers to disseminate low carbon technology
- Positive / negative gaps between the expected outcomes and actual outcomes through the implementation of the JCM
- Suggestions, proposals on how to address such gaps

1. Major achievements supported by Nippon Koei

• JCM projects

Country	Technology	Manufacturer	Recipient	Status
Indonesia	Centrifugal chiller	ERS	PT Primatexco Indonesia	First JCM registered project. To be verified in 2015.
Indonesia	Centrifugal chiller	ERS	PT Primatexco Indonesia	A chiller is operating, PDD is under preparation
Indonesia	Centrifugal chiller	ERS	PT Nikawa Textile	Chiller is operating, PDD is under preparation
Indonesia	Once-through boiler	Kawasaki Thermal Engineering	PT MC Pet Film Indonesia	Boiler is to be installed in 2015
Bangladesh	Centrifugal chiller	ERS	City Sugar	Chillers are to be installed in 2015

ERS: Ebara Refrigeration Equipment & Systems



1. Major achievements supported by Nippon Koei

• FS Experience

Country	Technology	Manufacturer	Recipient	Status
Indonesia	Carbonizer	CYC	Cleaning Dept, Jakarta City	To be applied to NEDO project in 2015
Vietnam	Pump	Ebara	1. Water company 2. Drainage	Under negotiation
Vietnam	FRP boat with engine	Yanmar	Group of fishermen	Under negotiation
Kenya	Toilet	Lixil	Hotel / residential complex	Under negotiation

1. Major achievements supported by Nippon Koei

- FS idea

Country	Technology	Manufacturer	Recipient	Status
Thailand	Regenerative brake	Hitachi	Bangkok Mass Transit System	2015 PS
Myanmar	Various	Various	Various	2015 Large Scale FS for Yangon city
Indonesia	Aluminium	TBA	Aluminium recycling factory	JCM Tech Renovation is proposed in 2015
Mongolia Indonesia	CCFL (lighting)	TBA	Textile factory	Under negotiation

*TBA: To be announced

And lot more...

2. Any Barriers to disseminate low carbon technology

- **Size of the project**

- Scale of projects in terms of “GHG emission reduction” and “cost” seem to be prioritized, while energy sector tends to have larger reduction potential
- It is not easy to apply JCM for small scale projects which have large future potential. For example, biogas digester with gas engine, FRP boat with high efficiency engine, etc.

- **Level of conservativeness** is different in each technology

- Energy saving by chiller is calculated very conservatively, which makes cost efficiency look less attractive

- **International consortium**

- When proposing Japanese firm cannot get profit, it is not easy for the manufacturers to formulate a JCM project directly with local companies

3. Positive/negative gaps between the expected outcomes and actual outcomes through the implementation of the JCM

- **Positive gap**

- Emission reduction from BAU (not from reference scenario) is significant in some cases (due to conservativeness)
- Co-benefit from acceleration of replacement of old equipments (e.g. by replacing old chillers, ozone depleting Freon can be destroyed)

- **Negative gap**

- Energy saving projects which was difficult to be approved in CDM have been realized, however, cost efficiency (amount of investment / ton-CO2 reduction) may be an obstacle for further expansion
- Involvement of local partner needs further effort

4. Any suggestions, proposal on how to address such gap

- **Project type:** Introduction of categorization of **project scale (small/large)** and **Program JCM:** small potential project should not be ignored and easy extension should be enabled with remote monitoring system
- **Technology selection:** In addition to cost efficiency, contribution to **Sustainable Development** (e.g. co-benefit) should be the key for selecting target technology
- **International consortium:** More involvement of **local participants** should be considered. Host country-led type (similar to unilateral CDM) with utilizing leading low carbon technologies can be considered. “**Appropriate profit**” for project participants should also be discussed.