"TIPS FOR PROJECT DESIGN THROUGH THE JCM EXPERIENCE"

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"Development of Projects: Tips Gained through the JCM Experience"
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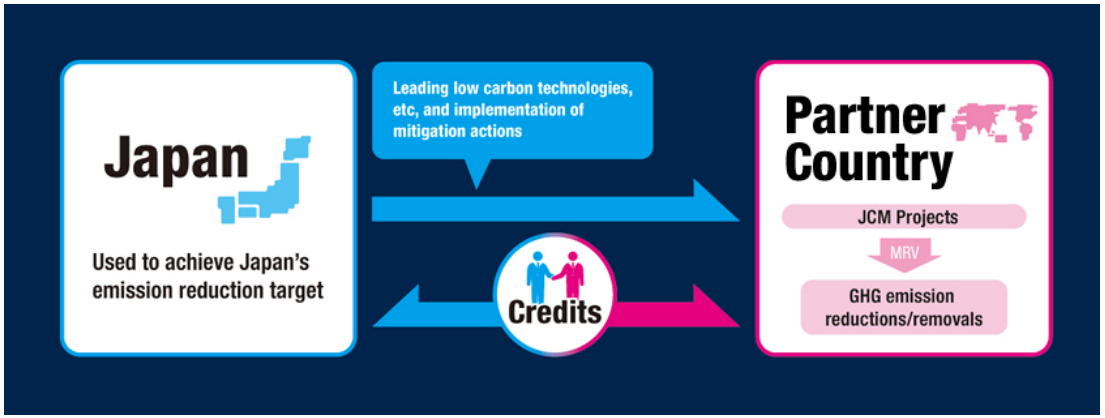
Organized by OECC

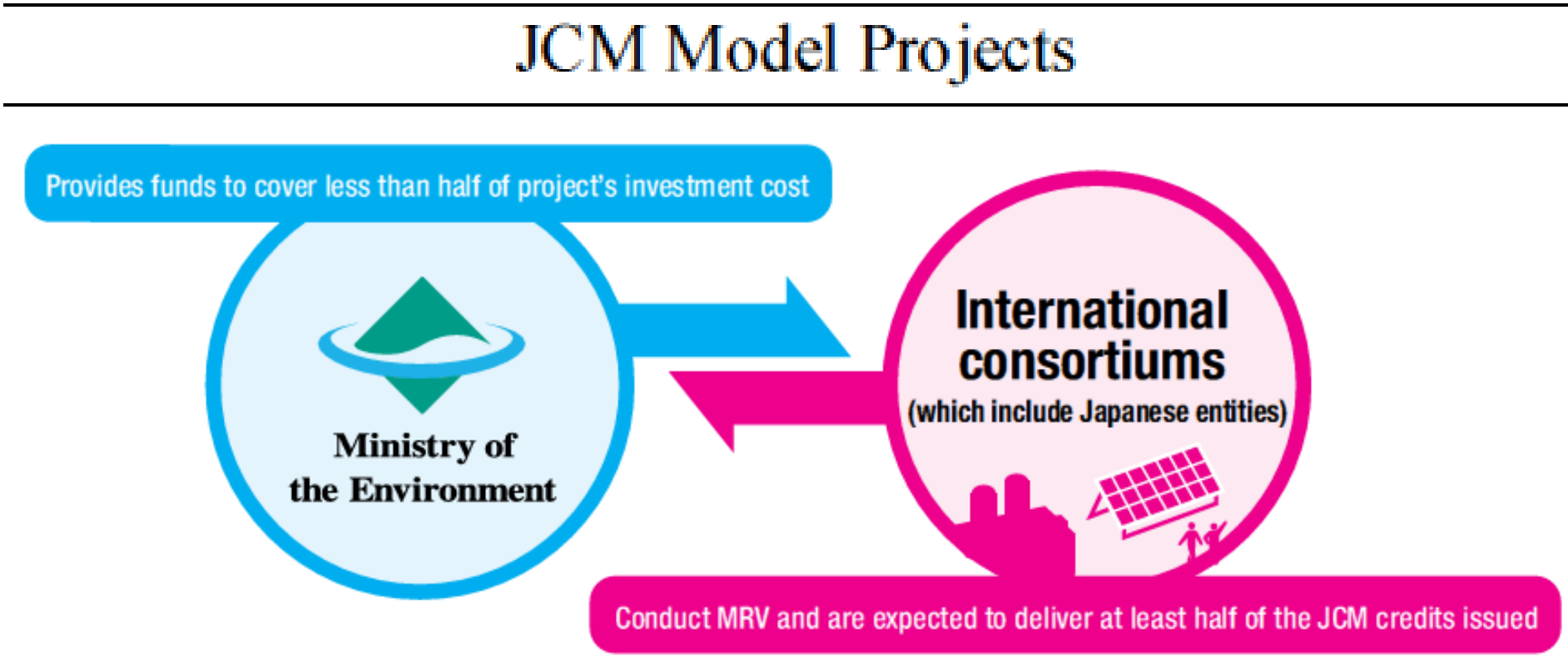
WHAT IS THE JOINT CREDITING MECHANISM (JCM)?

- Facilitating diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- Appropriately evaluating contributions from Japan to GHG emission reductions or removals in a quantitative manner and use them to achieve Japan's emission reduction target.
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals.



Ref. Carbon Markets Express (2018): Basic Concept of the Joint Crediting Mechanism (JCM) https://www.carbon-markets.go.jp/eng/jcm/index.html

JCM FINANCING SCHEME BY THE MINISTRY OF THE ENVIRONMENT, JAPAN (MOEJ)

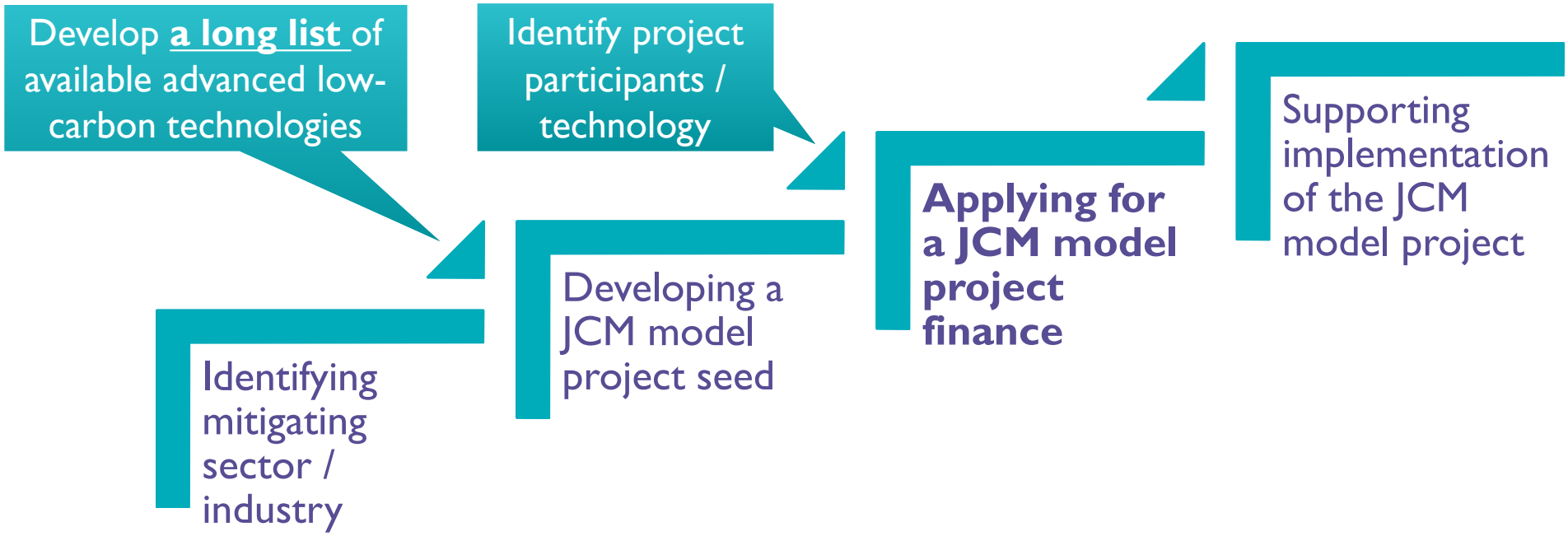


Ref. MOEJ and OECC (2017): A Proposal for our Future ver. 7.0- Toward Low Carbon Growth through the Joint Crediting Mechanism – https://www.carbon-markets.go.jp/eng/en_publications/

FRAMEWORK OF MOEJ PROGRAM FOR THE JCM: PROJECT DEVELOPMENT

- **The MOEJ Program for the JCM [Project Development]** aims to 1) develop JCM model projects in accordance with local needs and 2) find low carbon technologies with high performance.
- As an implementing organization, the OECC has advised projects in 9 countries (namely Mongolia, Bangladesh, Viet Nam, Laos, Indonesia, Cambodia, Myanmar, Thailand and the Philippines.)

ACTIVITY FLOW OF DEVELOPMENT OF JCM MODEL PROJECT



- Gained consultation support by the OECC, **20 projects in 9 countries** were selected under MOEJ's model project.

ON-GOING JCM MODEL PROJECTS CONSULTED BY THE OECC

(Note: As of June 2018, italic projects in bold have started operations)

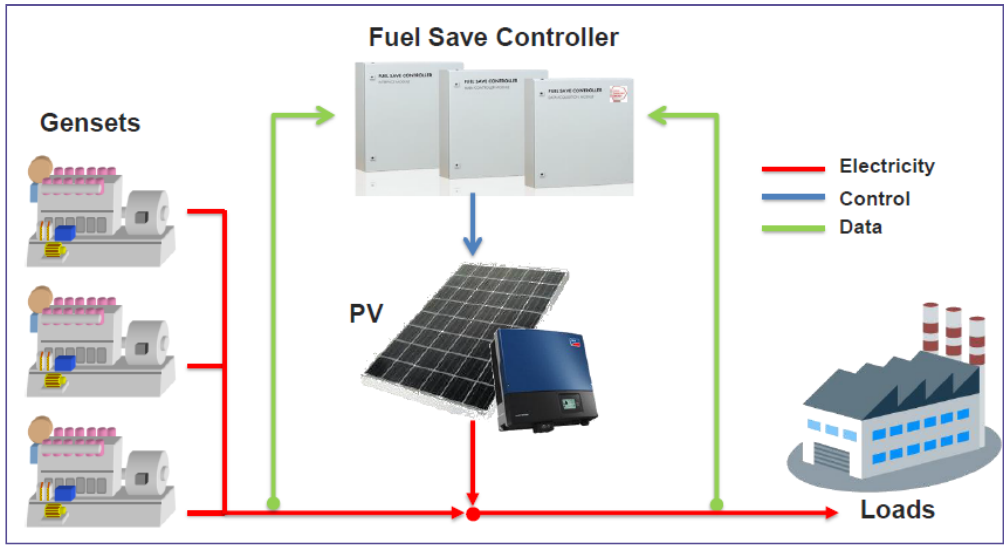
Year	Partner country	Technology introduced and project boundary	GHG reduction（tCO2/year）
2017	Mongolia	20MW Solar PV in Darkhan City	22,927
2017	Mongolia	15MW Solar PV in New Airport Suburb	18,438
2017	Indonesia	Absorption Chiller at Chemical Factory	1,084
2017	The Philippines	1.2MW Solar PV at Refrigerating Warehouse	838
2017	The Philippines	1.53MW Solar PV at Auto Parts Factories	1,124
2017	Laos	Amorphous Transformers in Nationwide Power Grids	2,099
2017	Viet Nam	Amorphous Transformers in Southern and Central Power Grids II (phase 4)	1,469
2016	Thailand	1.5MW Solar PV and EMS at Paint Factory	1,344
2016	Cambodia	800kW Solar PV project at International School	772
2016	Mongolia	8.3MW Solar PV at Farm in Ulaanbaatar Suburb	10,580
2016	***Viet Nam***	***Amorphous Transformers in Northern, Central and Southern Power Grids (phase 3)***	**2,098**
2015	***Mongolia***	***10MW Solar PV in Darkhan City***	***14,746***
2015	***Mongolia***	***2.1MW Solar PV at Farm in Ulaanbaatar Suburb***	***2,707***
2015	***Bangladesh***	***High Efficiency Loom at Weaving Factory***	***1,518***
2015	***Bangladesh***	***340kW PV-diesel Hybrid System at Fastening Manufacturing Plant***	***265***
2015	***Viet Nam***	***Amorphous Transformers in Southern and Central Power Grids (phase 2)***	***3,564***
2014	***Viet Nam***	***Amorphous Transformers in Southern Power Grids (phase 1)***	***610***

THE CASE OF BANGLADESH: FORMULATION OF 2 PROJECTS IN FACTORIES

High efficiency Air jet Loom

Low energy consumption Loom (more than 20%)

Solar-Diesel hybrid system



High diesel cost

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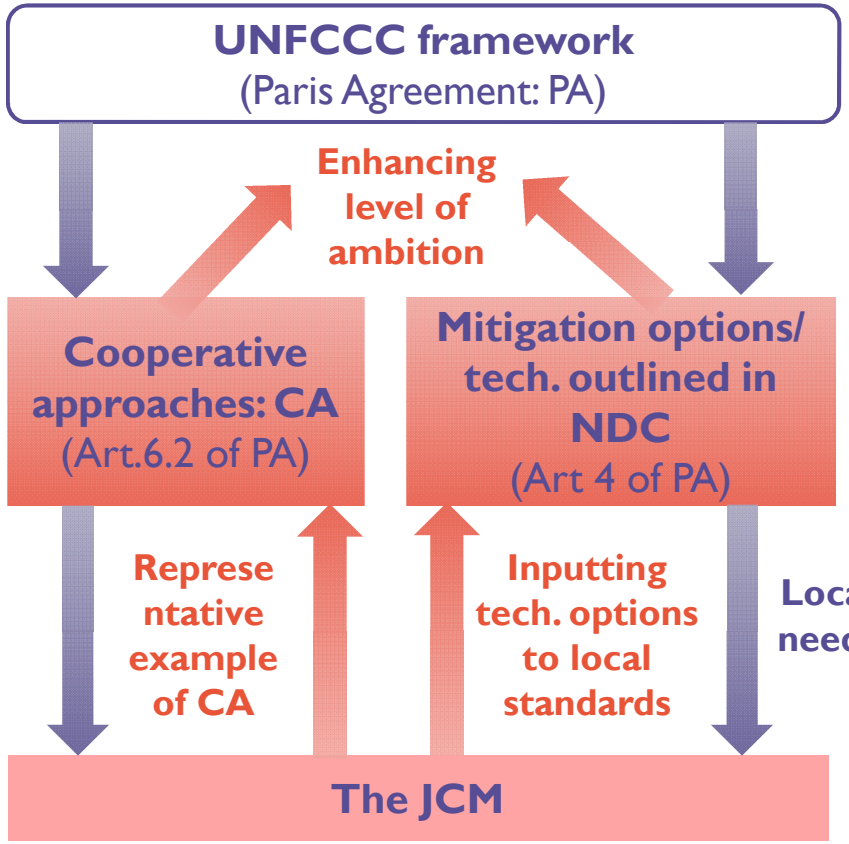
Economic incentive

WHAT KIND OF ASPECTS SHOULD WE TAKE INTO ACCOUNT IN PROJECT DESIGN? TIPS GAINED THROUGH THE JCM EXPERIENCE

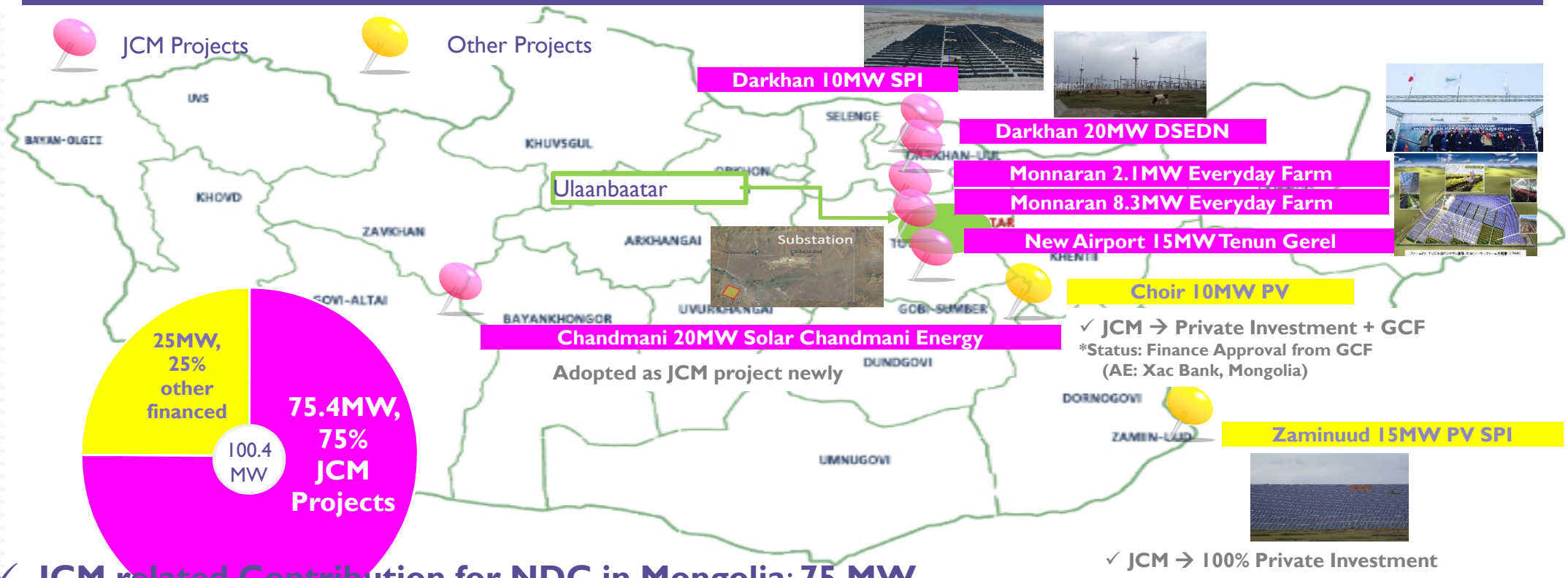
1. Alignment with prioritized sector outlined in NDC: Country ownership/Governance

- Based on the experience of supporting NAMA development in Asia using the MOEJ program, the OECC has encouraged PPs to formulate projects which partner countries' NAMA/NDC have a focus on.

  e.g. Solar Farm® Project developed in Mongolia is aligned with the145 MW installation target of solar PV facilities.



THE CASE OF MONGOLIA: JCM'S CONTRIBUTION TO NDC (75% OF SOLAR PV FACILITIES SUPPORTED BY THE JCM AS OF JUNE 2018)



- ✓ **JCM related Contribution for NDC in Mongolia: 75 MW**
- ✓ Private Investment PV Project by the trigger of successful JCM projects: 25MW

Ref. MOEJ (2018): Recent development of the JCM

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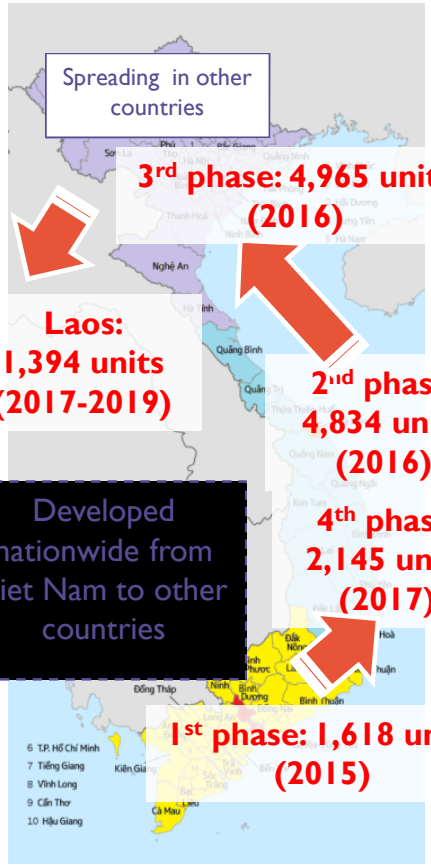
WHAT KIND OF ASPECTS SHOULD WE TAKE INTO ACCOUNT IN PROJECT DESIGN? TIPS GAINED THROUGH THE JCM EXPERIENCE



2. Consideration of long-term impact: Starting with the pilot project, "showcase" placement to scaling-up!

- Organizing workshops in Hanoi to share the benefit of the project (2015)

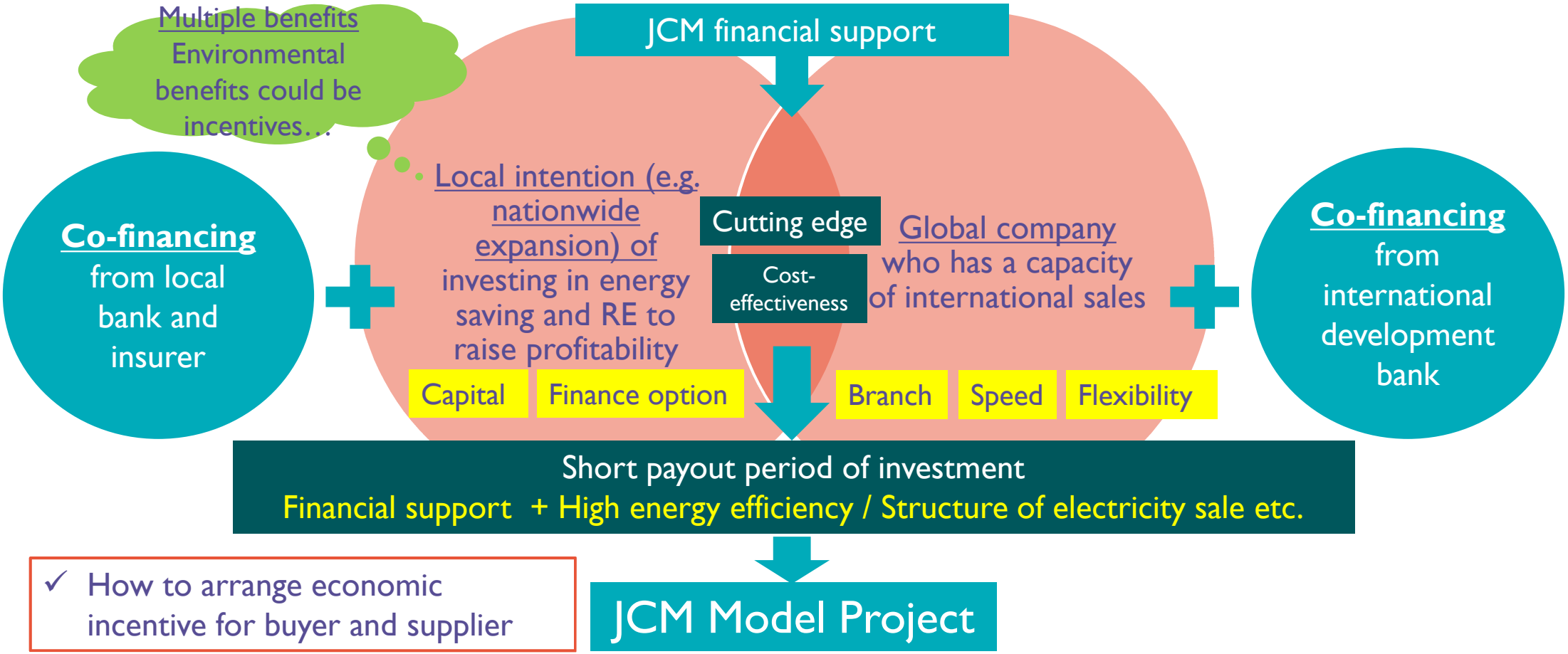
Speaker	Organizers	Audience
PPs of 1st phase project	OECC & MONRE	local power companies based in Hanoi and other
EVNSPC	OECC	EVNHANOI

- As the impact widely recognized, local energy distribution company included specifications for obtaining the technology in its procurement standard.

Amorphous transformers

Ref. Koyanagi, Y. (2018) Development of Projects Triggering a Paradigm Shift https://www.carbon-markets.go.jp/wp-content/uploads/2018/06/4_OECC.pdf

[SCHEMATIC CHART] DEVELOPMENT OF JCM MODEL PROJECTS TOWARDS SUSTAINABLE BUSINESS DEVELOPMENT



✓ How to arrange economic incentive for buyer and supplier

THANK YOU FOR YOUR ATTENTION !

- Please subscribe to the **Carbon Markets Express E-mail Newsletter**

  https://www.carbon-markets.go.jp/eng/en_newsletter/

- **Projects in the pipeline** at a glance in JCM brochure ! →
- **OECC's activities** related to the JCM is available at

  https://www.oecc.or.jp/en/activity/jcm/

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