### MRV IN INDONESIA

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**Institute for Global Environmental Strategies** 

### **JCM COOPERATION**

Previous efforts under city-to-city collaboration

First stage of project formulation in JFY2014

F/S in JFY2015 for further project formulation

Further effort for implementation of formulated project in JFY2016

City-to-city collaboration between Bandung City and City of Kawasaki since 2006

- e.g. UNEP-IETC Ecotown Project (organized by UNEP-IETC)
  - Asia-Pacific Eco Business Forum (hosted by City of Kawasaki)

Evaluation of feasibility on pilot projects under F/S titled "Developing a low carbon Society under Collaboration between Bandung and Kawasaki" in JFY2014

- Project implementation plan development (e.g. financial arrangement)
- Site visit for estimation of potential for electricity consumption reduction

**Project field 1: Energy efficiency improvement** 

Evaluation of CO2 emission reduction potential at shopping malls

Project field 2: Waste management

Evaluation on project potential for bio digester introduction

Project for Low Carbon Society Development under Collaboration between Bandung City and City of Kawasaki

F/S on EMS introduction in commercial facilities under the JCM (\*Ongoing)

Memorandum of
Understanding
For
city of Kawasaki & Bandung

Signed Feb 18th 2016

Further consideration for project formulation in progress

Demonstration at ITB for dissemination of proposed technology under JICA partnership scheme

### FIRST YEAR

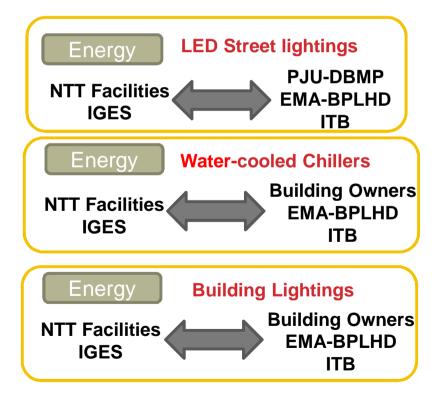
#### Kawasaki

Institute for Global Environmental Strategies (IGES)



### Bandung

Institute Technology
Bandung (ITB)



# Biodigester EMA-BPLHD PDK, PDAM, Park and Cemetary, Bappeda, (JESC) Hitachi Zosen (Hitz), IGES Biodigester EMA-BPLHD PDK, PDAM, Park and Cemetary, Bappeda, Agriculture Distarcip others

## Kawasaki IGES, JESC Hitz, NTT Capacity Building EMA-BPLHD PDK, PDAM, Park and Cemetary, Bappeda, Agriculture International Office

### SECOND YEAR

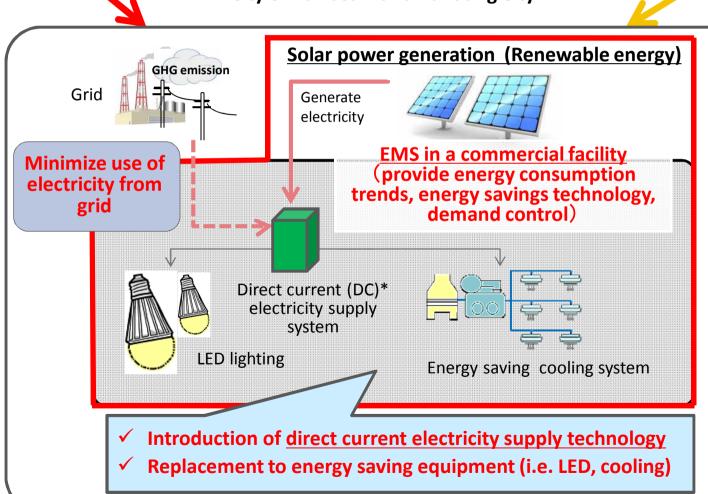
### City of Kawasaki

City-to-city collaboration with low carbon technologies from Kawasaki City

Joint project implementation by
Japan and Bandung sides
under city-to-city collaboration
between
City of Kawasaki and Bandung City



Energy efficiency improvement in buildings under the city's climate change action plan



## MRV IN BANDUNG: MULTIPLE POLLUTANTS

	Base case	Eco-driving			Scenario 2		Scenario 3	
Species	Emission (Gg/yr)		ission g/yr)	Reduction (%)	Emission (Gg/yr)	Reduction (%)	Emission (Gg/yr)	Reduction (%)
СО	173.14		145.33	16.06%	171.02	1.22%	168.68	2.58%
voc	34.00		32.87	3.31%	33.57	1.25%	33.49	1.48%
NO <sub>x</sub>	20.59		16.30	20.85%	20.42	0.81%	20.10	2.35%
SO <sub>2</sub>	0.33		0.30	10.71%	0.33	1.62%	0.33	1.57%
PM	2.73		2 <u>,40</u> _		2.73	0.24%	2.73	0.23%
ВС	0.88		0.76	12.91%	0.88	0.16%	0.88	0.17%
ос	1.36		1.21	11.06%	1.36	0.34%	1.36	0.32%
CO <sub>2</sub>	3315		2966	10.54%	3281	1.04%	3271	1.34%
N <sub>2</sub> O	0.07		0.06	11.00%	0.07			
CH <sub>4</sub>	5.02		4.79	4.70%	4.97			

2.06%

5.08

Air toxics

5.13

5.02

ECO-DRIVE Cara Terbaik Untuk Menghemat Bahan Bakar

### MRV IN BOGOR: ENERGY SAVINGS PREFERENCES

