# Support on Tourism Future City of Bali Province through City-to-City Collaboration

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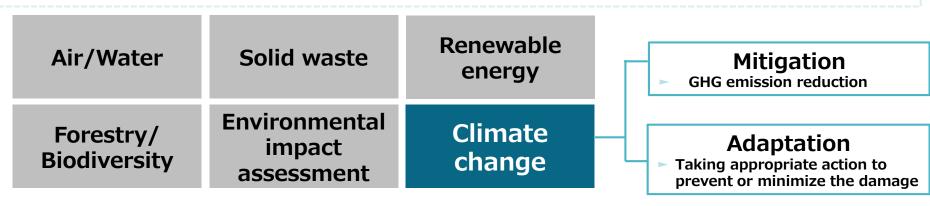
July 24, 2018 in JKT

## 1. Introduction of Nippon Koei Co., Ltd. (NK)

Japan's No.1 International Engineering Consultants plays a role in nation building around the world through our consulting.



Environmental Dept. conducts projects on many environmental aspects



# 2. Our supports: the city-to-city collaboration projects

NK have a lots of experiences on the city-to-city collaboration projects. (The followings are the current projects by NK support.)



► The goal is to realize a low-carbon society by utilizing each Japanese city's experiences/knowledge and formulating JCM model projects.

# 3. Objective and Introduced technologies

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#### 1-1. Objective

- ▶ In order to materialize a low carbon tourism city in Bali, the project will formulate energy saving / efficiency activities between Bali and Toyama entities.
- ► Especially, there are three projects considered as JCM model candidates.
  - **1** Energy efficiency project in tourism facilities (hotel etc.)
  - ② Hydropower project on additional power supply
  - 3 Fuel switch project on public transportation system

#### 1-2. Introduced technologies

#### **Activities**

Introduction of energy efficiency equipment in tourism facilities

Consideration of renewable energy project

Consideration of low carbon transportation system

#### **Outlines**

To consider energy saving/efficiency in hotel facilities, such as air-conditioning system, hot water production, boiler operation etc.

To consider renewable energy project, such as small hydropower or geothermal power project in the mountainous area, biomass generation project with forest resources etc.

To consider low carbon transportation system using fuel switch equipment (diesel oil/coal to CNG), urban transportation system etc.

#### **Image**





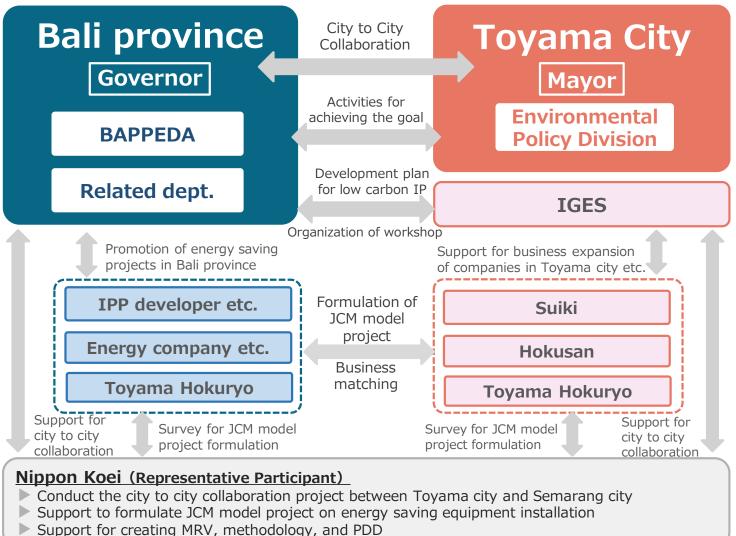


\*The above technologies are just example, and proper manufacturers/ equipment/ specification will be determined based on the result of this study

# 4. Implementation structure

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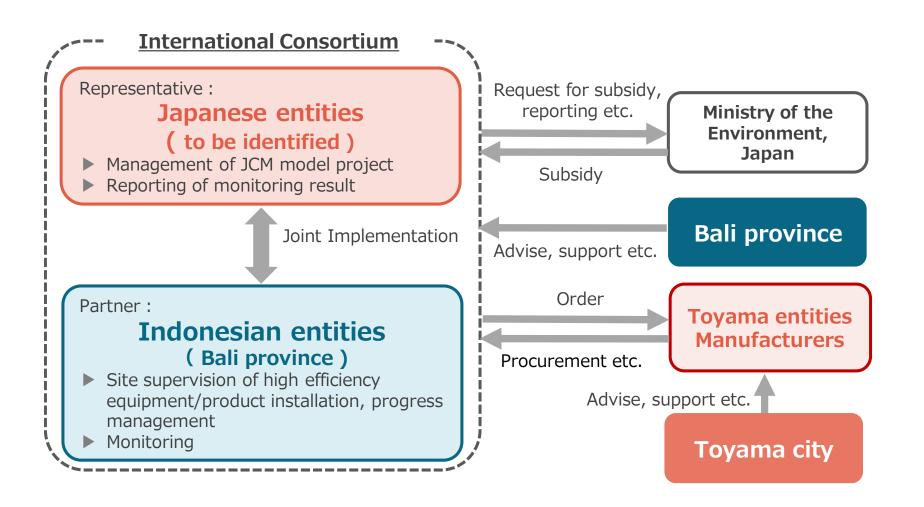


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# 5. International consortium, tentative image

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# 6. Outline of the city-to-city collaboration (1/2)

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#### 6-1. Process of the city to city collaboration between Bali and Toyama

| Date          | Outlines                                                                                  |
|---------------|-------------------------------------------------------------------------------------------|
| Mar. 21, 2015 | Conclude technical cooperation on sustainable energy supply project in Tabanan prefecture |
| Nov. 28, 2017 | Conclude technical cooperation on environmental management between Toyama and Bali        |



Conclusion of tech. cooperation on sustainable energy prj. between Toyama and Tabanan



Conclusion of tech. cooperation management between Toyama and Bali

#### 6-2. Activities of Toyama and expected outcomes by city-to-city collaboration

# **Toyama**



Experiences as an environment city

- ► Environment model city (2008)
- ► Environment future city (2011)
- **▶** UN SE for ALL (2014)
- G7 Toyama meeting

**Advanced** activities

- Share Toyama experience on Environment future city Toyama through the C2C collaboration
- Promotion of recycling system on eco town, such as Toyama eco town IP etc.

### Bali



Support on policy make contributing to realization of future tourism city

Achievement of sectoral mitigation target on tourism sector

Enhancement plan of low carbon public transportation

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# 6. Outline of the city-to-city collaboration (2/2)

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#### 6-3. Strategic steps for achievement of low carbon society

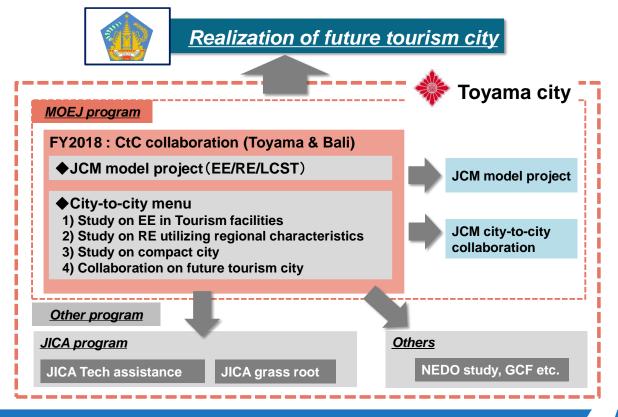
Clarification of JCM potential in Bali Selection of JCM model projects Study for energy saving/efficiency potentials and incentives

Formulation of JCM model projects

Target setting of emission reduction

Realization of low carbon future trourism city

#### 6-4. Effect of city-to-city collaboration



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# 7. Schedule, tentative

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| Item                                                    |                                                       | 2018 |     |     |     |     |      |     |     | 2019 |            |
|---------------------------------------------------------|-------------------------------------------------------|------|-----|-----|-----|-----|------|-----|-----|------|------------|
| (1) Study Item                                          |                                                       | May  | Jun | Jul | Aug | Sep | Oct  | Nov | Dec | Jan  | Feb        |
|                                                         | 1 Selection of JCM model projects in three sectors    |      |     |     |     |     |      |     |     |      |            |
|                                                         | 2 Preparation of international consortium             |      |     |     |     |     |      |     |     |      |            |
| 3 Confirmation of environmental approval etc.           |                                                       |      |     |     |     |     |      |     |     |      |            |
| 4 Potential study of JCM model projects                 |                                                       |      |     |     |     |     |      |     |     |      |            |
|                                                         | 5 Study for JCM application condition                 |      |     |     |     |     |      |     |     |      |            |
|                                                         | 6 Business matching of Toyama companies, if necessary |      |     |     |     |     |      |     |     |      |            |
|                                                         | 7 Formulation of energy saving promotion program      |      |     |     |     |     |      |     |     |      |            |
| (2)                                                     | Field survey/ Workshop                                | May  | Jun | Jul | Aug | Sep | Oct  | Nov | Dec | Jan  | Feb        |
|                                                         | 1 Kick-off meeting                                    |      | **  |     |     |     |      |     |     |      |            |
|                                                         | 2 Meeting with HCMC/ Field survey                     |      |     |     |     |     |      |     |     |      |            |
|                                                         | 3 Workshop                                            |      |     |     |     |     |      |     |     | *    |            |
| (3) Monthly report · Meeting in Japan · Conference etc. |                                                       | May  | Jun | Jul | Aug | Sep | Oct  | Nov | Dec | Jan  | Feb        |
|                                                         | 1 Monthly report                                      | *    | *   | *   | *   | *   | *    | *   | *   | *    | *          |
|                                                         | 2 Meeting in Toyama city                              |      |     |     |     |     | *    |     |     |      |            |
|                                                         | 3 Progress meeting (MOEJ)                             | *    |     |     | *   |     |      | *   |     |      | *          |
|                                                         | 4 JCM seminar organized by MOEJ                       |      |     |     |     |     | •••★ |     |     |      |            |
|                                                         | 5 Invitation of Bali officers to Japan                |      |     |     |     |     | •••★ |     |     |      |            |
|                                                         | 6 Final report                                        |      |     |     |     |     |      |     |     |      | <b>─</b> * |

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