Seminar on City-to-City Collaboration
for Creating Low-carbon Society

25 October 2018

Collaboration with Ayeyarwady Region and Sagaing Region (Myanmar)

Partnership for Low Carbon Initiative among Fukushima City, Ayeyarwady Region, and Sagaing Region

Introduction of Fukushima City

Introduction of Fukushima City

Fukushima City enjoys excellent transportation accessibility : by the Shinkansen bullet train, it takes only 90 minutes from Tokyo. The whole city area is rich in natural beauty—the verdant Mt. Shinobu graces the city center while the gentle Abukuma River flows from south to north through the urban area.

Introduction of Fukushima City

Introduction of Fukushima City

Introduction of Fukushima City

Iizaka Onsen

Tuchiyu Onsen

Takayu Onsen

Introduction of Fukushima City

Fukushima City: Fruit of Jewelry BOX

Tokyo Olympic Games 2020

Baseball and softball Games in Fukushima City【2020.7-8】

HOST VENUE

City-to-city Collaboration for Creating Low-carbon Society

Challenges for low carbon society in Ayeyarwady Region & Sagaing Region through city to city collaboration

City-to-city Collaboration for Creating Low-carbon Society

Policy dialogue
Based on experiences in local government systems

Mitsubishi Research Institute

Fukushima Camber of Commerce and Industry

Fujita

Fukushima City

Partnership for Low Carbon Initiative

Local Company, Organizations

Sagaing Region

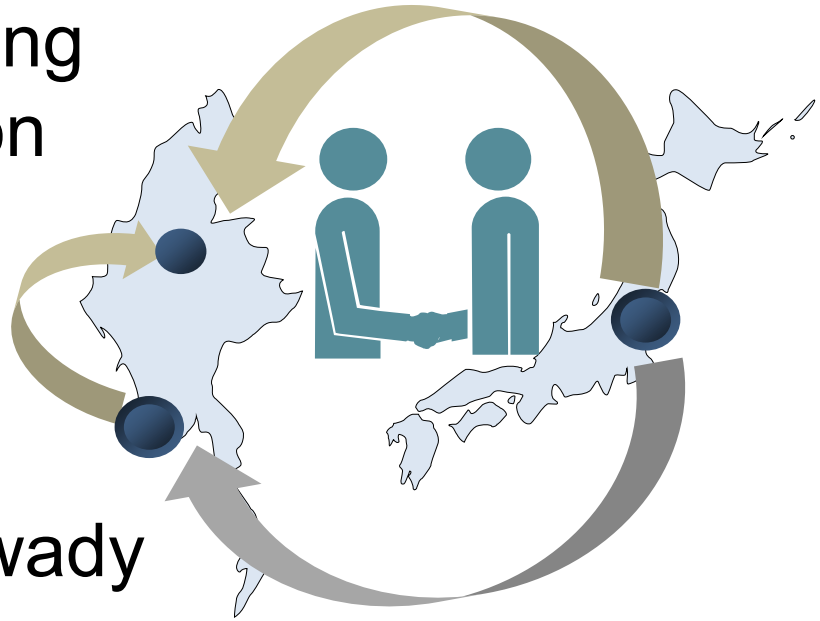
Inter-regional cooperation

Ayeyarwady Region

Expansion in Myanmar
By Inter-regional cooperation

Fukushima City

Sagaing Region



Ayeyarwady Region

City-to-city Collaboration for Creating Low-carbon Society

1 Key achievements: Enlightenment by environmental education

Scattered plastic waste in the backyard of the elementary school

Sending video letter from students at an elementary school in Fukushima City to Elementary school in Ayeyarwady Region

Receiving return video letter from students in Ayeyarwady Region to students in Fukushima

City-to-city Collaboration for Creating Low-carbon Society

2 Key achievements: Waste landfill site in Pathein

Waste is treated by landfill in Pathein City. After the city-to-city dialogue, segregation of waste has been started in the treatment site .

City-to-city Collaboration for Creating Low-carbon Society

3 Key achievements: Expansion into another city

Joint Workshop with Ayeyarwady Region & Sagaing Region (Feb. 2018, Yangon)

Courtesy visit to the Minister of Agriculture, Livestock and Irrigation(Feb. 2018)

Booth presentation of City-to-City Collaboration activities in Naypyidaw (Mar. 2018. Conference of Myanmar Rice Federation)

State Counsellor Dew Aung San Suu Kyi visited the booth, and we had a chance to explain the activity.

Partnership for Low Carbon Initiative

	JAPAN	Myanmar
Policy dialogue	Fukushima City	Ayeyarwady Region Sagaing Region
Business dialogue	Fukushima Chamber of Commerce & Industry Mitsubishi Research Institute	Business organizations (e.g. Chambers of Commerce and Industry in Myanmar, Myanmar Rice Federation)
Development of project	Fujita Corporation	Myanmar company (e.g. MAPCO)

Workshops and site visiting for facilitating policy formulation under **inter-city cooperation** with Fukushima city, Ayeyarwady region and Sagaing region

Feasibility study
(JCM Project)

Example of achievement;
Rice Husk Power Generation PJ in Myaung Mya Township
(Under construction)

Partnership for Low Carbon Initiative

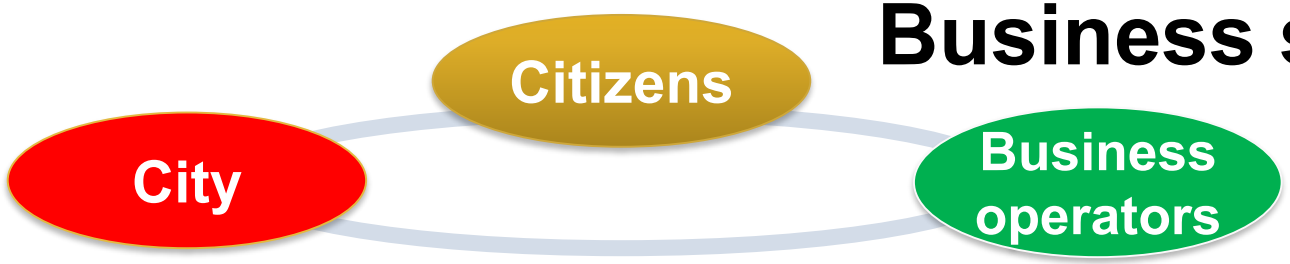
Key approach for Low-Carbon City

Promoting a low-carbon city and building a sustainable low carbon city (Local city model)

Policy side

Partnership for Low Carbon Initiative

Business side



Knowledge (i.e. policy) Transfer

Technology transfer

Reduce global warming and develop a low-carbon, recycling-oriented society with minimal environmental impact

Formulation of JCM projects

Adoption of new approach

Waste to energy, energy efficiency, with regional conditions etc.

Promotion of town planning Low-carbon & Sustainability

Vision

Partnership for Low Carbon Initiative

Target Problem

To secure electricity in a new industrial park
To enhancing utilization of rice husks

Our goals

Finding best solution for low-carbon city

- Developing low carbon industrial park (Business model)
- Facilitating policy formulation by dialogue (Based on experiences in local government systems in planning and implementation stages)

Co-effect in community

- Improvement of energy access
- Sustainable waste treatment system

  e.g. rice husks

ACTIVITIES

Feasibility study of biomass power project using rice husks generated at rice mills. (as Joint Crediting Mechanism (JCM) Project), and heat using system

Policy dialogue for facilitating policy formulation under inter-city cooperation with Fukushima city (Japan), Sagaing region and Ayeyarwady region (e.g. Joint workshop)

Partnership for Low Carbon Initiative

Strategy for realizing local city model of low-carbon industrial park

- **Business model** for realizing a low-carbon, resilient and sustainable rural city: using energy saving and renewable energy technologies, such as power plant and heat utilization using biomass resources (e.g. rice husks)
- **Social Model (institutional mechanism development)** for smooth project implementation
- **Capacity building** for low-carbonization of industrial park

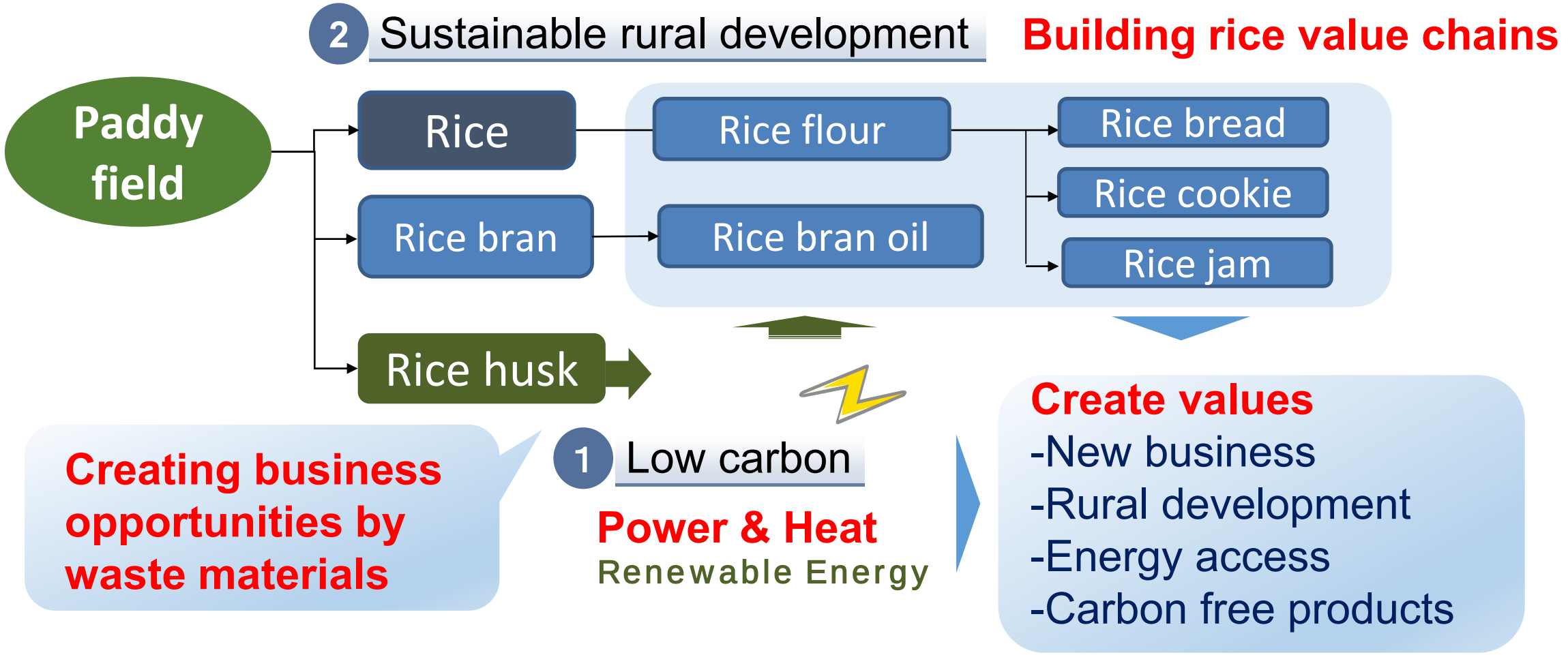
New industrial park: Aggregation area of processing industry utilizing local agricultural products such as rice

To formulate a master plan for low-carbon industrial park (i.e. vision, regional model, approaches)

Partnership for Low Carbon Initiative

Vision

Concept of rice complex as low carbon industry by using green energy from rice husks

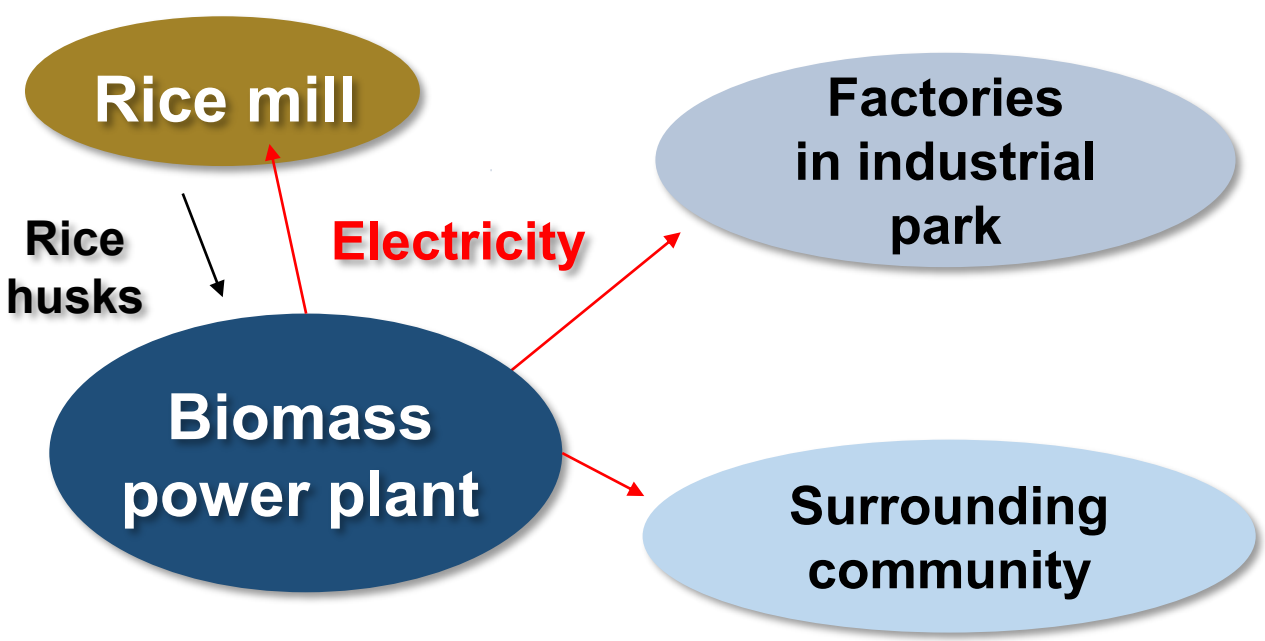


Partnership for Low Carbon Initiative

Regional model

Creating new regional electric power supply system by biomass power plant using rice husks

Combination of business model & social model



Building distributed energy system

Renewable energy system by waste biomass

Low carbon

Building waste management system

Awareness building for appropriate waste management

Sustainability

- Combination of appropriate technologies
  (Cost and performance through the project life cycle)
- O&M system (by localization, training)

Partnership for Low Carbon Initiative

Approaches of institutional development

(i.e. Lessons in Japan)

1	Electricity market system	● Effective utilization of power grid *(i.e. Wheeling power using existing distribution network)* ● Cross regional coordination of transmission *(i.e. Electric Power Exchange)*
2	Renewable power system	● Long term promotion strategy of RE *(i.e. Policy target of energy mix, support mechanisms; feed-in tariffs/auctions)*
3	Human resource development	● Training system for electric worker *(i.e. license of e1st, 2nd electric works)* ● Cooperation of business firms *(i.e. Association, union)*