Creation of Asia Biomass Community

May 29, 2019

Issei Sawa
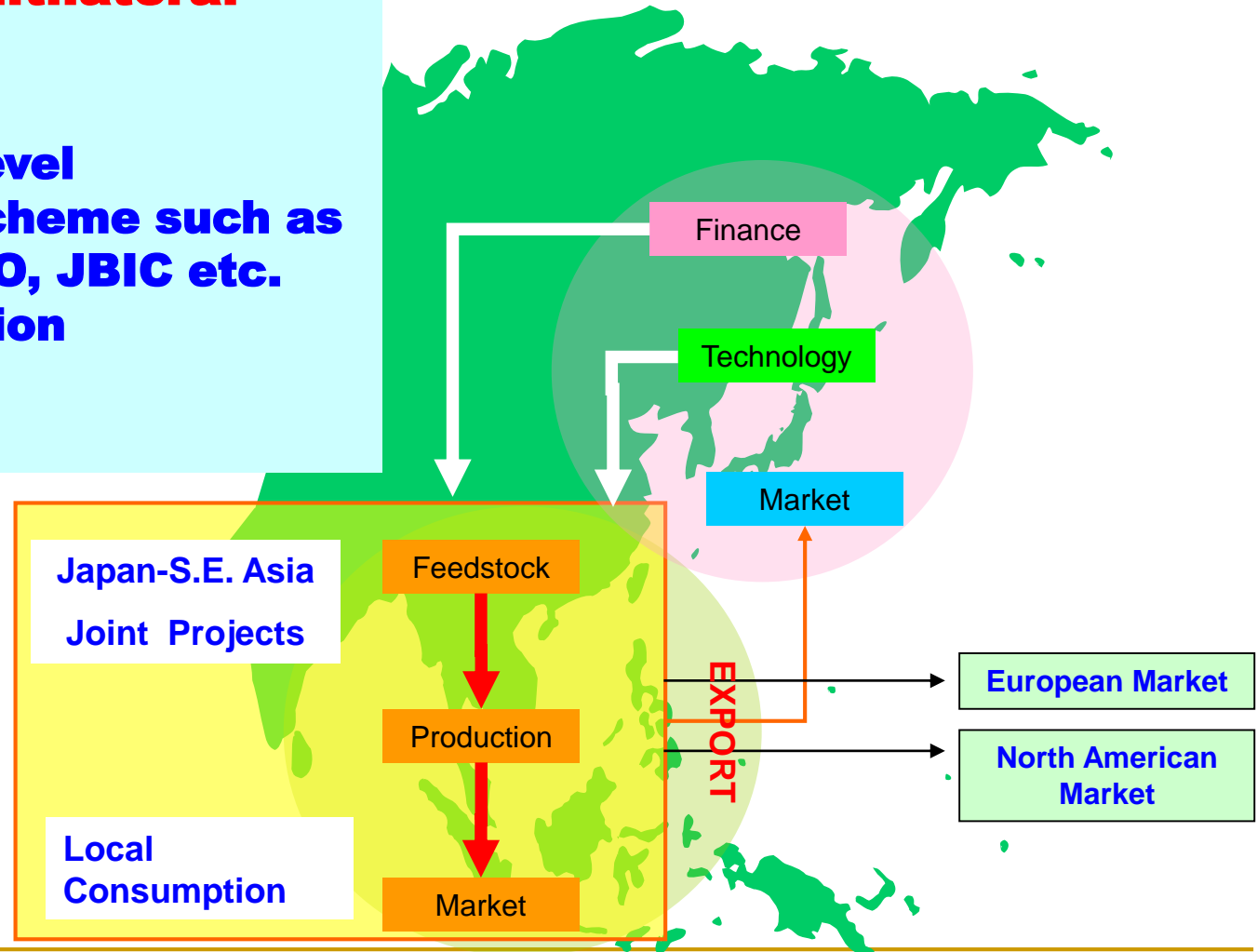### President , NEED

Creation of "Asia Biomass Community"

Enhance the Multilateral partnership

■**Governmental level**
·**Governmental scheme such as ODA , JCM, NEDO, JBIC etc.**
·**Biomass Plantation**

■**Private level**

Finance

Technology

Market

Japan-S.E. Asia Joint Projects

Local Consumption

Feedstock

Production

Market

EXPORT

European Market

North American Market

Phase-1 Production of Biomass Fuel in Asia and Biomass Power Generation in japan

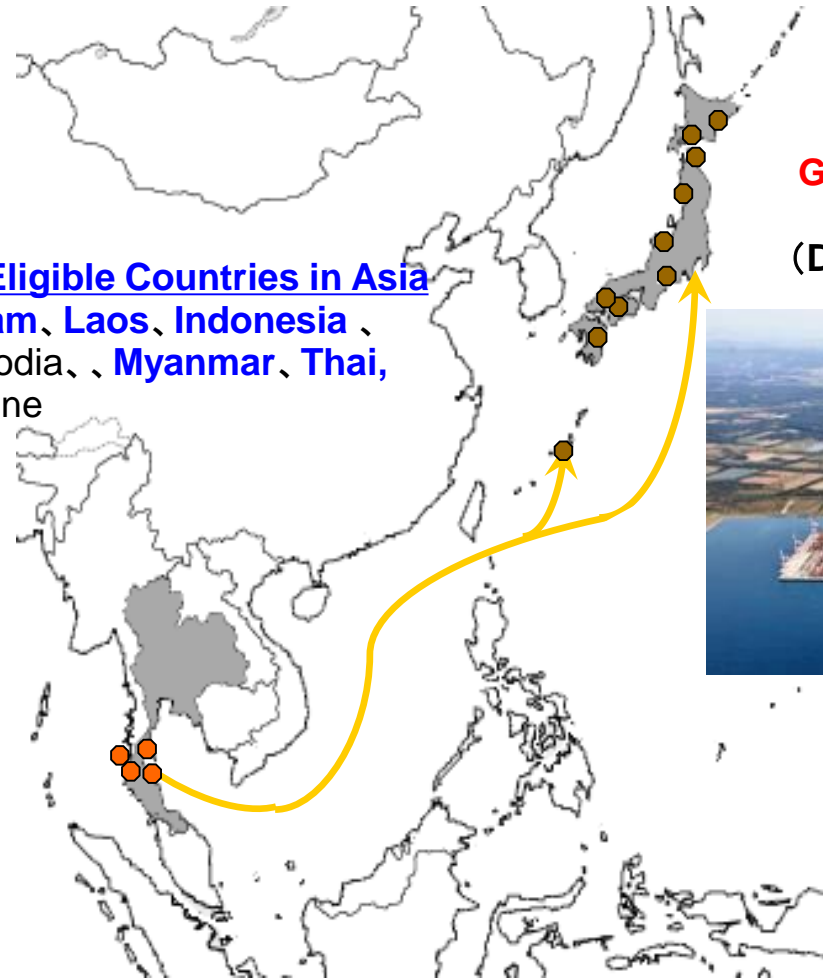**Pellet Production in Asia under JCM scheme**
（JV with Local Co.）

JCM Eligible Countries in Asia
Vietnam、Laos、Indonesia 、
Cambodia、、**Myanmar**、**Thai,**
Phillipine

Biomass Power Generation in Japan under FIT
（Dedicated, Co-fired）

Wood Pellet

➡ **Torrefaction**

Acceptance of forestry human resources from Southeast Asia and transfer of Japanese forestry technology

Acceptance of forestry human resources from Southeast Asia

Southeast Asia

Japan

On-site training in Southeast Asia

On-site training in Japan

Transfer of Japanese forestry technology

（*IoT, drone, forestry machinery, etc.*）

Phase-2 Biomass Power Generation and Production of Fuel in same location in Asia under JCM Scheme

Pellet Production in Asia under JCM scheme
（**JV with Local Co.**）

Biomass Power Generation under JCM scheme
（**JV with Local Co.**）

Wood Pellet

➡ **Torrefaction**

Establish Sustainable Biomass Industry
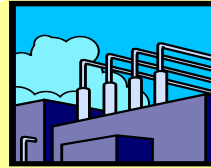
Biomass Plantation

・**Next Generation Agriculture and Forestry "Contract Farming & Afforestation for Various usages"**
・**Biomass Plantation under ODA.**

- **Improvement of Yield**
- **Mechanization**
- **Infrastructure**
- **Logistics**

Feedstock Management
(Stable Supply・Cascade Usage)

Biomass Refinery

Biomass Industrial Complex

- **Bio Ethanol（Cellulosic）**
- **Bio Pellet (⇒Torrefaction)**
- **Bio Jet Fuel (at existing Petrochemical Refinery)**
- **BDF (⇒High Quality)**
- **Biomass Power Generation**
- **Bio Chemical**
- **Feed, Fertilizer**

Industrialization
(Co-Production・Co-Location)

Market

Stable & Matured Market

- **Local Consumption**
- **Export to Japan**
- **Export to the other countries**

- **Long Term Offtake Agreement**
- **Reasonable Sales Price**

Establish Relationship with Buyers
(Utilities, Industries, Others)

Creation of Sustainable Supply Chain of Industrial Complex

Thank you for listening !!

NEED **(N**ippon **E**nvironmental **E**nergy **D**evelopment Co. ,Ltd.)
HP: http://need.co.jp