

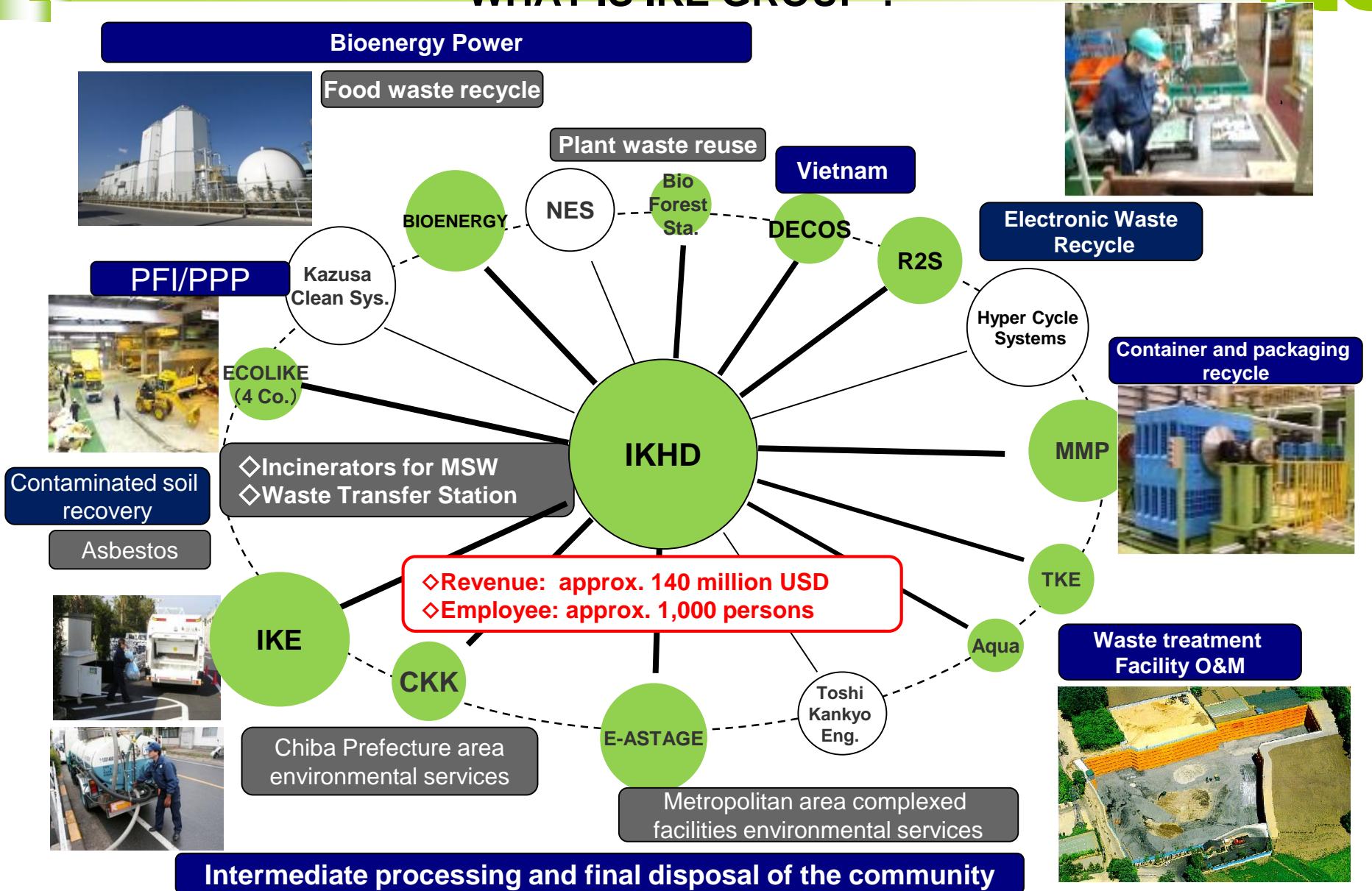


IKE business development in Vietnam

January 23, 2020

Ichikawa Kankyo Engineering Co.,Ltd

WHAT IS IKE GROUP ?



IKE business process in Vietnam



Supported by the Ministry of Environment Japan (MOEJ) aid fund program for market research and FS implementation

2014

- Start RPF business by BCC form investment
- Set up Hanoi Representative Office

2012 RPF demonstration test

2010 MOU with URENCO HANOI

- ①2010 CDM feasibility study for landfilling prevention of household waste (MOEJ)
- ②2010 Project for Cooperation and Advancement of Recycling-Oriented cities through a Kitakyushu-Dalian partnership (METI)

③2011 -2012 Feasibility study on RPF production and sales business in Vietnam (MOEJ)

④2011 New Mechanism FS for Energy Generation by Waste Management Activities, through Anaerobic Digestion as Model Technology, in Malaysia

- ⑤2013 Feasibility Study on D-waste (Demolition & construction) recycling system in Vietnam (MOEJ)
- ⑥2013 Study in building strategy for environmental business transfer to Asian area

2016/5 Establish DECOS JV with URENCO11

2018/8 Establish KES environment monitoring company with ECC

STEP II

⑦2014 Feasibility Study on waste transfer station business in Hanoi city (MOEJ)

⑧2014 Feasibility Study of Methane fermentation of sewage sludge and food waste at the sewage treatment

STEP I

2010-2014 Market research

2014 ~ Business development

Introduction of Join venture company in Vietnam



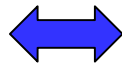
Dai Dong Environment Solutions Co.,Ltd



Company Profile

1. Establishment	May, 2016
2. Capital	500,000 USD (55,000,000 JPY)
3. Capital ratio	KE 51% , URENCO 11 19.41% , Other 29.59%
4. Head quarter	Van Lam Hung Yen *hside URENCO 11 waste treatment complex area
5. Staff	20
6. Business content	① RPF production and sales
	② Consulting business
	③ Solution business (Comprehensive outsourcing)

Structure



Partnership



- **IKE 51% capital**
- Transfer of waste treatment know-how
- Provide corporate management know-how
- Foreign capital company establishment works

- **Vietnam side 49% capital**
- Human resource
- Infrastructure (Land, building)
- Access to market information

New business

KES

(Kankyo Environment Solutions)

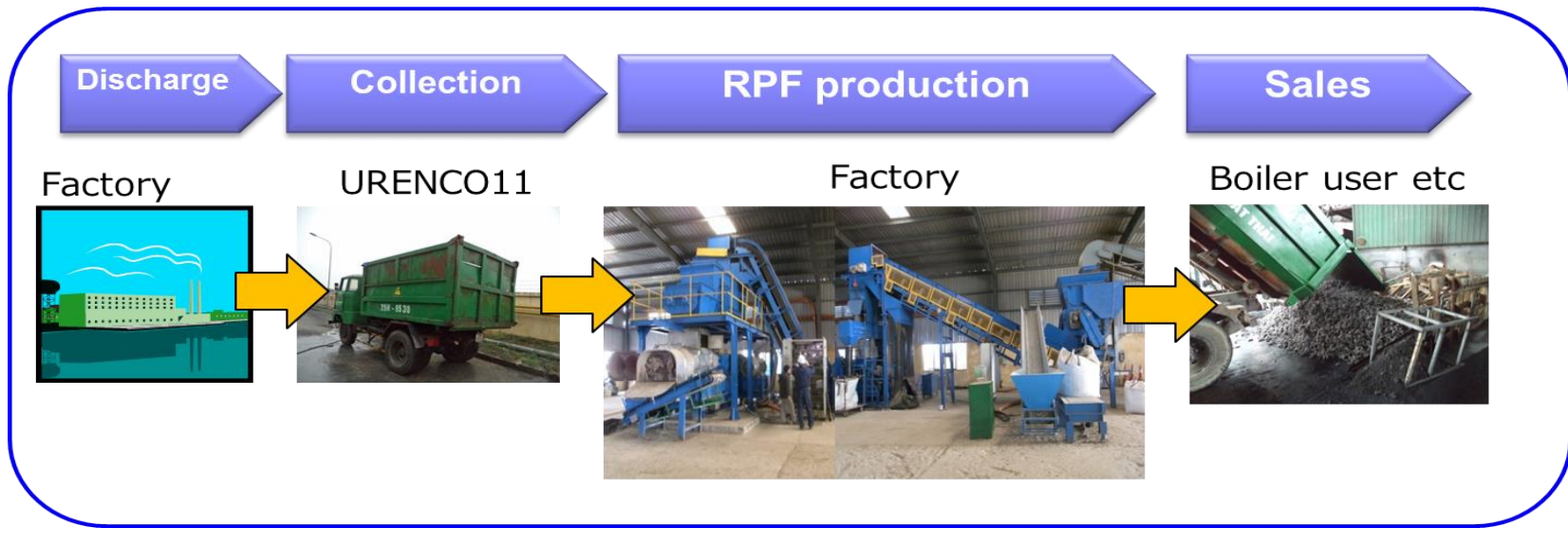


Environment Control Center (ECC)
(51%)

Environmental Monitoring
(air, water, etc)

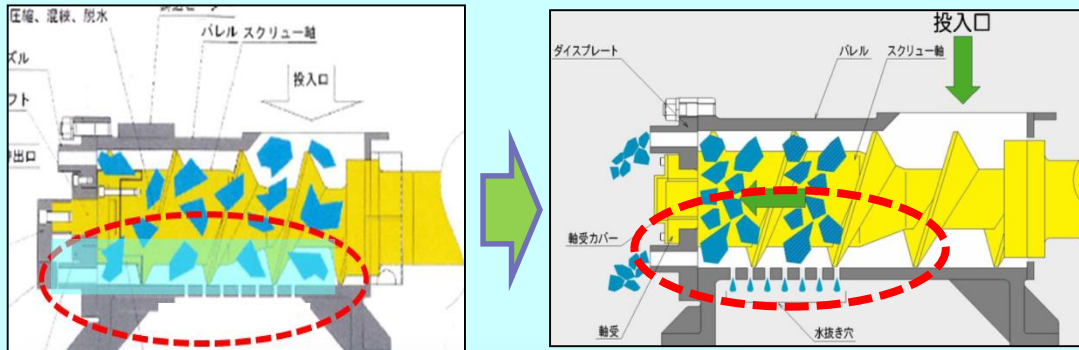


- ◆ Production volume : 10t/day
- ◆ Raw material : Waste plastic
Paper sludge and other
- ◆ Customer : Paper-mill company,
Feed company, etc
Boiler operation company
- ◆ Facility : Shredding machine, RPF machine,
Magnetic separator, Conveyor



<Support of Ministry of the Environment, Japan (MOEJ)>
“Financing program to demonstrate advanced low carbon technology innovation for further development in developing countries”

RPF machine renovation

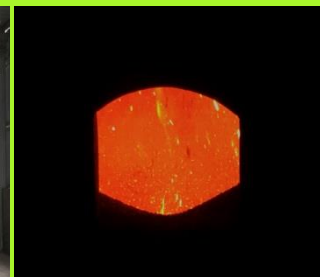


Water discharge function for high calorific value

Low CO2 emission to coal



Test use for demonstration



Thank you very much for listening!