

FS on introduction of waste management technology (2021)

Project name: “Business Feasibility Study on Sale of Recycled Aggregate from Construction Waste Materials and its Utilization to Pavement Construction in Vietnam”

1.FS implementation company

(Project developer)

ECO SYSTEM Inc., Oriental Consultants Co., Ltd.

(Partner Companies/Association)

Mitani Sangyo Co., Ltd. (local Aureole group company); Ichikawa Kankyo Engineering Co., Ltd.; Saitama University; National University of Civil Engineering (Vietnam) ; Binh Duong Precast Concrete Products and Machinery Co., Ltd.

2.Country and Waste types

(Year for FS implementation)

2021 (continued from 2020)

(Country)

Vietnam (Hanoi and Haiphong) (signatory country of the Memorandum of Cooperation on Environmental Cooperation and JCM)

(Waste types)

Construction waste (demolition debris including waste bricks, roof tiles, and concrete)

3.Planned project outline

(Technology)

Technology to process and reuse construction waste (demolition debris including waste brick, roof tiles, and concrete)

(Project description)

1.) Production and sale of recycled aggregate (production capacity: approx. 20,000 ton/year)

2.) Permeable/water-retentive paving / thin overlay

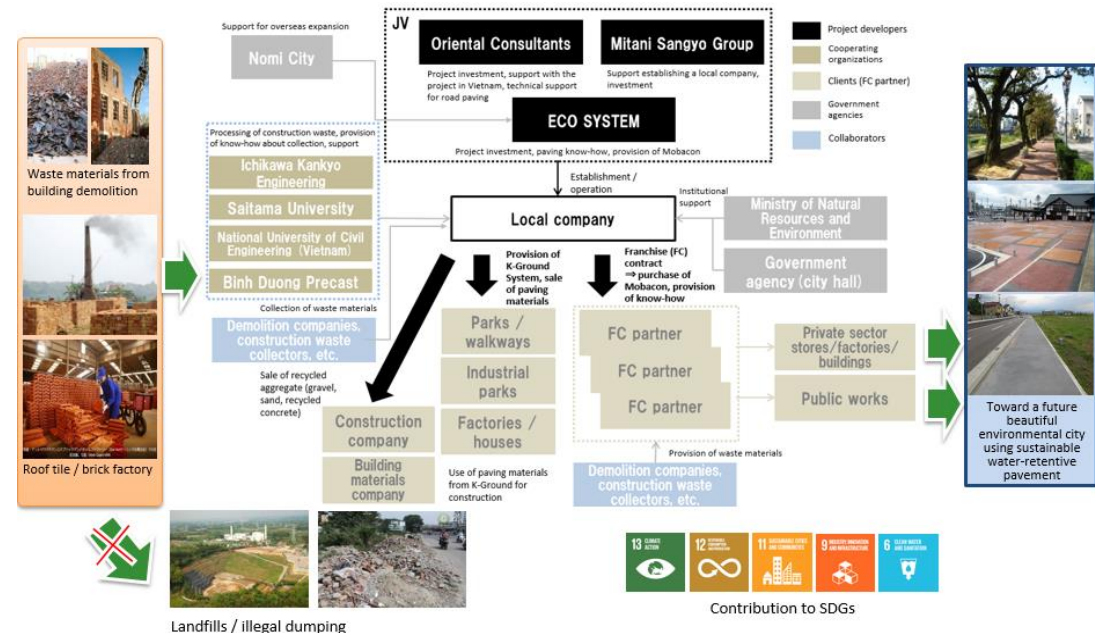
(Project implementation formation) (2 companies will complete the study, with Mitani Sangyo joining the joint venture for project implementation)

| Position | Name | Role | Notes |
|--------------------------|--|---|--|
| Project developer | ECO SYSTEM | Investment in project company, provision of crusher and concrete production technology, local project support, provision of road paving technology, local operations, and coordination with the Vietnamese government | Proposing company |
| | Oriental Consultants | | Proposing company |
| | Mitani Sangyo | | Has a strong local network and experience and experience working with the Vietnamese government. Owns a local company: Aureole Expert Integrators Inc. |
| Cooperating organization | Ichikawa Kankyo Engineering | Processing of construction waste, provision of know-how about collection, support | Extensive experience with projects involving construction waste, collaboration with JST-JICA SATREPS |
| | Saitama University | | |
| | National University of Civil Engineering | | |
| | Binh Duong Precast Concrete Products and Machinery | | |

(Impact of reducing environmental burden)

- Promotion of 3Rs through increased collection and reuse of debris
- Reduction of heat island effect through permeable/water-retentive paving
- Carbon reduction and contribution to five SDGs goals

(General picture of this project)



Production of gravel and sand from waste roof tile, brick, and cement which is then used as aggregate for functional paving materials