

Water environment improvement project through the introduction of Johkasou compatible with Food Waste Disposers in the suburbs of Hanoi, Vietnam

Implementing Countries/Regions

Suburbs of Hanoi, Socialist
Republic of Vietnam

Implementation Structure

[Japanese side]

- NIKKO COMPANY (Representative Company)
- Japan Environmental Improvement Education Center (a public interest incorporated foundation)

[Vietnamese side]

- Institute of Environmental Science and Engineering, Hanoi University of Civil Engineering (IESE-HUCE)
- Vietnam Water and Environmental Sanitation Company Limited (VESA)

Background

In the suburbs of Hanoi, while the construction of high-rise apartments and other multi-unit housing is progressing due to population growth, sewerage system development is not keeping pace. As a result, many decentralized wastewater treatment facilities have been installed, while maintenance and inspection of these facilities are not carried out to the same standard as Johkasou systems in Japan.

Furthermore, in Hanoi's landfills, groundwater and nearby rivers are seriously polluted by leachate originating from household food waste. In addition, the waste collection system in newly developed areas is inadequate for the expanding city, leading to a deterioration of living conditions due to uncollected waste. While the government is promoting the sorting of household waste and the effective utilization of organic waste, these efforts have not been widely adopted.

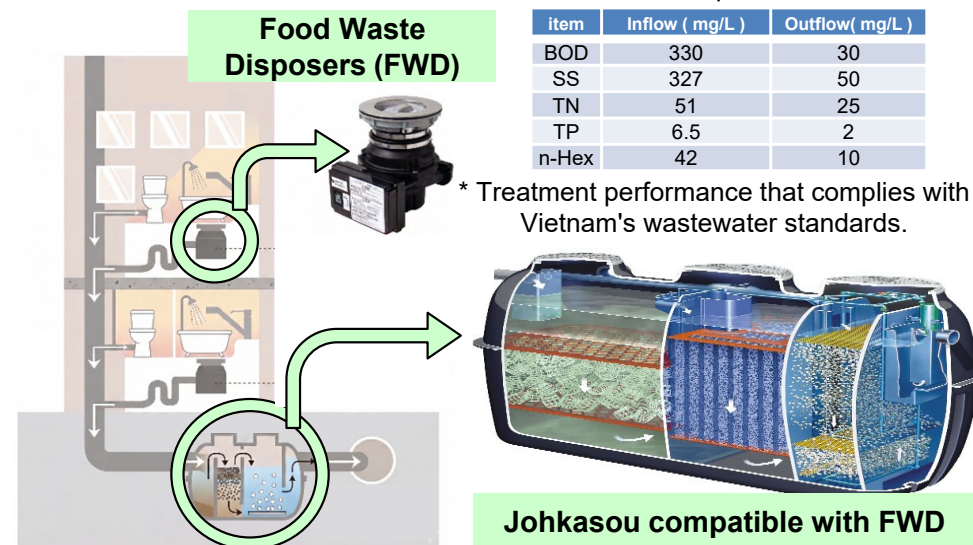
Objectives Of This Project

This project aims to improve the water environment by installing Johkasou compatible with Food Waste Disposers (FWD) in newly developed residential areas near Hanoi, Vietnam, where sewerage systems are not yet in place. It also aims to reduce the amount of food waste generated and sent to landfills, thereby mitigating water pollution caused by leachate from landfills and promoting regional resource recycling through the effective utilization of sludge.

Business Model Overview

- The project aims to provide private developers and other clients with a comprehensive service encompassing the design, manufacturing, installation, and maintenance of Johkasou compatible with FWD, as well as establishing a composting process for Johkasou sludge.
- By highlighting the advantages of Johkasou compatible with FWD, and by differentiating them from existing decentralized wastewater treatment facilities, aims to strengthen Nikko's Johkasou business.

Technologies To Be Applied



- Disposer unit : Disposers reduce household food waste by instantly crushing it in the kitchen and treating it through a Johkasou compatible with FWD. Nikko Company accounts for 38% of the Japanese domestic market for disposer systems (Research by Nikko).
- Johkasou compatible with FWD: This Johkasou can collectively treat all domestic wastewater, including wastewater from FWD and wastewater from toilets. It meets Vietnam's effluent standards and features a long-lifespan, energy-saving design.

Expected Outcomes

- With a Johkasou compatible with FWD, domestic wastewater can be properly treated even in areas without a public sewerage system.
- The amount of food waste disposed of in landfills will decrease, and water pollution caused by leachate will be reduced.
- By effectively utilizing sludge, it contributes to promoting regional resource recycling