

Demonstration of the practical application of power generation type sewage sludge incineration technology considering greenhouse gas reduction

Project Implementer

JFE Engineering Corporation; Japan Sewage Works Agency and Kawasaki city

Demonstration Field

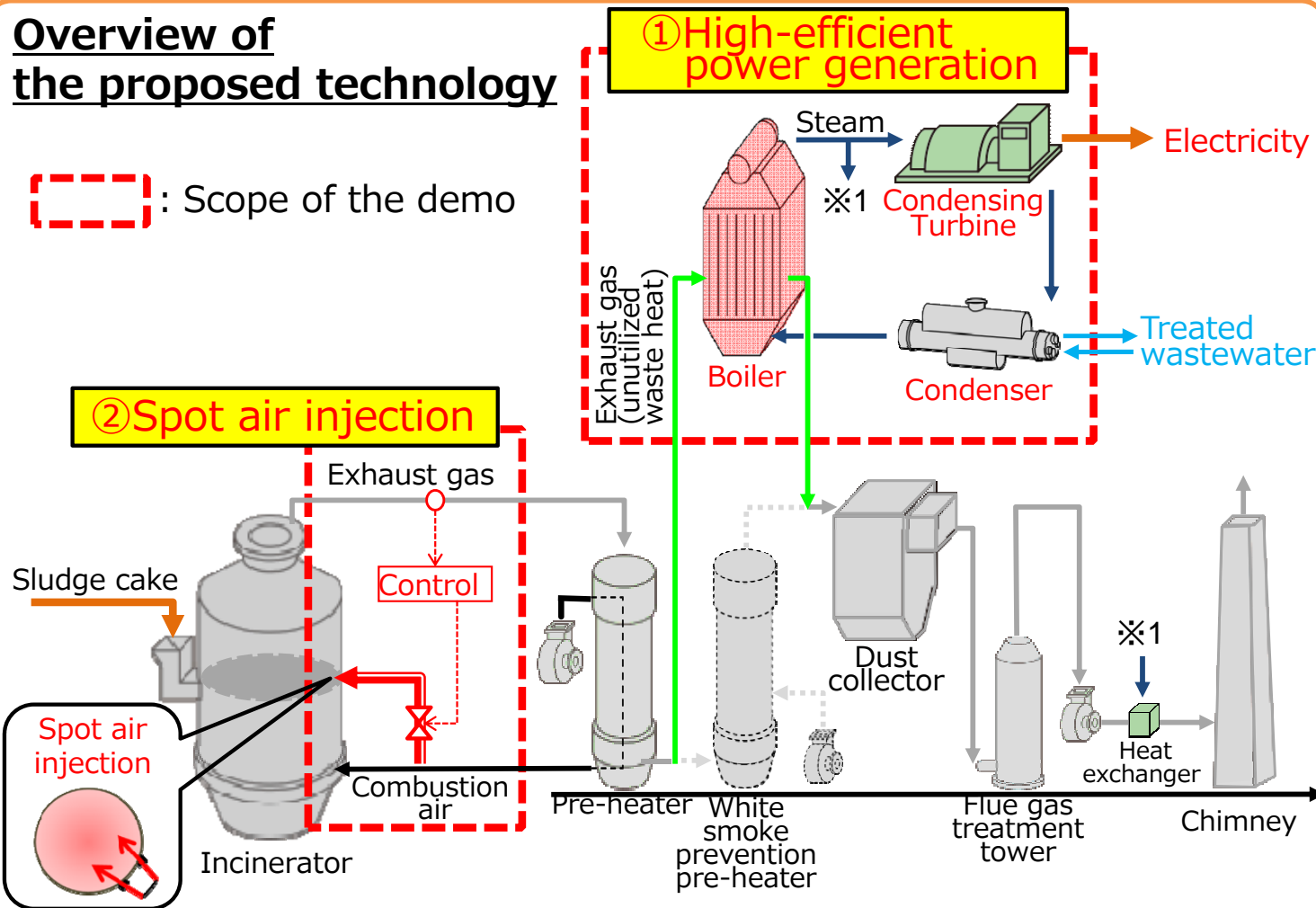
Iriezaki Sludge Center, Kawasaki City

Demonstration Overview

Demonstrate the realization of self power supplied incinerator and a great reduction of greenhouse gas (GHG) emissions by the combination of high-efficient power generation technology utilizing unutilized waste heat from sludge incinerator and the spot air injection technology which can add to the existing sludge incinerator.

Overview of the proposed technology

 : Scope of the demo



Advantages

The following two technologies realize the self-powered incinerator and the great reduction of GHG (CO_2 , N_2O) emissions. (They can be applied to the existing sludge incinerator)

① High-efficient power generation

Realize the high-efficient power generation by applying high-efficient condensing turbine and condenser which utilizes treated wastewater from sewage treatment plant as cooling water to small-scale sludge incinerator which is hard to realize the power generation.



Self power supplied incinerator

② Spot air injection technology

Achieve space saving installation with no complicated ducting of air injection pipeline. Achieves the reduction of N_2O emission.