

Technology Demand Survey

1. Project objectives and contents

Project Title		Development of a build-up plan for the efficient low-carbon small combined heat & power plant using waste of its regional area as combustible energy resource.
Objectives		To secure industrial waste of industrial estate and urban waste of urban area as combustible energy resource, and by using them, to construct the low-carbon small combined heat & power plant.
Contents	Domestic	<ul style="list-style-type: none"> - To make a project proposal which introduces Korean successful know-how of separate garbage collection for recycling waste materials at a low-carbon small combined heat & power plant. - Component analysis of waste materials. - Construction of facilities converting industrial waste of industrial estate and urban waste of urban area as combustible energy resource. - Development and construction of efficient low-carbon small combined heat & power plant, which uses industrial waste of industrial estate and urban waste of urban area as combustible energy resource suited to industrial estate and urban area of Česká republika. - Construction of facilities processing exhaust fumes to comply with rules of Česká republika. - Maximization of system efficiency with introduction of special generator(the replacement of PCV) and steam pressure rising facilities(TVR) using unused energy from a low-carbon power plant. - A study of the establishment of strategic BM for mutual growth by continuous expansion of low-carbon business across national or local industrial estates considering the distinct characteristics of the area.
	International	<ul style="list-style-type: none"> - A research on current situation and actual conditions of industrial and urban waste in industrial estate and urban area of Česká republika. - A research on current situation and processing system of separate waste collection in industrial estate and urban area of Česká republika. - A research on demands for facilities of separate waste collection taking area conditions into consideration. - A research on business approval, certification, and regulations etc. needed for construction of the efficient low-carbon small combined heat & power plant. - The establishment of the joint plan coping with regulations for with atmosphere and water pollution from polluted factory waste. - The establishment of a plan of system operation and maintenance. - Driving plan for legislation and complementary measures regarding waste processing cost in industrial estate and urban area of Česká republika.

2. State of the art in research and development

Necessity of the proposed project	<ul style="list-style-type: none"> - The low-carbon small combined heat & power plant using waste of its regional area as its fuel is very economic system. - We need to improve mutual interest about low-carbon business to cope with emission trading system. - We need to improve the environmental conditions of a regional community by using industrial waste and urban waste as combustible energy resource. - We need to improve the electric stability by disputing electric peaks resulted from the electric generation by the regional low-carbon small combined heat & power plant. - We need to construct facilities for energy recovery from waste
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Current Research Activities	<p>Domestic</p> <ul style="list-style-type: none"> - Korean has successful separate garbage collection system for recycling waste materials. - The proven efficient system for renewable energy is in operation in Korea. - There are the proven facilities processing exhaust fumes to comply with regulations of regional areas, which is needed when a low-carbon small combined heat & power plant is constructed. <p>International</p> <ul style="list-style-type: none"> - Studies to find the waste energy sources suitable to on-site regional area and to find its application are needed. - The construction of facilities reflecting Korean waste reprocessing cases is needed to improve the environmental conditions of a regional community.
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3. Administrative Information

Name of contact person/ Position	Kim, Heechan/ Research Fellow	Name of the organization	ENERGY PLUS Technology Co. Ltd.
Department	Fusion R&D Department in Research Institute	Contact Information	eplustec@naver.com