

Ube Industries, Ltd.

Energy & Environment Segment Environmental Business Div.

Location :1978-2 Oaza-Kogushi, UBE-CITY, YAMAGUCHI-KEN, 755-8633, Japan
(Tokyo Office : Seavans North Bldg. 1-2-1 Shibaura, MINATO-KU, TOKYO, 105-8449, Japan)

Representative : CEO Kazumasa TSUNEMI

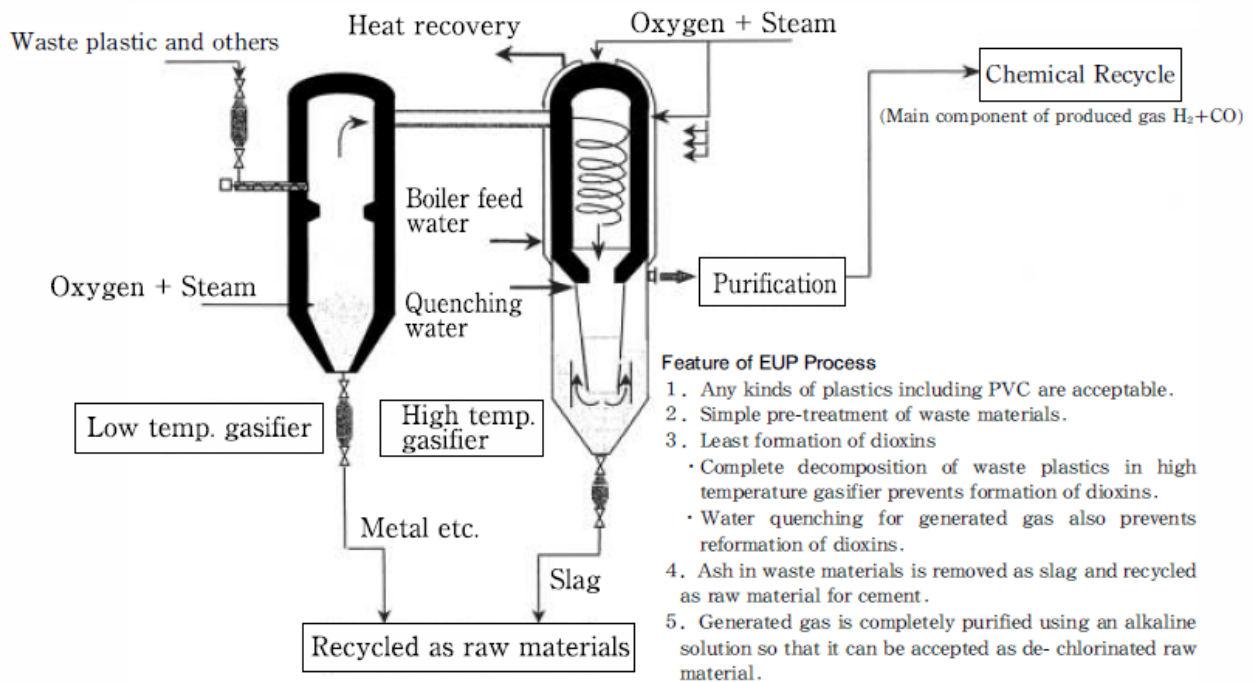
Business Classification	Capital	No. of Employees	Established
Chemicals, Resins, Construction Materials, Machinery, Metals , Energy & Environmental Technology	¥43,165,000,000	5,303 (88 in the Environment Business Division)	1897

Description of Business : Since founded as a coal mining company in 1897, UBE Industries, Ltd. has been developing in Ube city. The present main pillars of UBE's business consist of Chemicals & Plastics, Construction Materials, Machinery & Engineering, and Energy & Environmental Technology.

Main Products and Business : Chemicals & Plastics ; Basic chemicals, Fine chemicals, Commodity plastics, Engineering plastics, Synthetic rubbers, Electronics, Ceramics, Medical products Construction Materials ; Cement, Magnesium, Building materials, Concrete pre-fab housing Machinery & Engineering ; Die-casting machines, Injection-molding machines, Vertical mills, Bridge & structures, Aluminum extrusion presses, Chemical equipment, Reduction gears, Conveying equipment Energy & Environmental Technology ; Supply of coal and power, Recycling business and facilities for waste plastics, Environmental preservation business	
Main Activities in Environmental Business Field : (1) Design and engineering of recycling facilities for organic wastes · Gasification plant of waste plastics, Refuse derived fuel (RDF) system · Volume reduction and baling facilities for waste plastics, Sludge puffing system · Recycling plazas (2) Recycling business of waste plastics (Chemical recycling) (3) In-situ vitrification business for contaminated soil (4) Raw Materialization System for cement made from incinerated ash Extruding equipment of incinerated ash	
Main Facilities for UBE's Environmental Business : (1) Gasification plant for waste plastics (EUP) Annual Capacity ; 20,000 tons (2) Refuse derived fuel plant (RDF) (3) Sludge puffing plant (4) Volume reduction and baling facilities for waste plastics (5) In-situ vitrification facilities for contaminated soil	
Facilities for environmental preservation : All the facilities and equipment have been designed to prevent emission of any harmful substances and pollutant in accordance with the "Zero-emission Concept".	
Qualified Permits, Registrations and Others : Architect office	
Licensed and Qualified Engineers, Specialists : Architect (1st class), Pollution control manager, Manager in charge of safety production of high pressure gas, Engineer handling hazardous substance, Boiler technician, Energy control engineer (heat), Civil work control engineer, Electrical facility control engineer	
Environmental Preservation Activities	
Energy Conservation	ISO Certification obtained in March of 2001
Eco-business and Eco-products	
Eco-facilities	Gasification plant for waste plastics, Refuse derived fuel (RDF) system for waste plastics, Sludge puffing plant, Raw Materialization System for cement made from incinerated ash
Eco-products	Volume reduction and baling facilities for waste plastics
Contributions to Environmental Preservation	In-situ vitrification for contaminated soil, puffing treatment for sludge
International Contributions for Environmental Technology Transfer	Trainees from oversea who study about out environmental technology are invited three times a year.

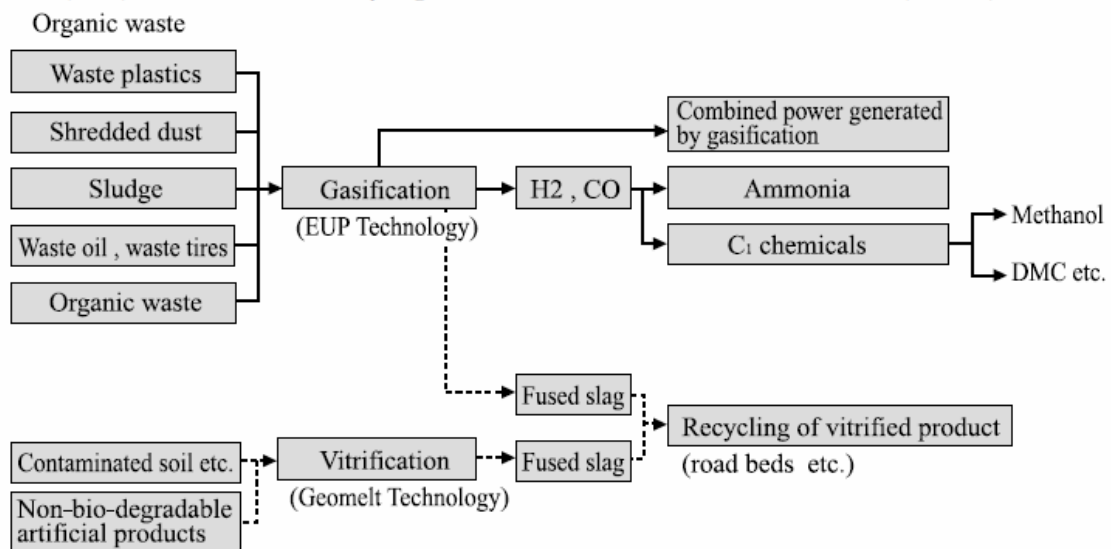
Outline of UBE's Environmental Technology (Flow System and Photos)

Pressurized Two-stage Gasification Process (EUP)



Zero Emission, Chemical Recycling of Waste Plastics

UBE Industries, Ltd. is putting effort into developing new technologies linked to integrated gasification combined cycle power generation (IGCC) and efficient chemical recycling of waste materials such as chemical raw materials (CO + H₂).



Further Information on UBE's Environmental Business and Technology

Ube Industries, Ltd. Energy and Environment Segment Environmental Business Div.

Marketing Dept. Manager : Shinri TAMAOKA

1978-2 Oaza-Kogushi, UBE CITY, YAMAGUCHI-KEN, 755-8633, Japan

Phone : +81-836-31-4775/ FAX : +81-836-31-8342/ E-mail : 22872u@ube-ind.co.jp/ URL : <http://www.ube.co.jp>