



DAE GIL ENGINEERING

Bio Plant Creator





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PRESIDENT	Lee, Gyu Hong		
SINCE	2023. 03. 09.	CONTACT INFO	T. +82 52-227-6200 F. +82 52-227-6202 daegileng@daegileng.co.kr

OUR TO DO

BUSINESS AREA



01

Organic Resource
Upcycling Design



02

Contruction



03

Operation



04

Upgrading &
Remodeling

WHAT WE DO

ORGANIZATION

DAE GIL ENG accompanying outstanding engineers and technology always does the best to meet the needs of customers and is all set to provide the best efficiency and value.



OUR FAMILY

BIT

Organic waste upcycling system engineering and operating, and manufacturing and R&D of BIOGAS.

BIT boosting up ESG management with the local community goes global and never stops innovation and challenge.

BIT makes the technology better and nicer and commits to providing a better and nicer life for all.



OUR FAMILY

NONG BI

manufacturing, R&D, and marketing of
Liquid Fertilizers.

NB accompanying eco-friendly
technology makes non-stop growth in the
market and its commitment to
reducing CO2.

161 retailers in Korea

193,297

Cumulative quantity
from 2020 to 2023

Global export

- Vietnam
- The Philipines



CEO VISION

CEO Message

DAE GIL ENG succeeds in the heritage and technology of biogas from BIT that can provide customers with a full package, starting from project plan and research, design, construction, and EPIC, plus management, advisory, maintenance, and upgrading & remodeling. Also, DAE GIL ENG is ready to make progress in manufacturing sodium carbonate (NaHCo_3) from biogas.

Furthermore, DAE GIL ENG is planning to produce energy from marine waste soon or later.

Lee, Gyu Hong (CEO of DAE GIL ENG) has PhD in environmental science and is a professional engineer in waste disposal. also, He is a retired public official and has made it to produce 4 kinds multi fertilizer and national sales. DAE GIL ENG is planning to build additional digesters for BIT and facilities to manufacture sodium carbonate (NaHCo_3) and make sales in Korea and globally as well. Plus, DAE GIL ENG is planning to make investment suggestions for 16 major BIOGAS plants in Korea and optional application of Biogas.

A new law about boosting up Biogas in Korea has been proclaimed, DAE GIL ENG will sophisticated the technology of manufacturing Biogas and build the perfect system to use CO_2 and methane each out of biogas including sodium carbonate (NaHCo_3) and hydrogen (H_2).

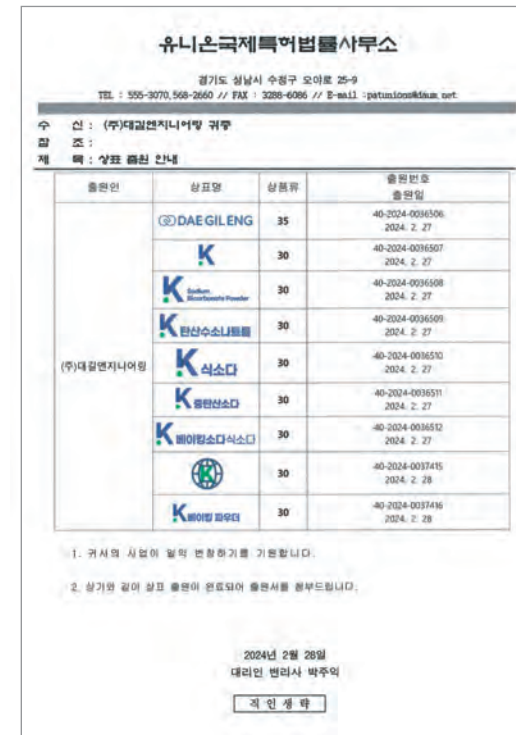
DAE GIL ENG is fully ready to make better progress and go global to become a leading company in the Biogas business.

CEO Lee, Gyu Hong

DAE GIL ENG HISTORY

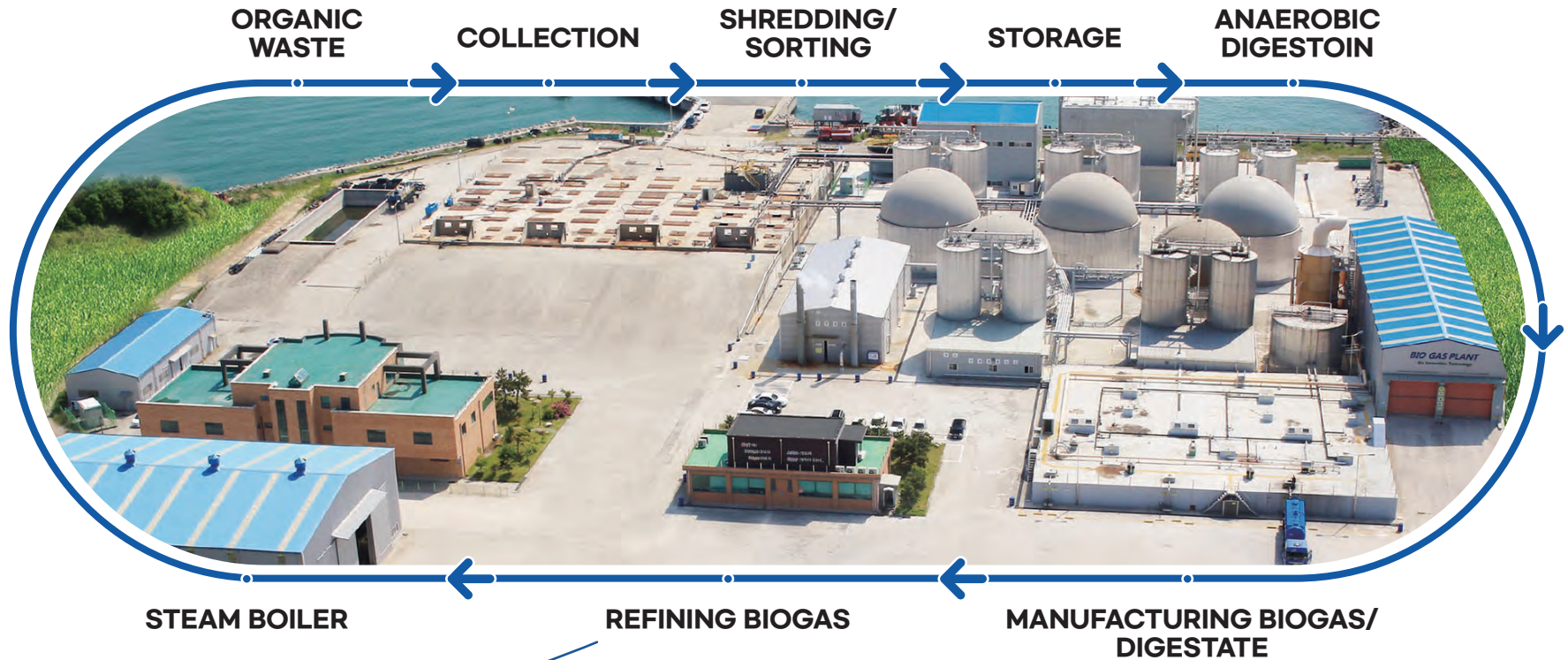
CERTIFICATIONS

DAE GIL ENG is an engineering company that inherits the technology from BIT so that can provide customers full package including design, construction, operation, and upgrading & remodeling. DAE GIL ENG is fully ready to make better progress and go global.



BIO TECHNOLOGY

BIT PROCESS



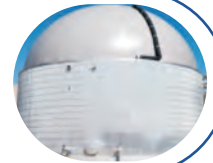
☑ Option 2

- Sodium Carbonate manufacturing
- Supply steam energy
- Supply heat energy
- Power Generation
- H2 reformation
- Supply civil gas



☑ Option 1

- 1 organic liquid fertilizer
- 2 organic solid fertilizer
- 3 sewage treatment



ECO-FRIENDLY FERTILIZER

over 150 multiple
microorganisms and enzyme
combination makes synergy
to improve the condition of
the soil and help grow plants.

Option 1

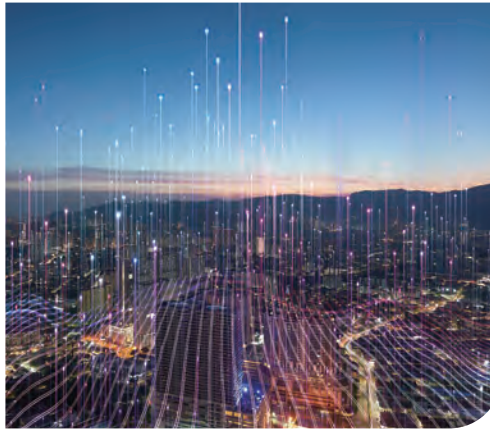


OPTION

BIO ENERGY

- Sodium Carbonate manufacturing
- Supply steam energy
- Supply heat energy
- Power Generation
- H2 reformation
- Supply civil gas

Multiple options to meet customers needs.



Option 2



OUR TECHNOLOGY

BIT ANAEROBIC DIGESTER

HRT (Hydraulic Retention Time)

5~10 DAYS

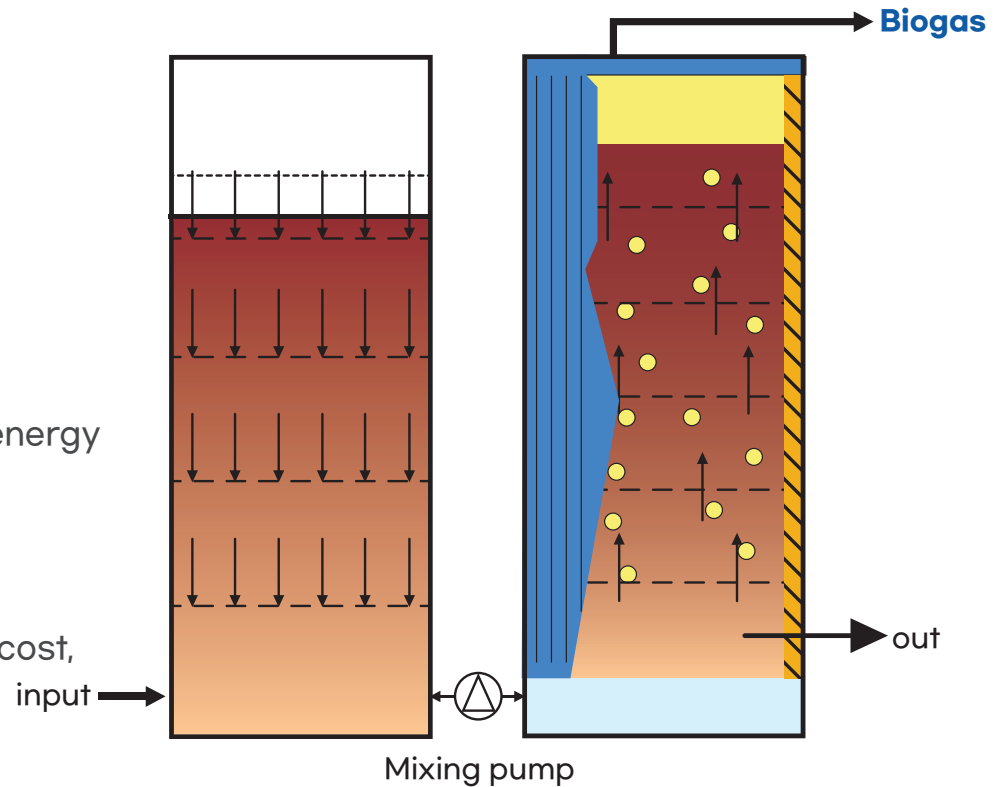
Digestive efficiency

70%↑

Double cylinder tower type using non-stop circulation through water level that is less energy consumable.

Applying multi plate that makes digestion better and faster (70% above).

Minimum digestion time (5~10days), saving cost, automatic operation, simple maintenance

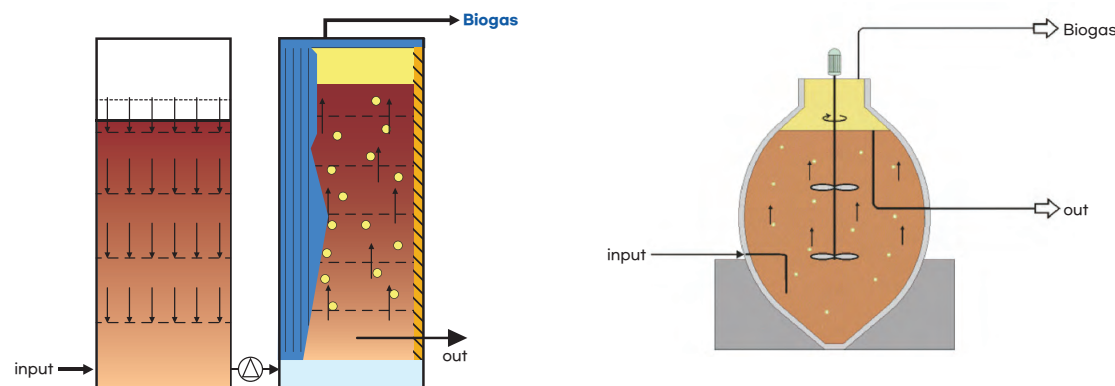


OUR TECHNOLOGY

BIT ANAEROBIC DIGESTER VS CONVENTIONAL DIGESTER

Digester types	BIT Anaerobic Digester	Conventional Digester
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Digester schematic diagram

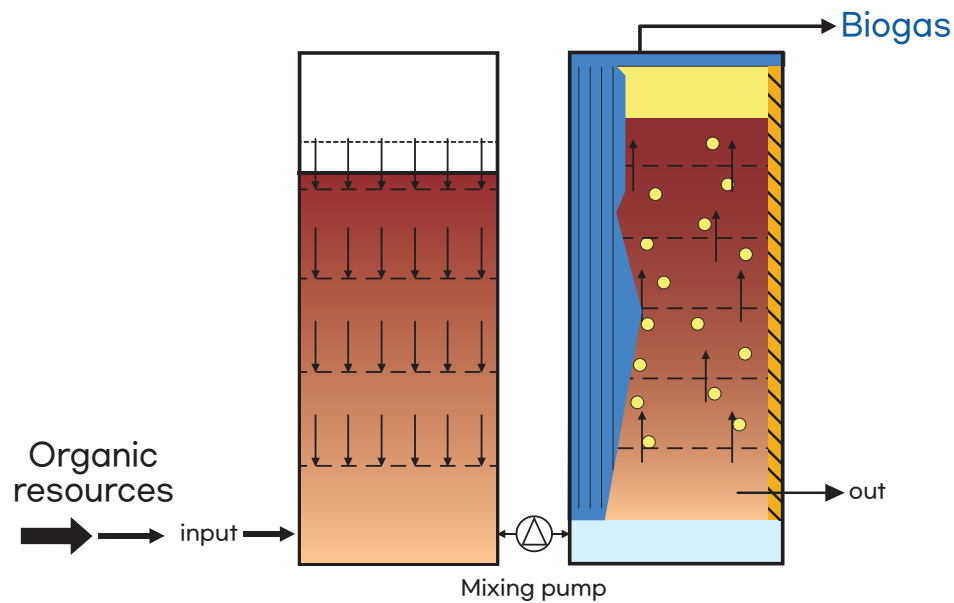
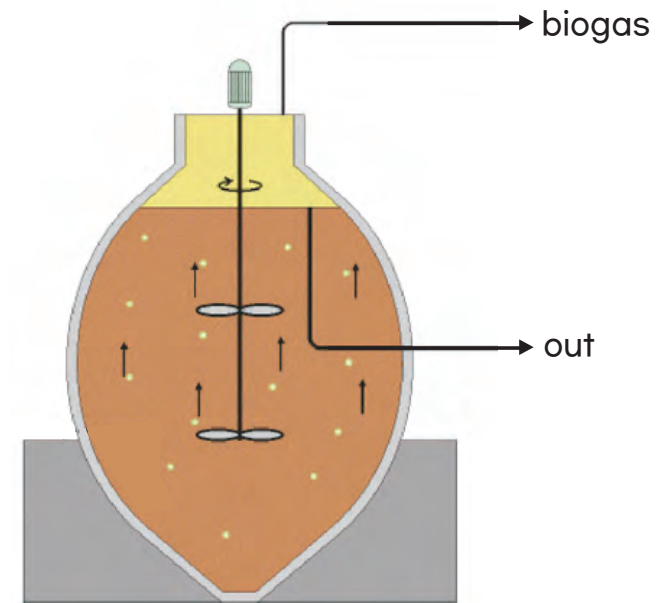


Mixing type	Impulse mixing system	Central stirrer system
HRT	5~10 days	15~30 days
Digestive efficiency	70% ↑	40%
Foam	No	Yes
Sediment discharge	Yes	No
Methane gas production rate	0.6m ³ CH ₄ /kg VS input	0.35m ³ CH ₄ /kg VS input

TECHNOLOGICAL INNOVATION

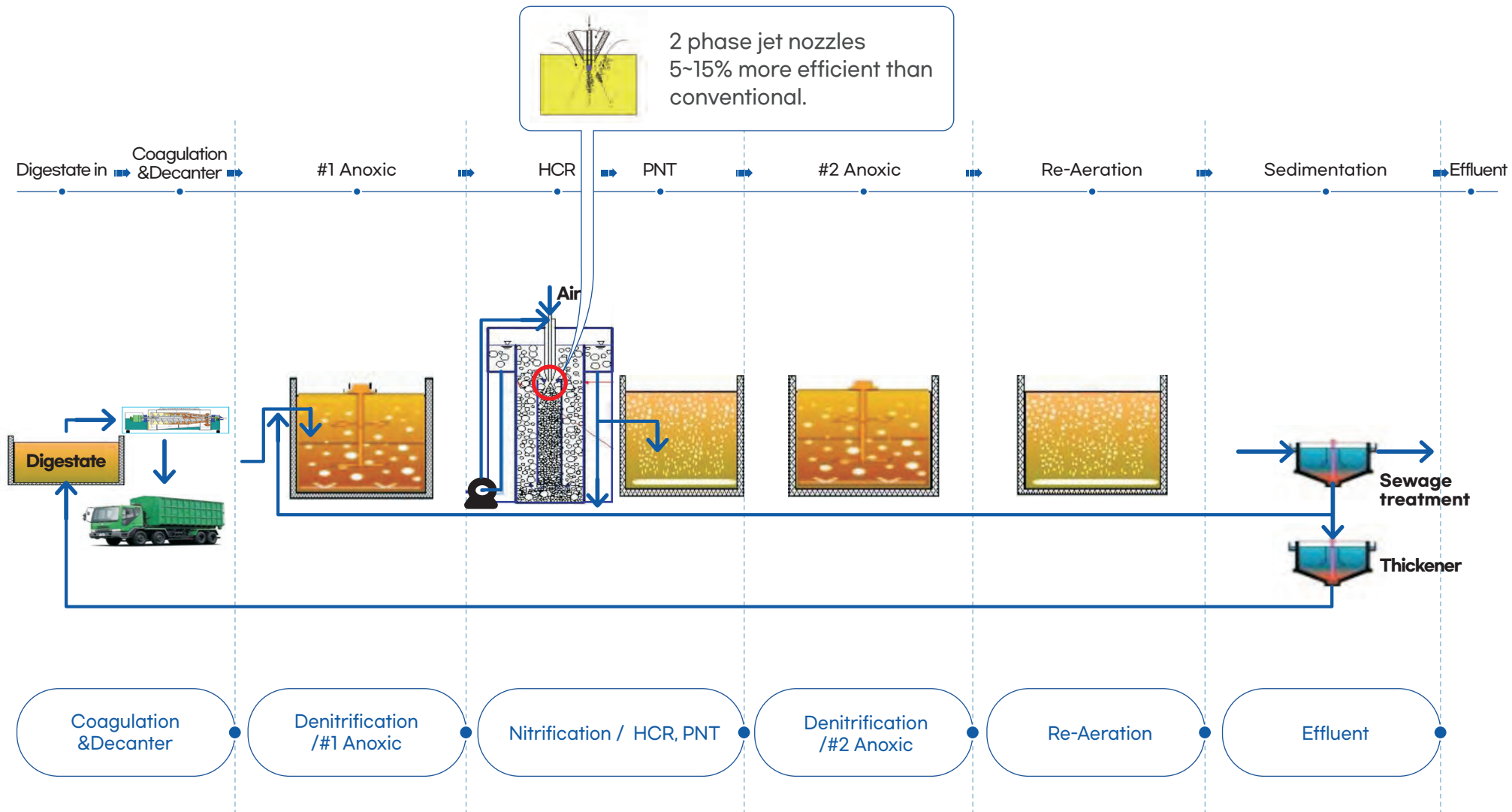
UPGRADING CONVENTIONAL DIGESTER

Upgrading conventional Digester to improve digestive efficiency leads to reaching the ultimate efficiency.

**BIT Anaerobic Digester****Conventional Digester**

PROCESS

WASTEWATER TREATMENT PROCESS



BIO PLANT CREATOR



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