

19 Years
BIOGAS EXCELLENCE

K'S Group[®]
SUSTAINABILITY²

Asia's Largest Producer of BioCNG[®], Carbon Credits, VER's, GS

World's Best Biogas & BioCNG[®], BioCO₂, BioLNG, BioHydrogen[™], BioFertilizer Technologies & Equipment Manufacturing
LEADING THE CLIMATE CHANGE, ENERGY TRANSITION & DECARBONISATION



Indonesia's First Commercial BioCNG[®] Plant



60th Project



WINNER

**WORLD'S TOP 2
BIOGAS PROJECT
2023, UK**

**WINNER
BEST BIOGAS
PROJECT IN
ASEAN**

**INDIA'S BEST
BIOGAS/
BioCNG[®]
PROJECT**

**BEST
RENEWABLE
ENERGY
COMPANY &
20 OTHER
PRESTIGIOUS
AWARDS
SINCE
INCEPTION
2006**

CREDENTIALS: PROVEN TRACK RECORD OF MORE THAN 50 PROJECTS IN LAST 18 YEARS.
AWARDED IN FRANCE, ENGLAND, SINGAPORE, GERMANY, INDONESIA AND INDIA

Dear Sir / Madam,

Greetings,

First of all Millions of Thank you for the glorious 19 years, to all our wonderful team, Esteemed Clients, JV partners & vendors in our supply chain.

KIS (Knowledge Integration Services) Group provides proprietary technologies in waste to Energy - BioCNG®, Biogas, BioPower®, BioClean®, ZPHB®, TLGM™ & BioHydrogen.

We are leading force for Energy transition & Decarbonisation of plantations, Transportation industry and Manufacturing industries by our BOOT & BOOM schemes.

We are the largest producer of Carbon Negative Fuel in the world and have projects registered in CDM / Gold Standards / VCC / IREC and others.

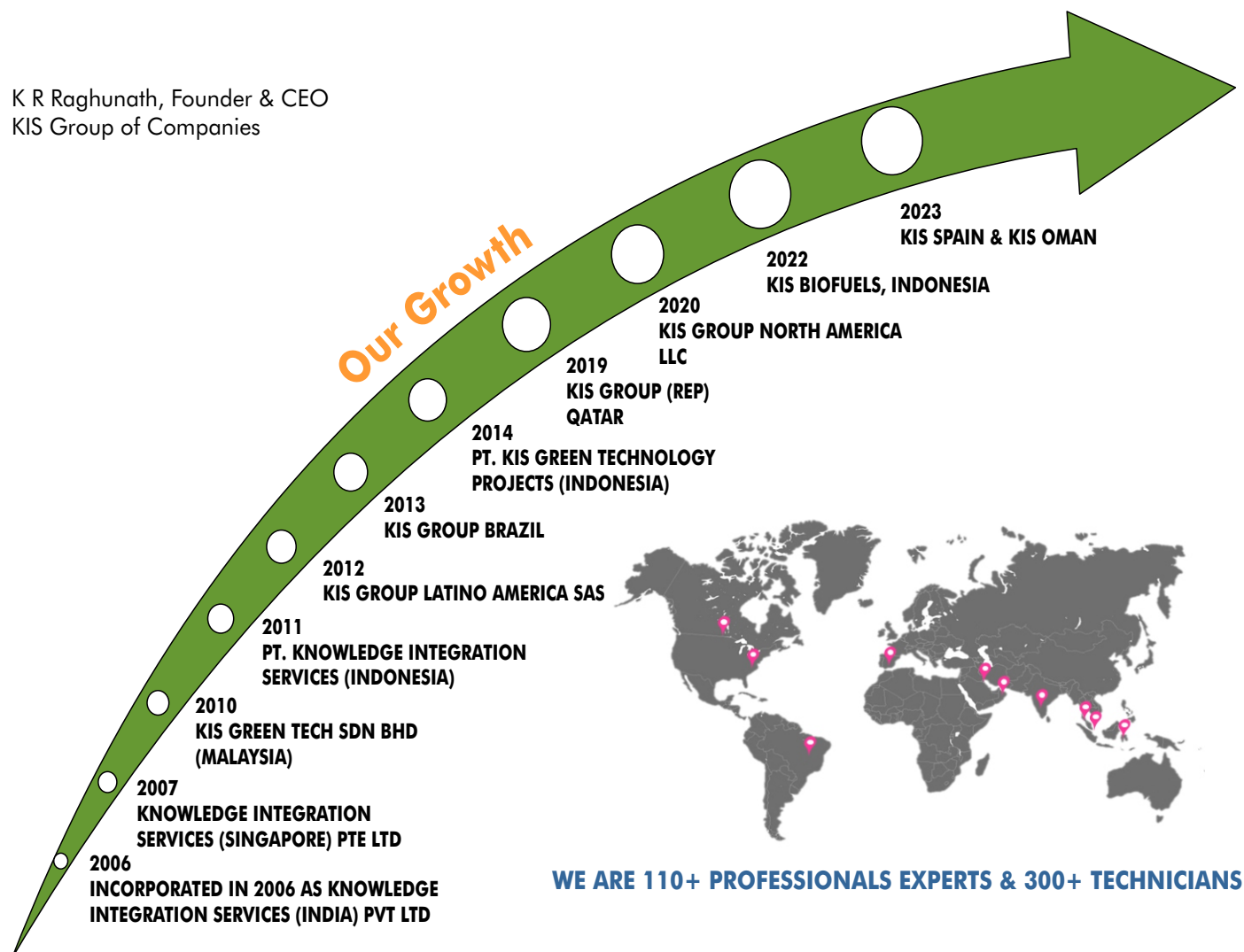
Our 5 core strength are the Technologies & Manufacturing of Equipments , Turnkey Solutions from concept to commissioning, BOOM / BOM /BOOT, Operation and Maintenance of the plant and Complete Carbon Management consultancy to achieve Net Zero Carbon (Zero Carbon Footprint).

Our Major success in our ventures and solutions with numerous repeat orders are testimonies built on knowledge and experience and dedicated efforts towards serving our clients, employees, vendors & caring for the environment.

I have every confidence that the business relationship which we form will be long lasting and mutually beneficial one and I personally stand for KIS Group of Companies Products and Services.

Thank You
Kind Regards,

K R Raghunath, Founder & CEO
KIS Group of Companies



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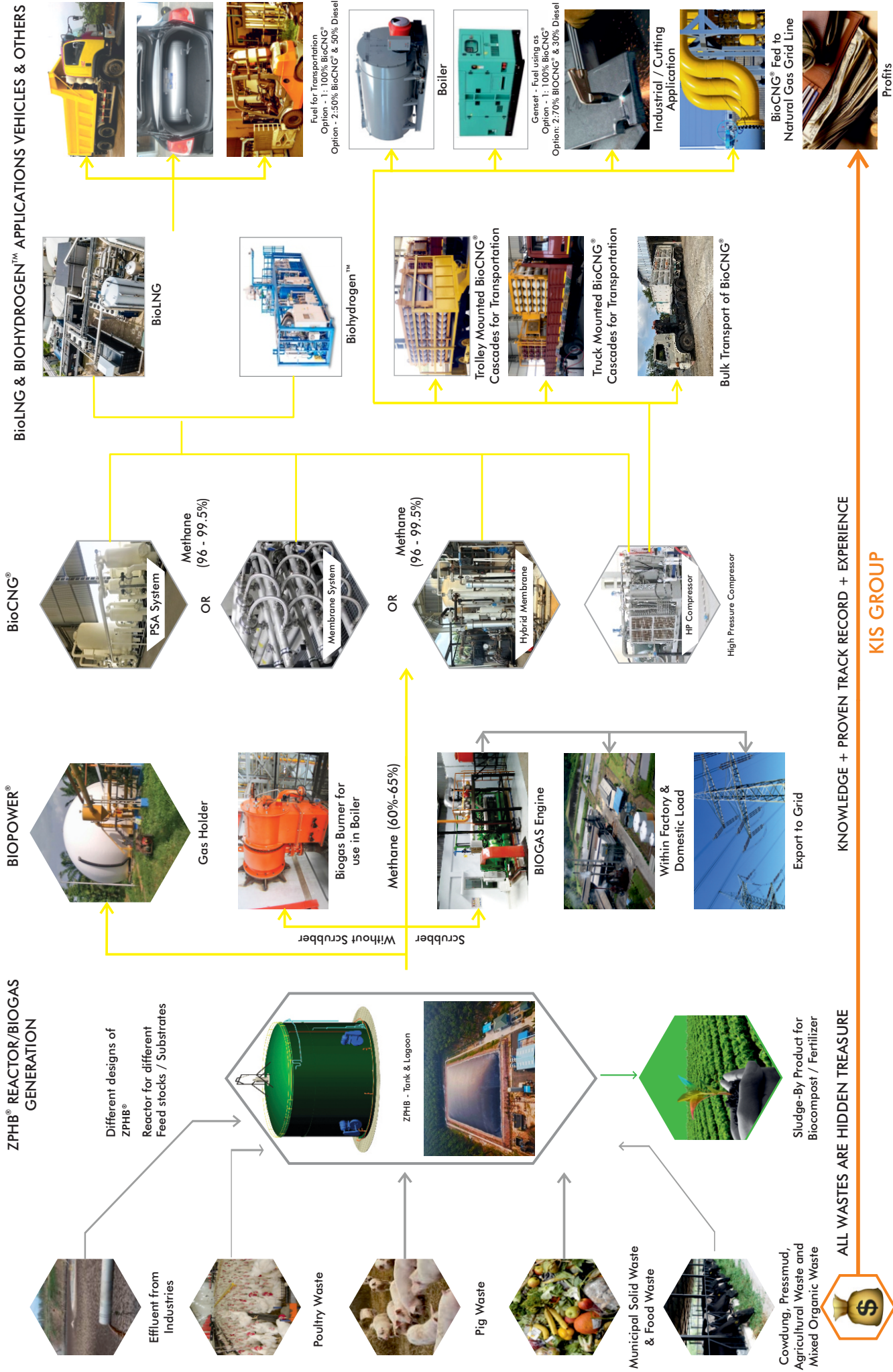
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COMPLETE TURNKEY SOLUTION PROVIDER

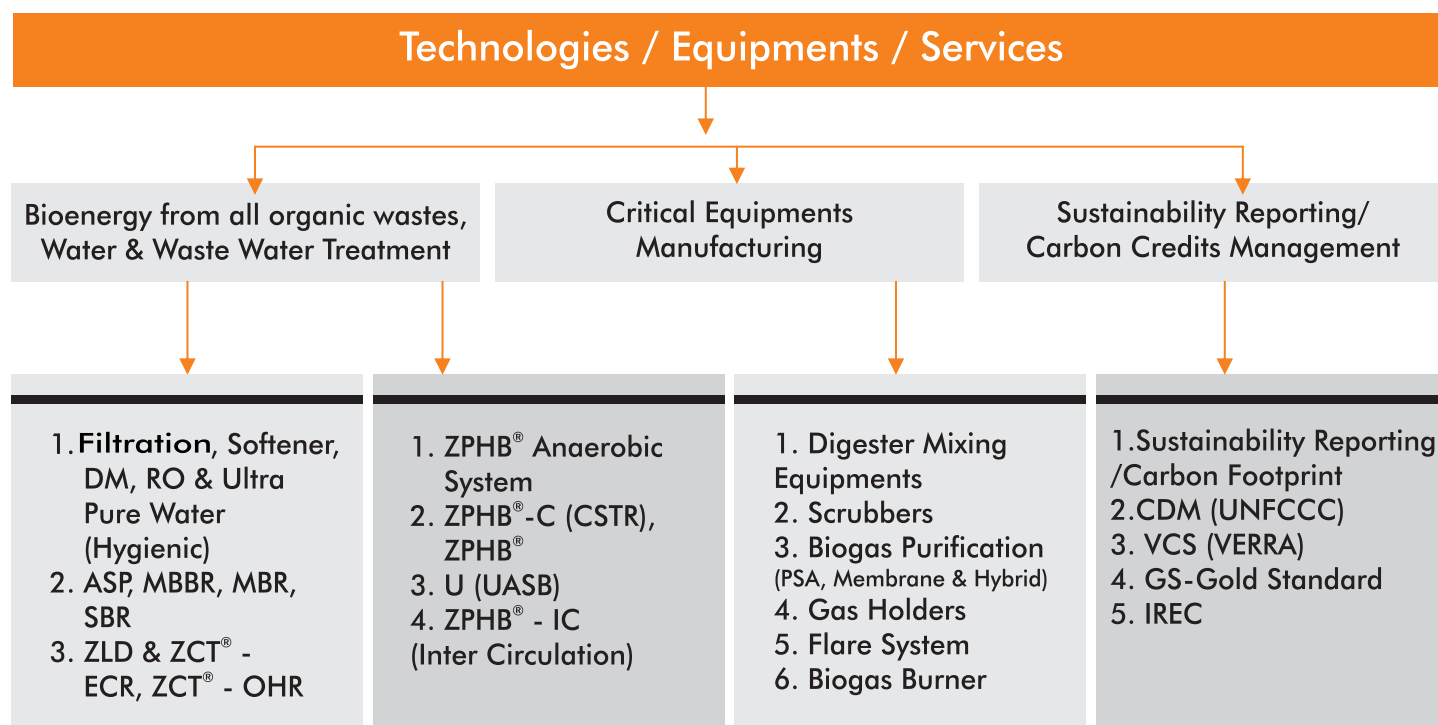
TYPE OF WASTES

TECHNOLOGIES

END PRODUCTS



MANUFACTURE'S OF WORLD CLASS TECHNOLOGIES & EQUIPMENT'S OF BIOGAS & BioCNG®



Industries: Municipal Wastes, Palm Oil, Oleochemical, Coconut Wastewater Agrochemical / Pharmaceutical, FMCG, Solid Waste, Starch, Distillery, Sugar, Brewery, Dairy, Pulp and Paper Etc.

18 YEARS OF PROVEN EXPERTISE IN CARBON CREDITS/VCC/IREC/GS

Provider for Complete Carbon Management Consultancy for Industries, Corporates, and Plantation Companies to achieve Net Zero Carbon Footprint

Experts and Experience of 18 years in preparations and providing consultancy for PDD/CPA-DD, Monitoring & Issuance of CER's, VER's, GS CER/GS VER and IREC.

Programs	CDM	VCS	GS	IREC
Registration & Units	UNFCCC (United Nations) CER	Verra, US VER	GS Board, Switzerland GS CER/VER	Green Certificate Company IREC
Crediting Period	10 years (Fixed or 3x7 = 21 years (Renewable))	10 years	3 x 5 = 15 years	5 years (Renewal after every 5 years)

EXPERTS IN COMPLETE BOOM (BUILD OWN OPERATE & MAINTAIN)



The first BOOM scheme Biogas plant was developed in 2013, KIS Group had invested 55% & 45% by SIPEF Group, Belgium.



After Successful 4 years of performance in year 2017, SIPEF Group Acquired 55% shares of the project from KIS group by paying premium.

We have completed 2 projects and currently doing another 2 projects under BOOM scheme.



PT. AGROMUKO
Muko Muko, Indonesia ZPHB® Higher Biogas Technology
1.2 MW Power Export to PLN and Excess Biogas used in boiler



Biogas Plant & Biogas Engine 1067 KW. Provision given for another 1067 KW Gas Engine in future



Export of Biogas Power to Grid (PLN)

AND BOM (BUILD OPERATE & MAINTAIN) PROJECTS, SINCE 2013

Indonesia's First Commercial BioCNG® plant UNILEVER BioCNG® PROJECT

Asia's 1st and Largest Commercial BioMethane/BioCNG® Project



- Unilever plans to achieve Net Carbon Zero by 2025 at their factory in Seimagki , Sumatra Indonesia. Other big Industries in Indonesia also have plans to reduce carbon emissions.
- Unilever & other Industries appointed and signed long term contract with KIS Group for supply of BioMethane / BioCNG® on take or pay basis.
- The target is delivered to achieve 13,036 MMBtu or 325,900 m³ of BioMethane/day by December 2025.

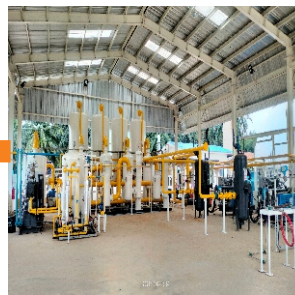
Purchaser / Off Taker of BioCNG®/ Unilever



Unilever
Oleochemical Plant



Transportation through
Cascades



BioCNG® from
Palm Oil Mill



Long term Agreement
Signed with Unilever

Inauguration of BioCNG® - NetZero project initiative at Unilever



BOOT (BUILD OWN OPERATE TRANSFER) PROJECTS



Mewah



BioCNG® Capacity: 788 m³/hr
Location : Sumatra, Indonesia
Supply of BioCNG® to near by Industries.

**PT. UNITED KINGDOM INDONESIA
PLANTATIONS (PT. UKINDO)**



ORGANIC WASTE & EFFLUENTS TO GREEN PRODUCTS

BioCNG[®], BioCO₂, BioHydrogen[™] & BioFertilizer from Animal Manure

BioCNG[®], BioCO₂, BioHydrogen[™] & Bio Fertilizer dari Kotoran Hewan

동물 거름의 BioCNG[®], BioCO₂, BioHydrogen[™] 및 BioFertilizer

BioCNG[®], BioCO₂, BioHidrógeno[™] y BioFertilizantes a partir de estiércol animal

BioCNG[®] / BioLNG / BioHydrogen

Types of Organic Wastes



POME & OTHER
EFFLUENT



EFB



CHICKEN WASTE



PRESS MUD



COW DUNG



ETP SLUDGE



SAGO WASTE



NAPIER GRASS



STP SLUDGE



PIG WASTE



MSW



OLIVE OIL
EFFLUENT



PADDY STRAW



FOOD & VEGETABLE
WASTE



ANIMAL
HUSBANDARY



Biogas Power



BioCO₂



BioFertilizer



Liquid Fertilizer



BioSulphur



Briquettes / BioChar



Carbon Credits



One Waste Converted into Many Green Products

ASIA'S FIRST COMMERCIAL BioCNG® DISPENSER FROM COWDUNG / ORGANIC WASTES IN INDIA



BANAS DAIRY:

Asia's Largest Dairy

Awarded India's Best Biogas / BioCNG® Project

3 years of Successful
Operation

50 Tons/day Cow-Dung Project at
Banas Dairy



Overview of BANAS BioCNG® plant

100 Tons/day Cow-Dung Project at
IDMC Varanasi



Overview of IDMC Biogas plant



Biogas Holder



Gas Engine



Solid / Liquid Separator



Biogas Burner & Sedimentation Tank



Solid Fertilizer Packing System



PROM System

ASIA'S FIRST CATTLE DUNG TO GRANULE TYPE BIO-METHANE BIOGAS POWER PLANT



BANAS DAIRY: Asia's Largest Dairy

Awarded India's Best Biogas / BioCNG® Project



BioCNG® Dispenser



PROM (Phosphate Rich Organic Manure)



BioCNG® Filling Station



PROM Bags for Sale



1st Project in 2020



India's 1st Best Biogas Project Award

2nd Project in 2022



World's 2nd Best Biogas Project Award

2 Repeat Orders in 2024

- 1) 100 Tons/day Cowdung to Biogas at Bhukhala Village,
- 2) 100 Tons/day Cowdung to Biogas at Agthala Village,
Palanpur, Gujarat, India

ASIA'S FIRST BIOMETHANE SUPPLY THROUGH PIPELINE TO 1500+ HOUSES

150 Tons/Day Cow Dung & Vegetable Waste
Insitu Cowdung production and Utilisation for production of BioCNG® distribution to the producers of CowDung to replace the LPG Gas at Housing complex in KOTA, Rajasthan, INDIA



CHICKEN WASTE TO BIOGAS



- Substrate : Chicken Litter, Cow Dung & Pressmud
- Capacity - 80 Tons/day
- Biogas generation - 6250m³/hr
- BioCNG® - 2354 Kg/d
- Used for Industrial applications
- Location - Janakpur, Nepal
- Nepal's Largest Biogas Project

BIOGAS PROJECT TO BIOPOWER® AGRICULTURAL WASTE FROM PALM OIL PLANTATION (POME/EFB) TO BIOGAS/BioCNG®



1. PT. Parna Agro Mas Biogas - 29376 m³/d
2. PT. Tintin Boyok Sawit Makmur Biogas - 28080 m³/d



- Substrate – Palm Oil Mill Effluent
- Flow – 648 m³/d
- Covered Lagoon Volume: 22800 m³/d
- Biogas Generation – 33000 m³/d
- Location - Indonesia



4 Orders in Last 12 Years



PT. Agromuko
Operating successfully
since 2013 & earning
carbon credits



Hargy Oil Palms
Operating successfully
since 2014 & earning
carbon credits



PT. UMW
Operating successfully
since 2016 & earning
carbon credits



PT. Tolan Tiga
Operating successfully
since 2017 & earning
carbon credits

2 Repeat Orders in 2024

1) 24,316 m³/day Biogas
and Carbon Management
At PT. AMR , Indonesia

2) 24,244 m³/day Biogas
and Carbon Management
At PT. Dendy Marker,
Indonesia

Our Prestigious Project for Maruti Suzuki





PERTAMINA

pgn GAGAS
brings energy to you



Supply of piped BioCNG® from Sago Waste for replacing the Cooking Gas in the Two villages of Leh & Tabo in Sarawak, Malaysia

ASIA'S FIRST PAPER MILL EFFLUENT TO BioCNG® AT SAINSONS PAPER INDUSTRIES PVT LTD., INDIA

- Substrate - Paper Mill Effluent
- BioCNG® - 3095 Kg/d
- Used for Industrial application
- Location - Pehowa, Kurukshetra



OUR WORLDWIDE SUCCESSFUL PROJECTS IN LAST 12 YEARS BIOGAS PROJECT TO BIOPOWER® FROM POME



2134 KW Biogas Power Plant |
Successfully Operating Since July-2015
Installed capacity of gas engine- 1067KW x 2
Total - 2134 KW
ZPHB® reactor details - 2 nos of
4555 m³each. Methane Content - 60%
Excess Biogas used in boiler with Biogas burner.



7 years of Successful Operation



1670 KW Biogas Power Plant |
Successfully Operating Since August-2015
Installed capacity of gas engine-835 KW x 2
Total - 1670 KW
ZPHB® reactor details - 2 nos of 4555 m³each.
Methane Content - 60%
Excess Biogas used in boiler with Biogas burner



7 years of Successful Operation

LIBM Burner for **excess** Biogas usage
Commissioned in Feb 2021



Winner: Indonesia's Best Biogas Power plant
Success Story: Biogas Power Plant -1670 KW



Testimony from Client

Our Biogas plants help in responsible palm oil production processes: Zero Waste, Increased Energy Efficiency and Reduced Greenhouse Gases.



sinarmas



K&S Group
SUSTAINABILITY²

1st Order in 2013



PT. Ivomas Tuggal, Indonesia

2nd Order in 2013



PT. Ramajaya Pramukti Indonesia

2024

**Repeat Orders for
BOOT (Build Own
Operation & Transfer)
Projects**

Another Successful Project in Indonesia | CDM-PoA Registration Completed

Overall we have commissioned 35 large, Waste to Energy projects. The prestigious CITRA BORNEO INDAH (CBI Group), PT Sawit Sumbermas Sarana TBK (SSMS) has a 2.4 MW capacity Biogas power plant, Our first project in Pangkalanbun, Central Kalimantan operating successfully since December 2018.

Winner - 2022 Indonesia's Best Biogas Project

Winner - 2023 The Best Off-Grid Power Plant

Winner - 2023 The Best Power Plant Company

3.5 years of Successful Operation



Another Successful Biogas Project at PTPN 5 Palm Oil Mill, Riau

Commissioned in October 2020

2 years of Successful Operation



Repeat order from SARIMAS Group,
1st Phase 2.5 MW Commissioned in March 2017

5 years of Successful Operation



Cocomas

7.5 MW - LARGEST
BIOGAS PROJECT
In Indonesia / South East Asia
3 Nos ZPHB® Digesters of
each 12,800 m³ volume
Biogas - 3900 m³/hr



PT. SAM, Astra Group
Hulu Sungai Selatan,
Indonesia

Biogas- 813 m³/hr
Commissioned in
April 2014

8.5 years of Successful Operation



4 years of Successful Operation



Dekeleoil
Ivory Coast

BIOGAS - 511 m³/hr
First ZPHB® Project for
POME in Africa, Commissioned in
August 2018



Malaysia's Largest Biogas plant / Largest Digester for DD Plantation



DD Palm Oil Mill SDN BHD
Sarawak, Malaysia
Biogas - 1170 m³/hr



8 years of Successful Operation



EVYAP - Turkey
Johor Bahru,
Malaysia

Biogas - 213 m³/hr
Commissioned in June 2014

First ZPHB® Technology for Oleochemical in Malaysia

8 years of Successful Operation



Indonesia

PT. UMBUL
MAS WISESA

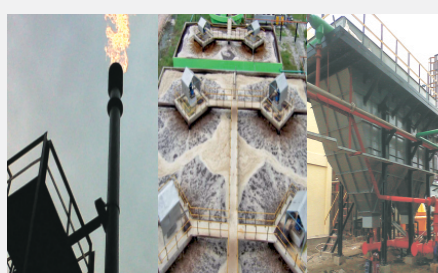
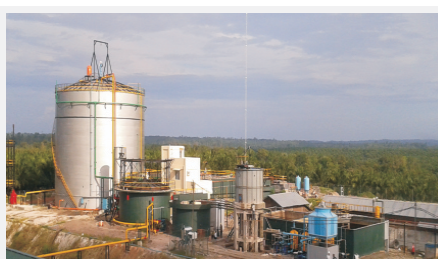
Rantau Prapat

Biogas - 898 m³/hr

Commissioned in August 2014



Exporting
Biogas Power
to Grid



9 years of Successful Operation

9 years of Successful Operation

5 years of Successful Operation



PT. Meskom, Indonesia.

Indonesia & World's First Project:
ZPHB[®], Zero Pond[™],
Zero Pollution[™] Higher Biogas
Technology Operating Successfully
since January 2013

One of the first project to
export Biogas Power to the
State Electricity Grid



Indonesia

PT. MAI
Kalimantan,
BIOGAS - 836 m³/hr
Commissioned in July 2013



PT. Rafi Kamajaya Abadi
Kalimantan Barat, Indonesia.

BIOGAS - 813 m³/hr
Zero Pond[™], Zero Pollution[™]
Commissioned in October 2017

BIOGAS / BioCNG® from Municipal, Food & Mixed Waste

KIS Group is a pioneer in treating food waste which are rich source of organic matter and this disposal attracts flies, mosquitoes which acts a breeding ground, moreover space constraint, methane release during decomposition, odour etc. are some of the problems associated with food disposal. The best solution is to use this food waste which is a source of energy back to captive use. ZPHB® reactor converts this food to Biogas which can be used as fuel in the Kitchens/Canteens.

The digested substrate produces organic fertilizer which can be used for gardening in the institutions. The effluent is treated in ETP and can be reused for flushing the toilets and other gardening applications.



3 years of Successful Operation



Torrent Pharma
Gujarat - India

30 m³ ETP Sludge + 500 Kg
Canteen Food waste at their factory
Biogas Generation: 123 m³/d
Application: Captive use for
Cooking in canteen



MIXED WASTE TO BioCNG®



- Substrate – Palm oil mill effluent
- BioCNG® - 3000 Kgs/d
- Used for Industrial application
- Location – Indonesia
- Repeat Order - BioCNG® Project



Next Era Energy Private Limited

- Substrate – MSW
- Capacity – 30 Tons/day.
- Biogas Generation – 2500 m³/d
- BioCNG® – 750 Kg/d
- Used for Household applications
- Location - DAMAK, Nepal (Prime Minister Constituency)

BIOCLEAR®, BIOPOWER®, BioCNG® AND BIOHYDROGEN™ TECHNOLOGIES

As shared in our major success stories before, we offer complete commercial applications of Biogas from cleaning & upgrading of Biogas with our proven & successful BIOCLEAR®, Biohydrogen™ and BIOPOWER® Technology.

BIOCLEAR® - Different types of H₂S SCRUBBERS

We design and provide highly efficient Chemical, Biochemical, Chelating, Biological and Water scrubber for removing H₂S from Biogas. The removal of H₂S makes it suitable for the use in different Biogas engines. The removal of H₂S is as low as required by the client with our scrubber system.

Applications of BIOGAS with BIOPOWER® & BioCNG®

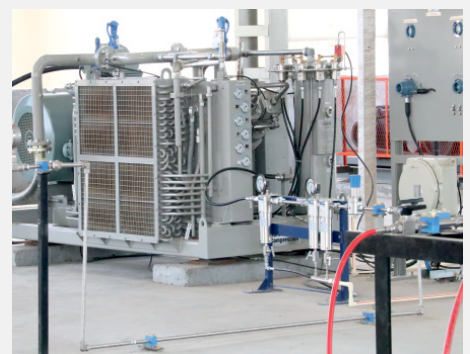
With our BIOPOWER® solutions we provide the end uses/ application of Biogas for Energy generation/ production uses. We provide solutions to use Biogas in Boiler & Gas Engine. With this we provide end to end solution for Biogas from generation to commercialization.

BIO-METHANATION & BOTTLING

The process of removal of CO₂ & other impurities from Biogas provides purified methane. The PSA (Pressure Swing Adsorption), water scrubber, membrane separation & cryogenic separation technologies are used for upgradation to 93%-95% methane. The bottled Biogas is used for industrial applications and vehicles.

BIOHYDROGEN™

BioHydrogen™ is a colorless, odorless and combustible gas in the presence of oxygen. Production of Hydrogen (H₂) from renewable sources such as Biogas by methane reforming process to produce clean energy with added High Energy Efficiency. BioHydrogen™ can be used as alternative fuel for transportation, industrial application and Power generation.



Waste Water / Effluent Treatment Plants

We are providing complete turnkey solutions for waste water / effluent treatment for all types of effluents. Our treatment scheme comprises of primary treatment, Biological treatments (ASP / MBBR / SBR / MBR), tertiary treatment and sludge management. The scheme will vary based on effluents & end user requirements.

MBR (Membrane Biological Reactor)

Membrane Bio Reactors provide a very compact, robust, simple effluent treatment plants that are capable of producing very high quality effluents. It is designed to achieve high quality effluent within a small overall foot print.

The MBR process utilises the well proven activated sludge process, but replaces conventional final settlement with an ultrafine membrane which effectively filters the final effluent.

Benefits of MBR Technology:

- The membrane is an extremely effective solids separation device.
- High removal efficiency results in a very high effluent quality.
- Simplicity of system design.
- No requirement for final settlement tanks.
- Offers bacterial removal without the need for complicated ultra violet radiation system.

MBBR (Moving Bed Bio Reactor)

MBBR (Moving Bed Bio Reactor) technology is based on the biofilm principle with an active biofilm growing on small specially designed plastic carriers that are kept suspended in the reactor.

The carriers are designed to provide a large protected surface area for the biofilm and optimal conditions for the bacteria culture when the carriers are suspended in water.

Benefits of MBBR Technology:

Less space required and easy operation for BOD/COD and nitrogen removal. High loading rate compared to other conventional biological treatment.

- High Strength reactor to increase the amount of biological population by providing large surface area to bacteria.
- Upgradation of existing ASP into IFAS / MBBR to meet higher organic load & discharge.

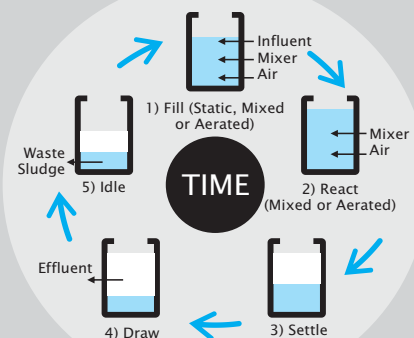
Activated Sludge Process

ASP is very simple and easy to implement but need more space and more energy than other treatment methods. We are providing complete mix - as conventional aeration and Extended aeration process or both depending on the inlet organic load to the system. Aeration system will be Diffused system (fine/coarse) with retro fit or without, Mechanical surface aerators and submerged turbine aerators. The overflow from Aeration tank will be taken into Secondary clarifier for further separation of sludge and water and part of sludge will be recycled back at inlet of aeration tank and excess will be sent for de-watering or other process.

SBR (Sequential Batch Reactor)

The SBR is a fill-and-draw activated sludge system that combines all of the treatments steps (anoxic phase, aerobic phase and sedimentation phase) into one single basin. It consists of the following five basic steps.

- 1) Fill (addition of new wastewater)
- 2) React (anoxic and/or aerobic phase)
- 3) Settle (mixing is stopped to let biomass settle down)
- 4) Draw (removing the clarified and treated water)
- 5) Idle (during this phase sludge is usually removed)



Sludge Management System

We provide suitable sludge management system based on the effluent characteristics





2.5 MLD ZCT® Plant Project at Colombia, Latin America

KIS Group has implemented the 2500 m³/d project with high inorganic and high TDS influent, using advanced ZCT® - OH radical with ZCT® - E Technology

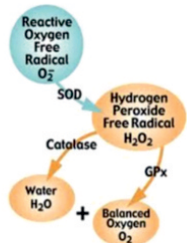


Main plant project photos commissioned in November 2019 and working successfully

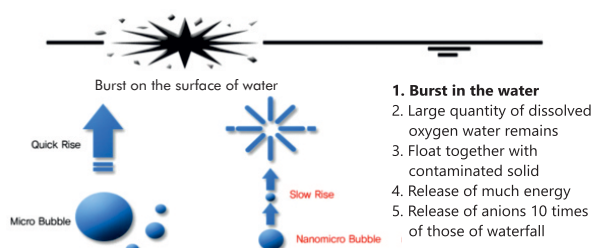
Innovative ZCT[®] (Zero Chemical Treatment) Technologies

We are providing Advanced ZCT[®] Technology such as ZCT[®] - OH (Hydroxyl Radical) System & ZCT[®] - and (Electro Contaminant Removal) System for Highly Inorganic / Organic Waste Water

A Proven OHR system with 4 patents



The Nanomicro Bubbles Advantage



Standard Micro Bubble Generators

Proprietary Nanomicro Bubble Generators

ZCT[®] - OH (Hydroxyl Radical System)

OH Radical, is the neutral form of the hydroxide ion (OH). Hydroxyl radicals are highly reactive and consequently short-lived. Hydroxyl radicals play a key role in the oxidative destruction of organic pollutant.

Advantages

- They can effectively eliminate organic / inorganic compounds in aqueous phase.
- It virtually reacts with almost every aqueous pollutant without discriminating.
- Complete reduction product of OH is HO , so it does not introduce any new hazardous substances into the water.
- Simple equipment, easy to operate.

Applications

- Water & Wastewater Treatment.
- Oxidation Process.
- Color & odour free potable water.



ZCT[®] - E System

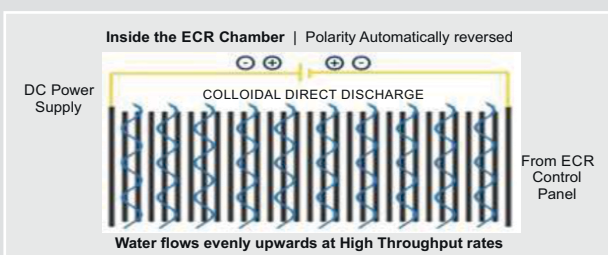
Our state of art ZCT[®]-E system works based on Electro Coagulation principle and is a process of removing contaminants in waste water with passing of electricity.

Advantages

- Simple equipment, easy to operate.
- Sludge easily settleable and easy to de-water.
- Flocs formed are larger, acid-resistant, stable and separated faster.
- Removes the smallest colloidal particles.

Applications

- Oil, Grease and heavy metal removal.
- Elimination of Colour & Odour.
- Oxidation of organic / breaking of organic molecules.
- Removal and separation of SS and colloids.



ZCT[®] is excellent to treat effluents from textiles, petrochemical, chemical industries, oil -mining plants, factory waste water as they remove heavy metals and also used for pond purification, slaughter house cleaning, food waste water treatment, sewage etc. These systems are easy to operate and up-gradation can be done easily as per the requirement with less Opex

Modular / Containerised ETP & WTP

We provide state of art design Modular / Containerised plant for effluent treatment plant and water treatment plants. This is based on customer requirements & inlet parameters. The system is pre engineered & fabricated with a number of containers for quick delivery & installation time. It is simple, easily transported to customers location & can be shifted from one place to another.



ZLD (Zero Liquid Discharge)

ZLD (Zero Liquid Discharge) technology is beneficial process for industries where the water is reused. Our process/technology (ZLD) helps to meet the discharge standards of the liquid which allows the use of treated liquid back for industrial use.



- ZLD treatment process includes Pre-treatment, where the effluent is screened and equalized for secondary treatment.
- The effluent at ambient temperatures enters secondary treatment wherein the high loads of COD and BOD (in the incoming effluent) is reduced in Anaerobic and Aerobic systems by 95%.
- The secondary treatment is succeeded by the tertiary treatment, in which the effluent is filtered through different streams of filters to get effluent with less particulate matter. The effluent coming out of the tertiary treatment enters the evaporators where water is evaporated, which is recycled back in the industry.
- The solids that are crystalized during evaporation have less volume. (depending on the TSS & TDS in liquids it may vary). These solid crystals are disposed after confirming the environmental aspects.



Oushadhi is a Pharmaceutical company located at Thrissur, Kerala. Water Treatment Plant (WTP) is installed to remove the Suspended Solids and Turbidity present in the water. Raw water from the Filter feed tank is taken to the Pressure sand filter and Activated carbon filter installed in series for removal of traces of suspended solids. The Filter feed pumps will be regulated by the level controller which will switch on the pump at the Low level of water in the Treated Water tank (Over head Tank) and switch off the pump at High level to avoid Overflow from the Treated water tank. The treated water is used for further processing



Waste Water / Effluent Treatment Plant

Success Story: Complete Waste Water Treatment



Project Details

Flow: 72 m³/d

TSS: 280 ppm

BOD: 4000 ppm

COD: 8000 ppm

This project was started in April 2017 and completed by June 2017

The final discharge as per the environmental requirement in India is
BOD < 20 ppm & COD < 250 ppm



Successful ETP Project for Unilever in Pondicherry, India



Water Treatment Plants

We are expert in water treatment process that makes the water more acceptable for specific end use. The end use may be drinking water, industrial water supply, irrigation, water recreation, hygienic water and other purposes. Our system of water treatment includes clarifiers, filtrations process, softener system, DM plant, Ozone treatment, UF, RO & UV based on the end requirement of customer use.

Project Details: Dubai

The Final discharge met the design parameters of conductivity <5 ppm, turbidity & TSS

The project started in April 2016 and was completed in Nov-2016 within a short period of 8 months

The final Hygienic water is used in the process of manufacturing of personal care products



Project Details: Nigeria

This project was one of the fast tracked project which was completed within 3 months

The final discharge met the design parameters of conductivity <5 ppm, turbidity < 5 ppm, TSS <2 ppm and TDS <1 ppm. This water is used for in-house Boiler purpose



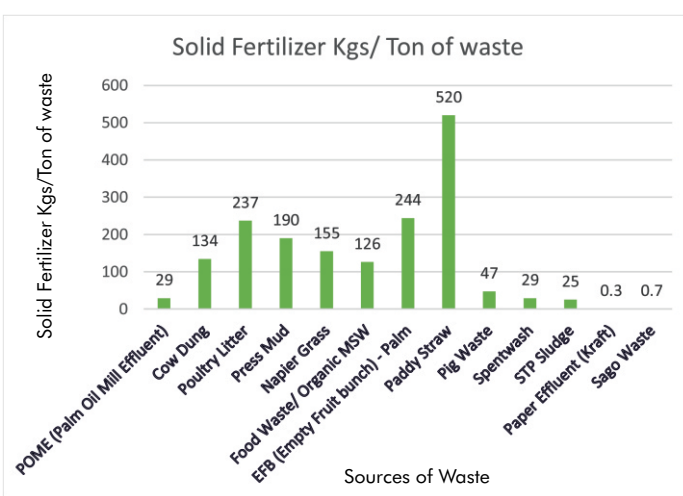
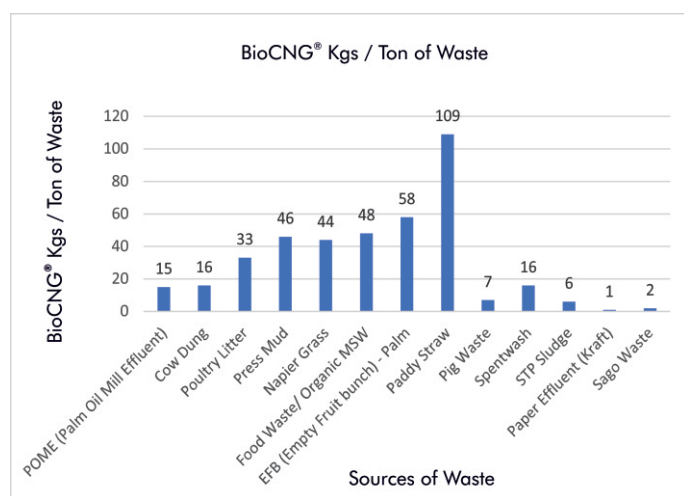
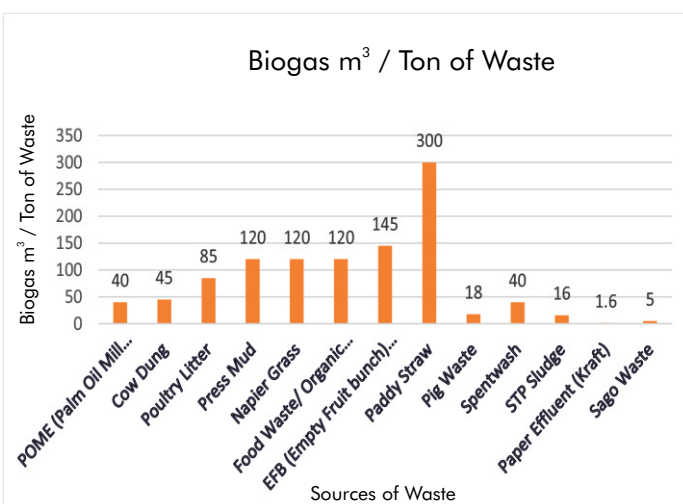
Feasibility study for achieving Zero Carbon Footprint for Unilever Oleochemical, Indonesia



BioCNG® POTENTIAL PER TON OF WASTE

Sources of Waste	Biogas m ³ / Ton of waste	BioCNG® Kgs / Ton of waste	Solid Fertilizer Kgs / Ton of waste
POME (Palm Oil Mill Effluent)	40	15	29
Cow Dung	45	16	134
Poultry Litter	85	33	237
Press Mud	120	46	190
Napier Grass	120	44	155
Food Waste/ Organic MSW	120	48	126
EFB (Empty Fruit bunch)-Palm	145	58	244
Paddy Straw	300	109	520
Pig Waste	18	7	47
Spentwash	40	16	29
STP Sludge	16	6	25
Paper Effluent (Kraft)	1.6	1	0.3
Sago Waste	5	2	0.7

Note: The gas fertilizer yield may vary based on the inlet solids and proposed technology



APPLICATIONS & TRANSPORTATION OF BioCNG®



- Sell BioCNG® to PLN / Electricity Board to save 70% /100% Diesel in Diesel Gensets
- Refinery/Bulking Station/Industrial Boilers (100% BioCNG®)
- Diesel Genset - Conversion to BioCNG® (Option 1:100% BioCNG®) (Option 2: 70% BioCNG® + 30% Diesel)
- Trucks - Conversion to BioCNG® (Option 1:50% BioCNG® + 50% Diesel) (Option 2:100% BioCNG®)
- Heavy Equipment's-Conversion to BioCNG® (Option 1:50% BioCNG® +50% Diesel) (Option 2:100% BioCNG®)
- Housing/Canteen/Restaurant's (100% BioCNG®)
- Industrial Application Like metal Cutting/Others (100% BioCNG®)

Our Offices, Design Centre & Factory



Our Manufacturing Facility is located at Bangalore and this helps in maintaining the assured quality required by the customers. The total capacity is in excess of 10,500 tons of fabrication per year. The factory is well connected through National Highways. The entire area is 1, 82, 952 sq. ft. of which hosts facilities for fabrication of our project, equipment's assembling & skid mounting.



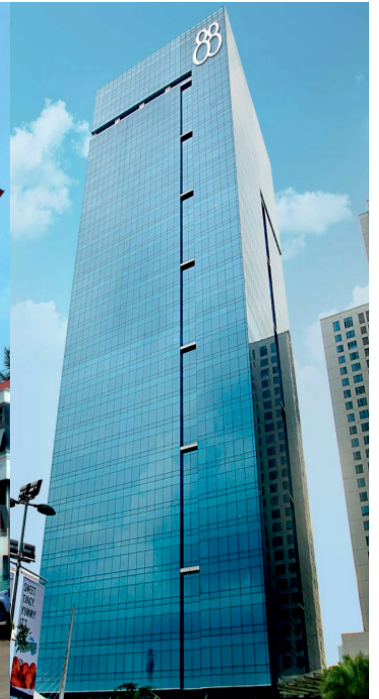
Singapore



Malaysia



India



Indonesia

Awards in Indonesia for two Consecutive years 2017 & 2018

Awarded "The Best Biogas power Plant" in Indonesia by Energy Minister of Indonesia
Government Bapak Archandra Tahar on 15 November 2018 in Jakarta



Top Environmental Company - Awarded in Indonesia, 2017



WINNER:
Golden Peacock Award 2018
London



Asia's Greatest Brand
2016, Singapore



Awarded in Germany, 2015



Golden Peacock Award
Awarded in London, 2016



WINNER: European Business
Award 2018, Cannes, France



"Sustainability Award" from
Indian Sustainability Congress, 2014



SMEs "Green Business Award" 2016



"National Award for Excellence
Renewable Energy" 2017



EEPC "Outstanding Export Performance"
Award - 2017



"Global Indian of the year Award" - 2017



"Excellence Global Award" - 2018

"SMEs Most promising brand" - 2017

"Water Leadership Award" - 2018

Indian Economic Studies
"Excellence Award" - 2017

G20 & COP27: INVITED FOR THIS EVENT TO REPRESENT BIOGAS INDUSTRY



Global Media Coverage

KIS GROUP® On Channel News Asia and TimesNow



Major Feasibility/Consultancy Projects by KIS Group®

Client/Location	Description
 PPT ENERGY TRADING CO.,LTD. Japan	Performing the Feasibility study for the 1.7 MW POME Biogas Power Plant in Indonesia
 Indonesia	Consultancy & Feasibility study to achieve Zero Carbon foot Prints at Unilever factory in Indonesia by using BioCNG® to replace Natural Gas
 Korea Research Institute on Climate Change Korea	Performing the Feasibility study for the Biogas & Carbon potential from waste water in Indonesia
 Malaysia	Revamping of the existing Biogas digesters for the better performance of the system
 Damak, Nepal	Feasibility study of Municipality /Organic waste to BioCNG® piping to houses
 Nagpur India	Feasibility study for 12 TPD of BioCNG® from 300 TPD mixed waste
 Mysore, India	Feasibility study for Current Combined Effluent Treatment Plant and for further expansion of the plant- Design, BOQ and for tendering process
 PT. Inhil Agro Sarimas, Indonesia	2 Nos. Digesters of each 12,800 m³ Biogas burn in Boiler Successfully Operating since March, 2017
 PT. Ramajaya Pramukti, Indonesia	1670kW Biogas Power Plant & Excess Biogas used in Boiler Successfully Operating since March, 2015
 PT. Ivomas Tunggal, Indonesia	2134 kW & Excess Biogas Power Plant used in boiler Successfully Operating since March, 2015

PARTIAL REFERENCE LIST

Clients	Performance Achieved /Design	Remarks
 PT. Tolan Tiga Indonesia	Biogas - 28,341 m ³ /d	CDM Registered & Biogas used in boiler Successfully Operating since March, 2016
 PT. Maya Agro Investama Indonesia	Biogas - 26,136 m ³ /d	CDM Registered & ZPHB® Zero pond project. Biogas used in boiler Successfully Operating since July, 2013
 PT. Subur Agro Makmur Indonesia	Biogas - 25,272 m ³ /d	ZPHB® Zero pond project. Biogas used in boiler Successfully Operating since April, 2014
 PT. Umbal Mas Wisesa Indonesia	Biogas - 26,520 m ³ /d	CDM Registered & ZPHB® Zero pond project. Biogas used in boiler Successfully Operating since August, 2014
 PT. Meskom Agro Sarimas Indonesia	Biogas - 23,200 m ³ /d	CDM Registered & 1.2 MW Excess Power to PLN Successfully Operating since January, 2013
 PT. Rafi Kamajaya Abadi, Indonesia	Biogas - 19,503 m ³ /d	Under CDM Registration. Biogas used in Bioler Successfully Operating since October, 2017
 PT. Agromuko Indonesia	Biogas - 19,440 m ³ /d	CDM Registered & 1 MW Excess Power to PLN Successfully Operating since May, 2013
 Hargy Oil Palms (Papua New Guinea)	Biogas - 19,440 m ³ /d	CDM Registered & ZPHB® Zero pond project. Biogas used in boiler Successfully Operating since July, 2014
 Dekel Oil CSA (Ivory Coast)	Biogas - 12,274 m ³ /d	First Project in Africa Successfully Operating since August, 2018
 Evyap Sabun, Malaysia	Biogas – 5,100 m ³ /d	Oleochemical Effluent Successfully Operating since June, 2014
 PT. Mitra Mendawai Sejati, Indonesia	Biogas – 17,856 m ³ /d	2.4 MW Biogas Power Plant Under CDM-PoA Registration Successfully Operating since December, 2018
 PT. Kali Mantan Sawit Abadi, Indonesia	Biogas – 17,856 m ³ /d	2.4 MW Biogas Power & BioCNG® Plant Under CDM-PoA Registration Successfully Operating Since November, 2023
 DD Palm Oil Mill SDN BHD Malaysia	Biogas – 28,080 m ³ /d	BioCNG® 9542 Kg/d under CDM-PoA Registration Under Commissioning
 Colombia	Waste Water 2500 m ³ /d	The treated waste water is discharged into Sea Successfully operating since Nov, 2019
 Golden Finger Dubai	Water- 440 m ³ / d	The treated water is used for in-house process Successfully operating since Nov, 2016
 Unilever Nigeria Plc, Lagos, Nigeria Hindustan Unilever limited Pondicherry, India	Water - 400 m ³ / d Water - 72 m ³ / d	The treated water is used for in-house process Successfully operating since June, 2016 & 2017
 Unilever, Indonesia	BioCNG® 730 mm btu / d	Under Commissioning

PARTIAL REFERENCE LIST

Clients	Performance Achieved /Design	Remarks
 BADAN PENGKAJIAN DAN PENERAPAN TEKNOLOGI  Indonesia	Biogas – 3,936 m ³ /d	Biogas used in Boiler Successfully operating since 2020
 Amul - Banas Dairy Asia's Largest Dairy/ Milk Production	Biogas – 2000 m ³ /d	BioCNG [®] used as a fuel in Vehicles Successfully Operating since August, 2020
 torrent PHARMA Torrent Pharma Gujarat-India	Biogas – 123 m ³ /d	Biogas used in Kitchen Canteen Successfully Operating since December, 2020
 LG PT.Parna Agromas Indonesia	Biogas – 29,376 m ³ /d	Under Construction CDM registered in 2021
 LG PT. Tintin Boyok Sawit Makmur Indonesia	Biogas – 28080 m ³ /d	Under Commissioning CDM registered in 2021
 NEXTERA ENERGY Damak, Nepal	Biogas – 2500 m ³ /d BioCNG [®] - 750 Kg/d	Successfully Operating since November, 2022
 Urban Improvement Trust Kota, Rajasthan, India	Biogas – 9000 m ³ /d BioCNG [®] - 3600 Kg/d	Successfully Operating since October, 2022
 Goodhope Indonesia	Biogas - 26,082 m ³ /d	Successfully Operating since April, 2023 CDM registered in 2022
 NDDB DAIRY SERVICES National Dairy Development Board Varanasi (India)	Biogas : 4000 m ³ /d Biopower [®] : 2000 KWh/d	Successfully Operating since March, 2023
 Sainsons Paper Industries Pvt. Ltd. Haryana, India	Biogas : 7200 m ³ /d BioCNG [®] : 3095 Kg/d	Successfully Operating since Feb, 2023
 CRAUN CRAUN, Malaysia	BioCNG [®] - 1260 kg/d	Under Construction
 Janakpur Agro Farm Pvt. Ltd. JanakpurNepal जानकपुर एग्रो फार्म प्रा. लि.	Biogas - 6250 m ³ /hr BioCNG [®] - 2354 kg/d	Under Construction
 KORINDO Korindo, Indonesia	Biogas – 31,200 m ³ /d	Under Construction
 Mewah MEWAH, Indonesia	Biogas – 29,453 m ³ /d	Under Construction
 MARUTI SUZUKI Haryana, India	Biogas : 280 m ³ /d	Successfully operating from Apr, 2024
 SAATVIK Saatvik Agro, India	Biogas : 1000 m ³ /d	Under Construction
 Godrej agrovet Godrej Agrovet, India brighter farming	Retrofitting Job Work	Under Construction
 KLK Kuala Lumpur Kepong Berhad, Indonesia	Biogas : 20750 m ³ /d	Under Construction

GLOBAL FOOT PRINT



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Malaysia, Qatar, Oman & Spain



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