We are a Water-Energy Company working to subsidise the cost of industrial wastewater re-use, by generating energy in the form of biohydrogen.
OB $bH_2$ Biohardware

Converts chemical content of effluents to hydrogen gas for simultaneous water treatment and energy generation.
How does the device work?

Device employs designer microbial community to converts wastewater treatment facility into on-site hydrogen gas generator for power or as raw material.
Self Powered
Retrofittable
No Secondary Effluent
“Green” Power
Scale Out NOT Scale Up

Features

4 Provisional Patents
2 Designs Registered
2 Process Patents in Pipeline
Pilot at STC, Bangalore

Central Sewage Pipelines

Stage 1 Treatment

Stage 2 Treatment

Stage 3 Treatment

System: 15 m³/day

OB bH2 Hardware

Hydrogen Distribution System/ Power Plant

Treated Water Tank

Hydrogen: 80m³/hr

To Injection and Power Water Systems
Does anyone care?

Easing prohibitory water pricing at fracking operations in the Permian Basin (West Texas) by improving water reuse and generate decentralised power.

4/Big 6 US Energy

~USD 900K in Paid Pilots

US Entity and Austin Team
Use Case and Economics

Produced Water

Truck Disposal: 30c-$2(+)/Barrel of Water

Disposal

OSSUS TREATMENT

89c-USD$1/Barrel* of Reusable

Produced Water

Installation

US$3-12 Value/Barrel* of Water

bHydrogen^

Chemicals^
Ossus India

Indian Downstream O&G (H-CNG as Transport Fuel)

Steel Industry (H₂ Uses as Raw Material)

Indian Navy Defence India Program
Team

SHANTA RAO
CLO, Ossus Bio
IP and Business

SURUCHI RAO
CEO, Ossus Bio
Bioengineering

KAMAR SUHAIL BASHA
CTO, Ossus Bio
Design and Engineering

SWATI DASH
Chief Microbiologist, Ossus Bio
Consortium Design and Data Protection

DD Kale, PhD
Emerging Tech Mentor India

SV Rao
Mentor US Shale and Permian
Milestones 2020

- Pilot with O&G (Permian Basin)
- Raise USD 3.3 Mil Seed
- Pilot with Tata Steel
- 300 Days of Operation
- Health/Safety
- RFID Guided Self-Assembly
- Diversify Funding Source
- H₂ Pricing