



# Enpro Envirotech Pty Ltd



## What we do

We provide innovative sustainable technologies and services for environment management including water, wastewater and waste with emphasis on renewable energy. Implementation of such technologies leads to reduced operating cost, generate new revenues, build new capabilities, control their environmental impacts and realise the immense opportunities of a low-carbon economy.

### Sustainable services

- Feasibility study
- Mapping and Planning
- Governance framework
- Detailed situation review (Environmental)
- Design, drawing, detailed engineering
- Training and workshops

### Innovative sustainable technologies

- Biogas generation from wastewater and waste streams- **Anaerobic Digestion Technology**
- Food waste to compost (24 hours)- **Thermophilic Composting Technology**
- Plastic waste to fuel- **Gasolysis Technology**
- Blue green algae control, water quality in lakes/ponds- **SolarBee Technology**
- Nitrogen removal from wastewater- **Anammox Technology**
- Skid mounted wastewater treatment plants- **MBBR, MBR Technology**
- Fats and solids recovery dairy, meat, industry and solids removal drip irrigation - **Wyuna separation Technology**
- High pressure steam to Electricity- **Turtle Turbine Technology**
- Oil recovery from depleted wells- **Microbial Enhanced Oil Recovery Technology**
- Energy efficiency with thermal reflection paint for buildings- **SunBless Paint Technology**
- Microbial remediation of petroleum hydrocarbon in soil and water

Enpro originates, designs, develops and delivers embedded generation assets that are economically viable *now*:

- **Purpose built Waste to Energy plants** on a Design, Drawing and Commissioning (DDC) basis
- **Wastewater Treatment plants** for industrial wastewater with high organics
- **Optimization** of existing waste management and wastewater systems by following sustainability principles
- **Integration** of other clean technologies for environment management

## Applicable industry examples for sustainable services and technologies

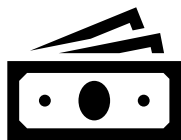


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Enpro can help you to find the best suitable solution for your environmental problems and can also conduct research on specific issues and provide environmentally friendly services and technologies. Potential benefits to the end user include

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- Reduce greenhouse gas emissions
  - Improve energy efficiency
  - Renewable energy generation
  - Achieve sustainability
  - Reduce operating and disposal cost
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## Economics

Enpro Envirotech technologies present attractive economic benefits. Depending on the technologies, plant size and how recovered outputs are used, these may include: avoided costs /sales from energy, electricity, recycled water and biofertiliser; avoided waste management/disposal costs; lower greenhouse gas emissions as well as reduced carbon footprint.

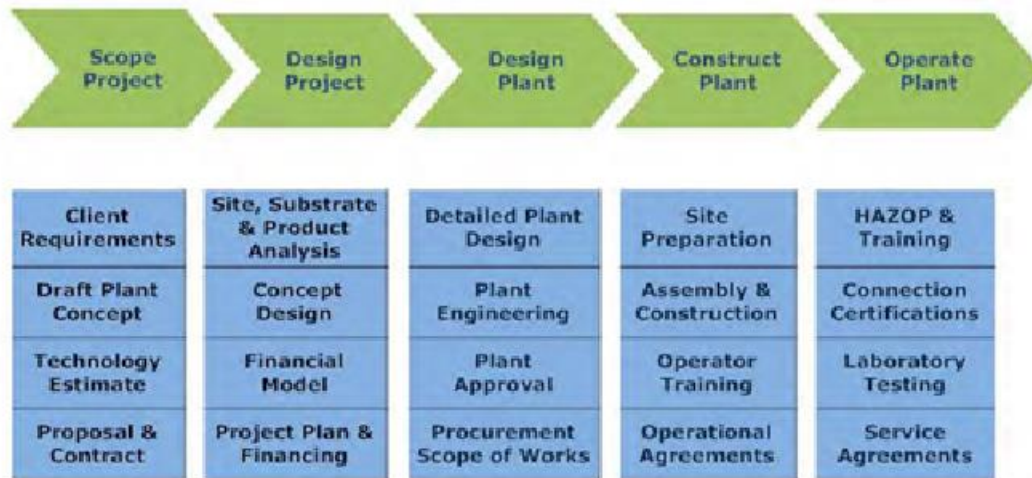
Other benefits may include decreased regional community dependency on energy, nutrient and water resources, employment generation in the region, and **achieving carbon neutrality**.

# Enpro Envirotech capabilities



Our highly capable team of technical experts, associates work closely with our suppliers and clients (all levels of management, technical to operational to strategic) to ensure every stage of the **project development pathway** is delivered seamlessly

## Project Development Pathway



## ENPRO PROJECTS

### Australia

- 200 kWe energy generation from pig manure in Queensland Australia  
CSTR Technology was supplied for treating pig manure to generate electricity and biofertiliser that is used on on-site. The plant was designed, and various units were sourced from different parts of the world so as to reduce capital cost of the project.
- Livestock industry waste stream trouble shooting in Australia  
A systematic study was conducted measuring pH, volatile fatty acids, bicarbonate alkalinity etc and changes in operations were made. This resulted in biogas generation in 2-month time.
- Feasibility studies/ Prefeasibility studies for assessment of water, wastewater, waste and energy for a regional council with further potential to improve operations and energy efficiency; food waste, vegetable waste, piggery, poultry, MSW waste streams with emphasis on energy generation.
- Master plan-preliminary design for wastewater treatment at a resort
- Training on sustainable environment management Pacific Island, Australia, Middle East region

## **China**

- 0.5MWe electricity and cooking gas for village in Xiangyang, China  
Piggery waste from 60,000 pigs and corn silage is creating odour problem in the region. An anaerobic system was designed to treat these waste streams to generate biogas which is partly used for electricity generation and partly supplied to household for cooking purpose. Currently the plant is under construction
- Summer school on organic waste, greenhouse gas emission and potential technologies for treatment- in Tianjin University

## **Pacific Islands**

- A workshop arranged on 'Harvesting clean energy from organic waste'
- Plastic waste to fuel and thermophilic composting project in consideration

## **Middle East**

- Feasibility study for management of livestock industry waste in the region
- Workshop for livestock industry waste management

## **India**

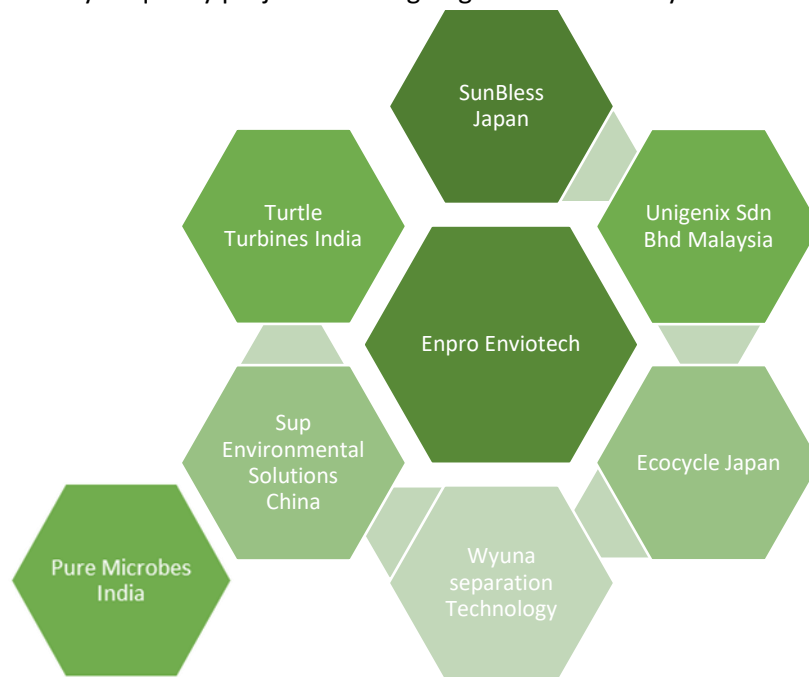
- Common Effluent Treatment Plant (CETP)  
Design, operations for CETP for 120 industries wastewater to achieve desired pollution control board norms
- Sewage Treatment Plant (STP)  
120,000 devotees gather at one location twice in a year and generate sewage. It was treated through Anaerobic + Aerobic pathway followed by chlorination to utilise the water for irrigation
- Starch industry wastewater  
500 m<sup>3</sup>/d starch industry wastewater was treated to generate biogas which is utilised in boiler to replace existing fuel. The work done for this plant was design, detailed engineering, project management and commissioning
- Rice husk to biogas using fungal consortium  
A novel technology was developed to increase biogas production from rice husk – a lignocellulosic type of material. About 50-60% increase in biogas observed which increase the revenue substantially.

Enpro Envirotech develops customized solutions for specific industry based on their requirement and make sure that the project run seamlessly.



## Our valued partners

Enpro Envirotech has developed strategic relationships across its value chain to enable the affordable delivery of quality projects and ongoing service reliability.



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### Contact for collaborative sustainable journey.....

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