

ECO TECH BASE



Eco
Tech
Base

“Green Technology for Sustainable Future “

(Profile and past experience)

Web site: ECO TECH BASE

Instagram: [ECO TECH BASE \(@ecotechbase\)](https://www.instagram.com/ecotechbase/) • Instagram photos and videos

Facebook: [ECO TECH BASE | Facebook](https://www.facebook.com/ECO TECH BASE)



ECO TECH BASE (ETB) is a private company (partnership) operating since 2014.

Mainly work in Renewable energy sector

1. Micro and mini hydro power plant design and installation
2. Conducting trainings on renewable energy technologies
3. Biogas plant design, construction and maintenance from domestic (1.5m^3 level up to industrial level 100m^3)

Working partnership with

1. Practical Action
2. Janathakshan GTE
3. Energy Forum/FECS
4. Private sector (mainly hotels and farms)
5. Government organizations (Municipal councils, Pradesiya Sabas & SEA)
6. Individuals

Working staff

S.K.R.K. ANANDA (B.Sc. Eng. Dip in Energy Technology) - CEO, Director Engineering Specialized in Renewable energy and energy management sector, 15 year working experience on biogas sector.

B.G.S.Wijethilake (NCT Draughtsman and QS) – Director Technical Specialized in Renewable energy and cost effective housing, 10 year field experience.

6 Well qualified Biogas trained masons (Trained by Janathakshan and People In Need, National biogas program)

5 Qualified supporting staff for biogas construction.



Work facility

ETB is strong with work shop and research facilities to manufacture domestic portable biogas plants and to carried out relevant testing and research. Workshops located at Kuruwita and Athurugiriya.



Past experience

- **Conduct Pico Hydro concrete turbine design, installation and O&M training**
 - **Funded by Wision**
 - **Organized by Janathakshan and Green Empowerment**
 - **12 participants for 5 countries participated**
 - **2 Pico Hydro systems installed**
- **Provide technical supports to develop and connect two village hydro power projects to the main grid (CEB) for FECS and EF**
- **Participate knowledge sharing workshop on hydro power sector**

In biogas sector experience

- **Over 30 biogas plants (above 7.5m³) were design and installed in Local Authorities farms and hotel sector**
- **2 masons training programs were conducted with JT**
- **1 international biogas training conducted with JT**
- **Over 50 awareness creation workshops were conducted for Gos, NGOs and privet sector collaborating with Janathakshan GTE**
- **Over 50 awareness creation workshops were conducted on “Waste management and energy bill reduction”**

More details given bellow.

Domestic biogas systems Design constructed and marketed by Eco Tech Base logo

➤ **"Eco Buddy" Domestic biogas system**



➤ **"Eco Buddy Plus" Domestic biogas system**



Domestic fiber glass biogas plant (design and manufactured under ETB logo)



Medium scale biogas plant 15m³ for farms in Ruwan Sampath's Piggery farm Welivita with the RDB loan scheme.



1. Kaduwela Municipal Council

Capacity - 100m³

Type - SirilakUmanga type improved semi high rate dual digester biogas plant

Waste type - Municipal garbage

End user application – Electricity generation and gas for thermal application

Plant in operation since October 2015

Funded By – UNDP and Kaduwela MC

Implementation agency – Janathakshan GTE LTD

ECO TECH BASE involvement - Biogas plant designed construction supervision and quality assurance.



2. Jetwing Blue Hotel - Negambo

Capacity - 70m³

Type - SirilakUmanga type improved semi high rate dual digester biogas plant

Waste type - Kitchen, restaurant, garden and Sewerage

End user application – for cooking and to run a steam boiler

Plant in operation since March 2015

Funded By – Jetwing group

Implementation agency – Janathakshan GTE LTD

ECO TECH BASE involvement - Biogas plant designed, construction and support for end user application.



3. Jetwing Kaduruketha Hotel - Wellawaya

Capacity - 70m³

Type - SirilakUmanga type improved semi high rate dual digester biogas plant

Waste type - Kitchen, restaurant, garden and Sewerage

End user application – for cooking

Plant in operation since November 2015

Funded By – Jetwing group

Implementation agency – ECO TECH BASE

ECO TECH BASE involvement - Biogas plant designed and construction



4. Jetwing Lake Hotel - Dambulla

Capacity - 70m³

Type - SirilakUmanga type improved semi high rate dual digester biogas plant

Waste type - Kitchen, restaurant, garden and Sewerage

End user application – for cooking

Plant in operation since November 2016

Funded By – Jetwing group

Implementation agency – ECO TECH BASE

ECO TECH BASE involvement - Biogas plant designed and construction



5. Oakray regency Hotel - Kandy

Capacity - 70m³

Type - SirilakUmanga type improved semi high rate dual digester biogas plant

Waste type - Kitchen, restaurant,

End user application – for cooking

Plant in operation since October 2016

Funded By – Oakray regency hotel owner

Implementation agency – ECO TECH BASE

ECO TECH BASE involvement - Biogas plant designed and construction



6. Isiwara Asapuwa Hotel – Matale

Capacity - 22.5m³

Type - SirilakUmanga type improved semi high rate multi digester biogas plant

Waste type - Kitchen, restaurant,

End user application – for cooking

Plant in operation since March 2016

Funded By – Oakray regency hotel owner

Implementation agency – ECO TECH BASE

ECO TECH BASE involvement - Biogas plant designed and construction



7. Kuliypitiya Pradesiya saba - Kuliypitiya

Capacity - 70m³

Type - SirilakUmanga type improved semi high rate duel digester biogas plant

Waste type - Market and municipal waste,

End user application – to run a generator

Plant in operation Since January 2017

Funded By – North western Provincial council and Kuliyaipitiya Pradesiya Saba

Implementation agency – Janathakshan Gte Ltd

ECO TECH BASE involvement - Biogas plant designed and construction



8. Oliyadeniya Cemetery - Narammala

Type - Continuous "Semi high rate SirilakUmaga" type biogas plant to manage (avg. 300kgs)

- Market waste (max 350kgs/day),
- sewerage waste (apr.4000 liters per week),
- Compost yard extract liquid (100 liters/day)

And generate biogas (few options)

- to support to run the LPG driven burner (as a hybrid system which is already operating with LPG) to burn human death bodies
- (if excess gas available) to run a small generator for lighting
- use bio slurry for organic cultivation at the hotel premises and the agriculture land

Plant in operation since November 2017

Funded By – North western Provincial council and Narammala Pradesiya Saba

Implementation agency – Machinery & Equipment Authority (NWP)

ECO TECH BASE involvement - Biogas plant designed and construction

9. Bopitiya Cemetery - Pannala

Type - Continuous "Semi high rate SirilakUmaga" type biogas plant to manage (avg. 300kgs)

- Market waste (max 350kgs/day),
- sewerage waste (apr.4000 liters per week),
- Compost yard extract liquid (100 liters/day)

And generate biogas (few options)

- to support to run the LPG driven burner (as a hybrid system which is already operating with LPG) to burn human death bodies
- (if excess gas available) to run a small generator for lighting
- use bio slurry for organic cultivation at the hotel premises and the agriculture land

Plant in operation since Decemebr 2017

Funded By – North western Provincial council and Narammala Pradesiya Saba

Implementation agency – Machinery & Equipment Authority (NWP)

ECO TECH BASE involvement - Biogas plant designed and construction

10. Unilever Sri Lanka Factory – Horana

- Capacity - 30m³
- Type - Sirilak Umanga type improved semi high rate multi digester biogas plant
- Waste type - Kitchen, canteen,
- End user application – for cooking
- Plant commissioned – June 2017
- Funded By – Unilever Sri Lanka
- Implementation agency – ECO TECH BASE
- **ECO TECH BASE involvement - Biogas plant designed and construction**



11. Jetwing Sea – Negambo

- Capacity - 30m³
- Type - SirilakUmanga type improved semi high rate multi digester biogas plant
- Waste type - Kitchen, restaurant and sewerage
- End user application – for cooking
- Plant commissioned – July 2017
- Funded By – Jetwing group
- Implementation agency – ECO TECH BASE
- ECO TECH BASE involvement - Biogas plant designed and construction

12. Waga Piggery farm – Hanwella

- Capacity - 15m³ in stage 01 and another 15m³ in stage 02
- Type - SirilakUmanga type improved semi high rate multi digester biogas plant
- Waste type - Piggery waste
- End user application – for cooking and boiling food for pigs
- Plant Commissioned – Stage 01 – April 2015 and stage 02 - March 2017
- Funded By – Farm owner
- Implementation agency – ECO TECH BASE
- **ECO TECH BASE involvement - Biogas plant designed and construction**

13. Piggery farm – Kaduwela

- Capacity - 15m³ in stage 01
- Type - SirilakUmanga type improved semi high rate multi digester biogas plant
- Waste type - Piggery waste
- End user application – for cooking and boiling food for pigs
- Plant Commissioned –January 2015
- Funded By – Farm owner and Abacus organization and RDB loan
- Implementation agency – ECO TECH BASE
- **ECO TECH BASE involvement - Biogas plant designed and construction**

14. Jetwing Sea – Vil Uyana Seegiriya

- Capacity - 30m³
- Type - SirilakUmanga type improved semi high rate multi digester biogas plant
- Waste type - Kitchen, restaurant and garden
- End user application – for cooking
- Plant in operation since November 2017
- Funded By – Jetwing group
- Implementation agency – ECO TECH BASE
- ECO TECH BASE involvement - Biogas plant designed and construction

15. Wamba Training Centre – Kurunegala

- Capacity - 7.5m³
- Type - SirilakUmanga type improved semi high rate single digester biogas plant
- Waste type - Kitchen, restaurant and garden
- End user application – for cooking
- Plant in operation since May 2018
- Funded By – Janathakshan GTE and Green Empowerment
- Implementation agency – Janathakshan GTE as a demonstration and training unit
- ECO TECH BASE involvement - Biogas plant designed and construction



16. Badalgamuwa tourist information centre – Kurunegala

- Capacity - 7.5m³
- Type - SirilakUmanga type improved semi high rate single digester biogas plant
- Waste type - Kitchen, restaurant and garden
- End user application – for cooking
- Plant in operation since March 2019
- Funded By – Local Government Authority - North Western Province
- Implementation agency – Machinery & Equipment Authority (NWP)
- ECO TECH BASE involvement - Biogas plant designed and construction



17. Jetwing Yala – Hambantota

- Capacity - 60m³
- Type - SirilakUmanga type improved semi high rate multi digester biogas plant
- Waste type - Kitchen, restaurant and garden
- End user application – for cooking
- Plant in operation since February 2019
- Funded By – Jetwing group
- Implementation agency – ECO TECH BASE
- ECO TECH BASE involvement - Biogas plant designed and construction



18. Grand Udawala Safari Hotel – Embilipitiya

- Capacity - 70m³
- Type - SirilakUmanga type improved semi high rate Dual digester biogas plant
- Waste type - Kitchen, restaurant and garden
- End user application – for laundry drier
- Plant in operation since March 2019
- Funded By – **Rosen Lanka PVT LTD / Grand Udawalawe Safari Resort**
- Implementation agency – ECO TECH BASE
- ECO TECH BASE involvement - Biogas plant designed and construction



19. Jetwing Light House – Galle

- Capacity - 70m³
- Type - SirilakUmanga type improved semi high rate Dual digester biogas plant
- Waste type - Kitchen, restaurant and garden
- End user application – for cooking
- Plant in operation since August 2019
- Funded By – Jetwing group
- Implementation agency – ECO TECH BASE
- ECO TECH BASE involvement - Biogas plant designed and construction



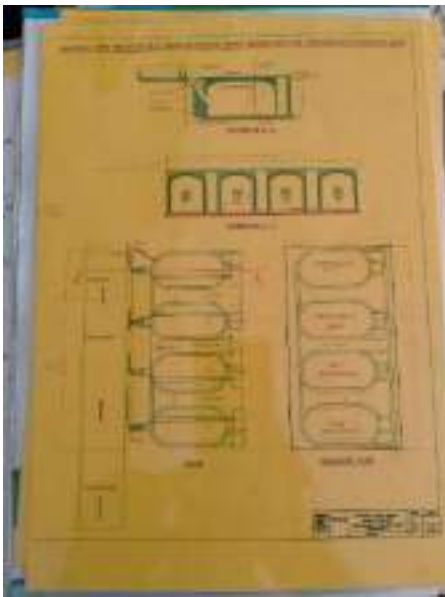
20. Kaduwela Manipale council – Kaduwela

- Capacity -
 - a. Main digestors - 360m³,
 - b. Secondary digestors – 100m³
 - c. Feeding tanks - 190 m³
- Type - Fixed dome type improved semi high-rate multi-digester biogas plant
- Waste type - municipal waste restaurant and garden
- End user application – Power generation (40kW generator in operation)
- Plant in operation since March 2021
- Funded By – **UNDP and Kaduwela Municipal council**
- Implementation agency - Janathakshana Gte. Ltd
- ECO TECH BASE involvement - Biogas plant rehabilitation and monitoring



21. Deraniyagala Pradesiya Saba – Deraniyagala

- Capacity - Main digestors - 200m³,
- Type - Sirilak Umanga type improved semi high-rate multi-digester biogas plant
- Waste type - municipal waste restaurant and garden
- End user application – Power generation
- Plant operated since April 2023
- Funded By – **Local Government Authority**
- Implementation agency – Eco Tech Base



22. Kegalle Pradesiya Saba – Deraniyagala

- Capacity - Main digestors - 100m³,
- Type - Sirilak Umanga type improved semi high-rate multi-digester biogas plant
- Waste type - municipal waste restaurant and garden
- End user application – “HelaboJune” food preparation
- Plant operated since January 2023
- Funded By – **Local Government Authority**
- Implementation agency – Eco Tech Base

23. University of Jaffna – Killinochchi

- Capacity - Main digestors - 35m³,
- Type - Sirilak Umanga type improved semi high-rate Single-digester biogas plant
- Waste type - canteen waste and farm waste
- End user application – Power generation
- Plant operated since April 2023
- Funded By – **UNDP**
- Implementation agency – Eco Tech Base

24. Uppuweli Farm NWP – Trinco

- Capacity - Main digestors - 50m³,
- Type - Sirilak Umanga type improved semi high-rate Single-digester biogas plant
- Waste type - Farm waste
- End user application – Power generation
- Plant operated since May 2023
- Funded By – **UNDP**
- Implementation agency – Eco Tech Base

25. Ansell Lanka – BOI zone Biyagama

- Capacity - Main digesters - 80m³,
- Type - Sirilak Umanga type improved semi high-rate Single-digester biogas plant
- Waste type - canteen waste and farm waste
- End user application – Power generation
- Plant operated since June 2023
- Funded By – **Ansell Lanka Pvt Ltd.**
- Implementation agency – Eco Tech Base