

PROJECT SUMMARY



Life Cycle Assessment for complying with Puro.Earth Carbon Removal Standard (2021)

Service Category - Anvarta



Project status:

LCA-Complete, Auditing -In-progress

Project duration & time:

16-weeks, 08/22 to 11/22

Client profile and context

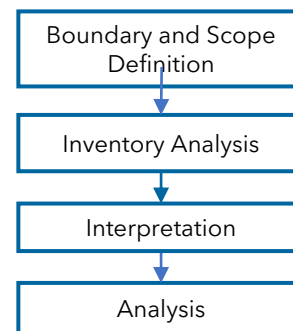
Rainbow Bee Eater Pty Ltd., based in Melbourne is a technology provider for ECHO2 pyrolysis modules, which convert organic waste to bio char, syngas and wood vinegar. With biochar having capability to capture and retain CO₂ for a long period of time, pyrolysis modules such as ECHO2 helps organic waste generators to effectively dispose of their waste with a net negative effect on carbon emissions. Rainbow Bee Eater intends to estimate the extent of carbon removal for the unit installed at Holla-Fresh at Tantanoola, South Australia and have the CO₂ removal certificates (CORCs) obtained for the relevant operation by Puro. Earth.

Scope

The project aims to aid RBE to be audit-ready in compliance with Puro.Earth Carbon Removal Standard (2021). The study involved the biomass provider Holla Fresh and biochar user for soil application BioGro. The scope of the study included receipt of biomass in Melbourne up to application of produced biochar to soil, including carbon storage.

Project Approach

The typical approach for life cycle assessment was used adhering to ISO 14040. The relevant model for the LCA was built in SIMAPRO software.



Lead Advisory Organization

Anvarta

Client Organization & Contact

Peer Burgess - Managing Director,
Rainbow Bee Eater Pty Ltd.

Project team

Dr Mayuri Wijayasundara - Project lead, Lead advisor, Anvarta
Harshani Rananjali - Research Specialist, Anvarta
Ayomi Walagedara - Research Specialist, Anvarta
Lucille Wagner, Research Scientist- Life Cycles
Tim Grant, Advisor - Life Cycles

Key Outputs

- Completed LCA as a calculation and as a detailed report
- Estimation of the CORC values for RBE's ECHO₂ operation at Holla Fresh at Tantanoola, complying with Puro.Earth Carbon Removal Standard (2021)

Key Outcomes

- Enabling RBE to be certified by Puro.Earth for issuing CORC as per Carbon Removal Standard (2021) and enter Puro Registry
- Enabling continuous improvement of data capturing & record keeping practices of RBE

Project Partners

