

The Biochar Living Lab & Lighthouse

Image by Genevieve Cother

Overview

Frank Strie from Terra Preta Developments formed a working group with Geoff Watson of CPT Engineering in George Town to establish a Biochar Living Lab and Lighthouse. A Living Lab is an open-innovation ecosystem for co-designing, testing, and validating new technologies, products, and services.

The Biochar Living Lab is a Lighthouse project for businesses, community groups and local government to connect, experiment and build communities around developing regenerative systems in regional areas.

Objective

Establish a Biochar Living Lab & Lighthouse project in George Town to advance and promote pyrogenic carbon production and use in Tasmania, educate the community and businesses, and collaborate on projects that reflect the values and vision of the Living Lab.

Learn from international models to make George Town an internationally recognised eco-region, and help Tasmanian businesses achieve accreditation to access voluntary carbon markets and participate in the circular economy.



Frank Strie

Terra Preta Developments

“George Town and surrounds are ideal for developing a model for regenerative systems in regional areas.”

“How do we mobilise businesses, government and the community to get involved and take action?”

In May 2023, a forum was held in George Town to introduce the Biochar Living Lab to key stakeholders. Feedback was positive and the group met with the General Manager of George Town Council to develop a collective vision and identify opportunities for collaboration. Following the forum, a mobile kiln was installed on-site at CPT Engineering for biochar production and the group commenced practical experiments and demonstrations, using readily available green waste materials on and around the site.



Engage key stakeholders

Key stakeholders were identified in government, research institutions, and industry and invited to an open forum.

Demonstrate the process

Representatives from George Town council attended a trial burn and provided sample feedstock from the local transfer station.



Investigate existing models

The group met online with Kaindorf Eco-region in Austria to understand funding and governance structures.



Lessons Learnt

Leadership and dedicated resources are crucial for driving progress and ensuring the sustainability of outcomes in an initiative like the Biochar Living Lab. Strong leadership provides direction and motivates the team, while dedicated resources, such as funding and human resources, enable the execution of planned activities. Without these, projects struggle to maintain momentum and deliver lasting impact.

Collaboration is key when balancing the competing priorities of generating revenue for your small business and developing a volunteer-based organisation to promote new product systems and markets. Stakeholders must be highly engaged in creating mutual benefits that support economic growth, regional development and community engagement. Successful collaboration will be based on a sense of shared purpose and leveraging diverse strengths to achieve common objectives.



Learning into action

What have you learnt from Frank's experience that you could put into action in your business? Here are three actions you could take right now:

- Call your local council and ask them if they've considered producing biochar from green waste.
- Join the BREP community and let us know about feedstocks or uses for biochar that you would like to investigate.
- Email brep@businessactionlearningtas.com.au to learn more and get involved in the Biochar Living Lab & Lighthouse project.

Outcomes

The Vision, Mission and Key Strategic Objectives of the organisation documented in a discussion paper.

A skills-based steering group has been tasked with establishing a governing body for the Living Lab.

A 'test site' for product development established in the Bell Bay Advanced Manufacturing Precinct.