

The OpenChar Initiative

Opening Biochar to the World

Biochar is a technology with enormous potential to sequester carbon and enrich agricultural soils. The OpenChar Initiative aims to drive the development of appropriate, distributed Biochar technologies for agricultural communities through an open and collaborative process.

Hatch and Engineers Without Borders Australia (EWB) are developing a new initiative called 'OpenChar'. This exciting project will allow interested individuals and organisations to collaborate in developing new and innovative biochar technologies to boost the agricultural capacity of local and international communities. The OpenChar Initiative aims to provide simple and low cost designs that can be implemented on a distributed basis through an open and collaborative process.

The OpenChar Initiative will exist as an open-source website that will allow interested individuals and organisations to contribute by submitting designs, modifying designs, solving problems, contributing case histories, providing practical guidance and operational knowledge.

The OpenChar Initiative will allow engineers and other interested participants to collaborate in developing technologies that enable the implementation of biochar at a range of scales and in a range of circumstances. All technologies developed and experience gained will be open-sourced and available for anyone in the world to access, with the only proviso being that all lessons-learned are provided back to the OpenChar community



The Benefits

Contributing to Sustainable Development Biochar is arguably the only technology currently in practice that can appreciably and securely remove carbon from the atmosphere at low or negative net cost. The OpenChar Initiative aims to reduce and ultimately eliminate barriers to implementation to ensure it happens as fast as possible.

Benefits for Agricultural Communities

The OpenChar Initiative will benefit agricultural communities in the following ways:

- Increase crop yields
- Increase rate of crop rotation
- Decrease fertilizer use
- Decrease water requirements
- Improve quality of farm run-off
- Decrease use of fossil fuels

Benefits for Engineers

The OpenChar Initiative provides numerous opportunities for engineers and companies to direct charitable efforts to an application with immediate, practical and significant beneficial outcomes. It also provides real-world opportunities for young engineers and university students to learn and practice new skills not usually available to them.



Engineers Without Borders Australia

Engineers Without Borders Australia (EWB) is a non-profit organisation that works with disadvantaged communities to improve their quality of life through education and the implementation of sustainable engineering projects. EWB works in partnership with developing communities both within Australia and overseas, assisting them to gain access to the knowledge, resources and appropriate technologies they need to improve their livelihoods.

HATCH

Hatch is an employee-owned multidisciplinary firm that provides custom process design; business strategies; technologies; and project and construction management from 65 offices around the world for clients in the Metals; Infrastructure; and Energy market sectors.

Hatch recognises the importance of supporting local communities and strives to use sustainable development principles in the planning, design and construction of their projects. The pyrolysis and gasification processes are core Hatch capabilities and our involvement in the OpenChar Initiative provides HATCH with an opportunity to give back to communities on a large scale.

EWB contact:

Lizzie Brown
Director for Education,
Training and Research
Engineers Without
Borders Australia (EWB)
P: +61 7 3365 7038
F: +61 3 9696 9034
M: +61 421 934 655
E: l.brown@ewb.org.auk

HATCH contact:

Andrew Murphy
SD Consultant
Hatch
61 Petrie Tce
Brisbane QLD 4000
P: + 61 7 3166 6148
E: amurphy@hatch.com.au

Benefits to Collaborators

The benefits extend beyond just those available to farmers and engineers, reaching out to all others interested in furthering the development of this promising technology. The OpenChar website will be a central repository or filter of information on Biochar to speed investigations, avoid duplication and seek opinions and guidance from others in the field on particular issues or topics.

More Information

The OpenChar website www.openchar.org will be launched in mid 2009. The website will be the primary knowledge hub and collaborative space for the OpenChar Initiative. It will facilitate:

- Public access to resources, links and current project information
- Knowledge sharing on existing Biochar technologies
- Open Membership Opportunities where information, designs and ideas can be openly shared in an easy and clear format
- Project forums and news



Get Involved

Hatch and EWB would like to invite you to join the OpenChar Initiative team & collaborate with us to research and develop new Biochar technologies for the benefit of our local & global community.

