

MACCY BIOCHAR MEMBER BULLETIN

No. 24 - September 2021

Maccy Biochar is a Task Group of the Macclesfield Community Association Inc.

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31,271 litres biochar made; 16.8 tonnes of CO₂ removed.

HELLO ALL.

Welcome to our 24th Member Bulletin.

In this Bulletin we report on our biochar production and the evolving situation overseas with certification of carbon sequestration projects.

September 2021 PRODUCTION

Another dodgy month weather-wise for biochar! But we managed about 2800 litres which brings our total for 2021 to about 11000 litres.



Quenching while Busta waits to pounce on the water-jet.

TOTAL PRODUCTION SUMMARY

The latest summary of our production and carbon capture as at 30/9/21 is shown below. This year's values are based on:

Dry bulk density of our biochar = 189 kg/m³.

Carbon content of our biochar = 84.3%.

SA emissions factor = 0.43 kgCO₂/kWhr.

MACCYBIOCHAR SCOREBOARD at 30/09/21					
YEAR	2019	2020	2021	TOTAL	Units
BIOCHAR PRODUCED	1720	18451 ²	11100	31271	Litres
CARBON CAPTURED	222 ¹	2939 ³	1762	4923	Kg
NET CO2 REMOVED	0.775	10.048	6.072	16.895	Tonnes
ELECTRICITY OFFSET	1.520	23.369 ⁴	14.130	39.019	MWhr

1. Re-calculated based on 3rd party biochar analysis dated 19/4/20
2. Includes 3180L from members.
3. Re-calculated based on 3rd party biochar analysis dated 28/1/21
4. Calculated based on Australian National Greenhouse Accounts Factors Oct. '20 (SA: 0.43 kgCO₂/kWh)

At the end of the year we will add in the values provided by members from their home production.

NEWS FROM USA

Message from USBI Chair, Tom Miles

CARBON, ENERGY, SOIL HEALTH, AND CLIMATE RESILIENCE

Biochar producers provide firm, reliable, renewable energy and durable carbon for sequestration and soil health.

Carbon offsets, carbon removal credits, carbon incentives, like Low Carbon Fuel Standards, and good prices for renewable energy help to build up cash flow which should lead to increased production of lower cost, fit-for-purpose, biochar-based products. Developers need these revenues to finance plants, increase biochar production, and lower costs. Affordable biochar-based products help build markets while providing essential environmental services. Support legislation in your area that will place fair values on energy, carbon, soil health, and climate resilience. **Ed: We should encourage and support similar legislation here in Australia to do likewise rather than rely on overseas bodies.**

HOW BIOCHAR & CARBON CREDITS WORK

by Jeff Waldon, Managing Partner, Restoration Bioproducts LLC.

The world of monetizing climate benefits (avoided emissions, carbon sequestration, methane capture, etc.) is exploding right now. This trend is being driven by the stark reality of climate-related catastrophes around the world.

The private sector, led by multi-national companies, has embraced the need to reduce their emissions to meet climate change commitments to satisfy their customers and shareholders, and while it's preferable for each company to actually reduce their own emissions, it's not always possible so some sort of offset strategy is needed. There are multiple standards organizations and dozens of creditable strategies focused on avoided emissions and/or carbon sequestration. Regardless of the type of process involved, each project is standardized to metric tons of CO₂ equivalents.

The Crediting Process

The general process for all crediting strategies, termed methodologies, is to compare a baseline emissions or



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sequestration pattern with a proposed new amount of emissions or sequestration. The difference between the two, calculated over time, is the basis upon which the credits are awarded. Once awarded, usually with some sort of reserve set aside for insurance purposes, those credits can be recorded into a public registry.

Biochar Credits Are Promising

More pertinent to biochar, two current and soon several more standards bodies-registries-methodologies will be available to provide an opportunity to monetize the carbon sequestration value of biochar application in soils, building materials, filtration, and other applications that result in long term storage. At present, two groups in Europe, [Puro.Earth](#) and [CarbonFuture](#) have published methodologies and established registries to sell biochar-based credits. Both are relatively simple, rely on third-party audits of the biochar production process, and have reasonably low overhead costs.

Advertised prices for biochar credits are very high relative to other carbon markets. While advertised prices are often higher than actual sales prices, there still appears to be a premium in the market for the relatively simple concept of direct carbon sequestration. Since a metric ton of biochar with an 80% carbon content equates to 2.9 tons of CO₂, and current prices are exceeding \$50/ton, the total value to biochar producers is potentially substantial.

NEWS FROM EUROPE – Carbon dioxide removal

The site for both a document and a 76 minute video with 5 CDR experts is at:

<https://www.euractiv.com/section/climate-environment/news/eu-plans-certification-scheme-for-carbon-dioxide-removals/>

OUR OPINION

From our point of view (as a small community group) it is not so much the ability to trade carbon credits that makes certification important; it is more to do with the credibility that certification provides to our process and to the claims we make in relation to the carbon drawdown we can contribute as a community group.

NEWS FROM YOUR COMMITTEE

1. Planting Day at Davenport Square:

We donated some raw biochar for use in planting about 600 new seedlings in Davenport Square, Macclesfield as part of the Square upgrade on Sunday 19 September. The biochar was enriched courtesy of Black Diamond Biochar and it was decided to use it on about half of the seedlings so that a comparison can be made later. The biochar was used on the western half of the major planting on the north side of the Square.

2. Quality control:

The Committee has decided to purchase an Apera AP-PC60 Water Quality Meter from Adalab to measure pH, total dissolved solids, electrical conductivity and/or salinity of the quench water and biochar.

3. Willunga Workshop:

We will be conducting a biochar workshop at Willunga on Saturday 16 October in conjunction with the Willunga Environment Centre.

4. New Members:

Welcome to new member Geoff Page of Meadows.

Geoff is also a member of the Meadows branch of the Ag Bureau of SA, which has a long standing record of advising and assisting SA farmers.

Committee meetings are now held on the 3rd (was 2nd) Monday of the month (public holidays excepted) from 7:30 pm. In the Macclesfield Institute Supper Room. Financial members are welcome to attend.

Enquiries: Brian Lewis Mob: 041 148 0935

COMMITTEE MEMBERS at present are:

Brian Lewis – Chairman, Treasurer & Newsletter.

Kelvin Williams – Deputy Chair.

Fiona Williams – Membership Secretary.

Geoff Brockhouse – Wood collection Team Leader.

John Agnew – Schools Liaison.

Stephen Heading, Ivars Eglitis and Dean Hewlett.

EX-OFFICIO ADVISORS are:

Greg Marlu – Operations

Meegan Semple – Horticulture.

Tony Huppertz – Carbon credits.