

MACCY BIOCHAR MEMBER BULLETIN

No. 19 - April 2021

Auspiced by the Macclesfield Community Association Inc.

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HELLO ALL.

Welcome to our 19th Member Bulletin.

In this Bulletin we cover: revised summary of our carbon capture; vine-wood biochar analysis; 2020 financial report; donation to BMT; and more.

REVISED SUMMARY OF CARBON CAPTURE

The summary of our carbon capture achievements last published in November 2020 has been revised based on the latest laboratory analyses of the biochar that we made in 2020.

The analyses showed higher carbon content than the previous 2019 analysis (up from 79.4% to 84.3%).

Also the dry bulk density inferred from the moisture content of the sample and the wet bulk density of other samples (up from 163 kg/m³ to 189 kg/m³).

MACCYBIOCHAR SCOREBOARD at	28/04/21				
YEAR	2019	2020	2021	TOTAL	Units
BIOCHAR PRODUCED	1720	18451 ²	0	20171	Litres
CARBON CAPTURED	222 ¹	2939 ³	0	3161	Kg
NET CO2 AVOIDED	0.775	10.048	0	10.823	Tonnes
ELECTRICITY OFFSET	1.520	23.369 ⁴	0	24.889	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. Re-calculated based on Australian National Greenhouse Accounts Factors Oct. 2020 (SA: 0.43 kgCO₂/kWh)

The value of MWHrs offset by the net CO₂ avoided also increased because of the latest estimate by the Australian National Greenhouse Accounts for South Australia (down from 0.51 to 0.43 kgCO₂/kWhr).

So our carbon drawdown can be said to have offset the GHG emissions generated by the electricity consumption of about 4 households (based on an average of 6000kWh/household). While this is a very long way from making Maccy carbon neutral it is only a small amount off our objective of contributing 20% of the 5% reduction in GHG set by the Government for each year from now to 2030.



VINE-WOOD BIOCHAR ANALYSIS

We have received the analysis of the sample of 2020 vine-wood biochar that we sent to EAL and find that it compares favourably with the analysis of our other biochar. The comparison is shown below:

Type of biochar:	Vine-wood	Standard
Moisture	63.1%	53.20%
Total Carbon	82.6%	84.30%
Total Ash	14.9%	11.40%
Total remaining volatiles	2.5%	4.30%

The ash composition is comparable as shown below:

Ash Composition:	Vine	Standard
Plant nutrients	%kg	%kg
Calcium	3.55	3.96
Potassium	0.55	0.27
Magnesium	0.54	0.26
Sulphur	0.02	0.02
Phosphorus	0.24	0.11

Micro-nutrients	mg/kg	mg/kg
Boron	34.4	22.1
Zinc	201	40
Manganese	210	412
Iron	2302	2538
Copper	50	10.9
Molybdenum	<1	<1
Nickel	1.6	1.78
Contaminants	mg/kg	mg/kg
Aluminium	1333	1023
Silicon	895	1145
Cobalt	<1	<1
Selenium	<1	<1
Cadmium	<0.5	<0.5
Lead	1.20	<1
Arsenic	<2	<2
Chromium	7.1	5.52
Mercury	<0.1	<0.1



MOUNT BARKER
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FINANCIAL REPORT – 2020

MACCY BIOCHAR	YEAR 1	YEAR 2
PROFIT & LOSS	CY2019	CY2020
1 Jan to 31 Dec	2019	2020
INCOME		\$
Membership fees	440.00	500.00
Workshops	0.00	220.50
Donations	20.00	450.00
Sales	225.00	3645.40
Drop-off fees	0.00	10.00
TOTAL INCOME	685.00	4825.90
COST OF GOODS SOLD		
Shady Grove road site	70.00	58.00
Bulk bags	0.00	157.00
Crane hire	0.00	50.00
Strawberry Fete	29.00	0.00
TOTAL COGSS	99.00	265.00
GROSS PROFIT	586.00	4560.90
EXPENSES		
Analysis		379.50
Plant & equipment		3449.43
Depreciation		0.00
Website	231.00	329.00
Motor veh. exp.	0.00	0.00
Office Exp.	0.00	0.00
Postage	0.00	0.00
Promotions	0.00	0.00
Rent	0.00	0.00
Repairs	0.00	101.21
Workcover	0.00	0.00
Telephones	0.00	0.00
Travelling & Accommod	0.00	0.00
Volunteers	0.00	123.00
Miscellaneous	0.00	0.25
TOTAL EXPENSES	231.00	4382.39
OPERATING PROFIT	355.00	178.51
OTHER INCOME		
Council Grant	2000.00	0.00
NET PROFIT/LOSS	2355.00	178.51
Income tax paid	0.00	0.00
Profit/Loss after tax	2355.00	178.51

MACCY BIOCHAR	YEAR 1	YEAR 2
BALANCE SHEET	31-Dec-19	31-Dec-20
ASSETS		
CURRENT ASSETS	\$	\$
Cash at Bank (MCA)	2355.00	2533.51
Debtors	0.00	0.00
TOTAL CURRENT ASSETS	2355.00	2533.51
NON-CURRENT ASSETS		
Biochar Inventory @ \$400/m ³	300.00	2180.00
Plant & Equipment at cost	0.00	3135.85
(Accum Depreciation @ 30%)	0.00	0.00
TOTAL NON-CURRENT ASSETS	300.00	5315.85
TOTAL ASSETS	2655.00	7849.36
LIABILITIES		
CURRENT LIABILITIES		
Creditors	0.00	0.00
TOTAL CURRENT LIABILITIES	0.00	0.00
NON-CURRENT LIABILITIES		0.00
Contractors	1750.00	0.00
TOTAL LIABILITIES	1750.00	0.00
NET ASSETS	905.00	7849.36

DONATION TO BIGGEST MORNING TEA

We will be donating 90 litres of our biochar to the **Macclesfield Biggest Morning Tea** with proceeds of the Tea and Auction all going to Cancer Research. The biochar will be enriched by **Black Diamond Biochar** and packaged into 6 x 15 litre bags that normally retail for \$22/bag.

It will be interesting to see what price they fetch at this upcoming event on 19 May at the Macclesfield Institute starting at 9am and on-line.

INSTITUTE WALL DISPLAY

The **Macclesfield Community Association** has offered us some wall space in the Institute foyer to hang some promotional material. If you have any eye-catching examples of your successes with biochar please send them to me. And next time you visit the Macclesfield monthly market peruse our wall display and encourage others to get involved.

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WOOD COLLECTION

Wood collection around Macclesfield has started so if you have a trailer please bring it to the wood collection working bees (dates to be advised). This is a community service for Macclesfield residents. Even if you do not have a trailer but would like to take part in wood collection then please call Geoff on 0418800691 to be added to our wood collection volunteer list. We have found these working bees to be quite congenial and fun and not too arduous. Basically just picking up sticks and chucking them on a trailer!



SAUSAGE SIZZLE BBQ

The sausage sizzle BBQ was held on 18 April and my apologies to anyone who was confused by the change of venue. At the last minute we found about 100 cars parked on Davenport Square and assumed that they would outnumber us at the barbecue facility. So we relocated to Kelvin & Fiona's garden. And a jolly time was had by all. Thank you to Kelvin & Fiona for your kind hospitality.

BIOCHAR DEMONSTRATION WORKSHOP

Saturday 8 May 2021:

Normanville Natural Resource Centre,

Bookings & Details: Maddie Maguire

Tel: 8558 3644; Mob: 0418 828 517.

We will be demonstrating the use of our flame-capped kilns to make biochar the simple way. Current planning is that this will take place on a property just outside the Yankalilla township.

FURTHER READING

1. Biochar in concrete:

Congratulations Biochar Innovations Pte., Singapore, for launching biochar amended concrete technology. Dr. Harn Wei Kua is a board member of International Biochar Initiative. He has been promoting the use of biochar for building materials. Go to:

<https://www.biochar-innovations.com/>

2. How to make money and sell biochar:

See Peter Olivier's Blog at:

<https://theburningquestion.substack.com>

3. From Michael Shafer, Warm Heart Foundation

"I am pleased to announce the publication, this past March, of an article in the Springer, online, scientific journal Sustainable Earth of my article describing how very low-cost, low-tech biochar made by the poorest farmers in the world can stop much global crop waste burning, reduce carbon and PM2.5 emissions, sequester large amounts of carbon, improve public health and reduce rural poverty. Entitled "Global crop waste burning – micro-biochar; how a small community development organization learned experientially to address a huge problem one tiny field at a time," the downloadable PDF can be found at:

<https://lnkd.in/eFed3Xa> or <https://lnkd.in/eTFSArK>

COMMITTEE MEMBERS at present are:

Brian Lewis – Chairman & Treasurer.

Kelvin Williams – Deputy Chair.

Fiona Williams – Membership Secretary.

Geoff Brockhouse – Wood collection Team Leader.

John Agnew – Schools Liaison.

Greg Marlu & Stephen Heading – Technical advisors.

Ivars Eglitis, Dean Hewlett and

Meegan Semple – Horticulture liaison.

Meetings are normally held on the 2nd Monday of the month (public holidays excepted) at 7:30 pm. All members are welcome to attend.