

ANNUAL REPORT 2019/20



LETTER FROM THE CEO

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On behalf of the ANZBIG Board and staff, I am pleased to present the ANZ Biochar Industry Group (ANZBIG) Annual Report 2019/20.

This year was like no other. We finished 2019 with our first study tour and third conference, being our most successful information sharing and networking event. Then 2020 and a pandemic hit us and everything changed and I believe our advisory board and committee (now executive board) responded very well by embracing and delivering one of the first successful virtual study tours & conferences whilst other industries were postponing until 2021. This event, of course was also the launch of a new business model or cluster for want of a better word in these new times and a new business plan full of program specific activities.

As well as this new model and plan, led by our Chair Nigel Murphy we developed a draft code of practice for the sustainable production & use of Biochar in Australia & New Zealand which effectively overtook our proposed standards for soil in Australia. We will now form a committee to fine tune and trial the Code of Practice with a view to opening this up to all producers in the first half of 2021.

As the World Economic Forum is pushing and given the great reset the World has recently undergone, the 4th Industrial Revolution is underway and set to transform society as we know it. With this advent it appears that biochar as a negative emissions and carbon removal technology is becoming recognised by industry and government including a number of Fortune 500 Companies now investing millions to offset their footprint.

This year in a very practical sense also brought forth medium to large scale facilities being commissioned around the country which at the Local Municipal Council level is extremely encouraging to what is a safe, effective and well researched technology that first and foremost provides jobs and economic opportunity and secondly drives better environmental outcomes.

Thank you to all who have contributed to our success in 2020 and we look forward to an even bigger and better 2021.

Chars, Don Coyne
CEO, ANZ Biochar Industry Group
(ANZBIG)



"Australia and New Zealand continue to be global biochar leaders. The unique ecological and agricultural setting of our lands creates significant opportunities for both the production and utilisation of biochar. Our technologies and know-how are being exported across the world and provide great opportunities for jobs, more sustainable agriculture and carbon sequestration. Biochar production can transform a waste and turn it into a valuable product – a perfect example of a circular economy in action"

INTRO TO ANZBIG

The Australian and New Zealand Biochar Industry Group (ANZBIG), is a not-for-profit member driven organisation representing 65+ organisations and companies producing, using and researching biochar. ANZBIG facilitates and assists companies, governments and institutions in the effective use and production of Biochar. ANZBIG focuses and streamlines Biochar education, research, collaboration and commercialisation activities to provide better outcomes for the societies and economies of Australia and New Zealand. ANZBIG sees its role as catalysing the growth and development of biochar in our region. By playing this coordinating role, the economic and social opportunities that biochar can create can be realised sustainably.

ANZBIG AIMS TO

PROMOTE DRAWDOWN

The new carbon economy is drawing out ambitious targets by Fortune 500 companies across the globe to achieve NET ZERO by 2050. They cannot do this without embracing negative emissions technology like Biochar that pull CO2 out of the atmosphere.

MARKET INTELLIGENCE

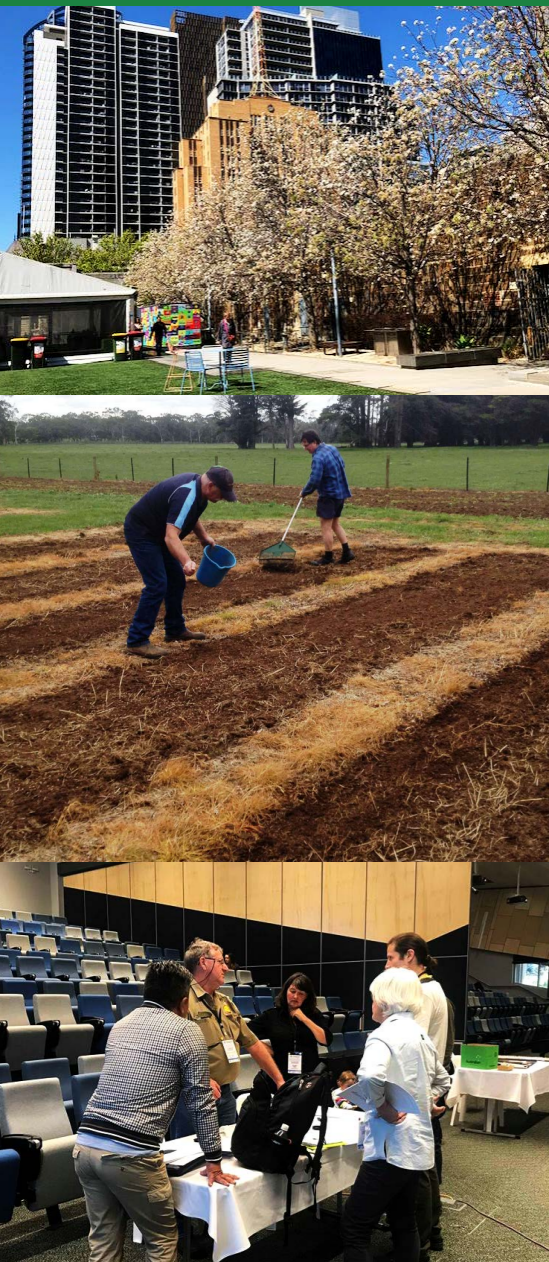
Provide relevant market information for members and for publications. We wrote an ongoing market report on the value of Biochar and wood vinegar looking at early case studies from users.

POLICY & LOBBYING

Support/ initiate adaptation of legal regulations regarding production and use of Biochar.

OUR MISSION

"The Australia and New Zealand Biochar Industry Group will facilitate and assist companies, governments and institutions in the effective use and production of Biochar. The ANZBIG will focus and streamline Biochar education, research, collaboration and commercialisation activities to provide better outcomes for the societies of Australia and New Zealand."



EVENTS

ANZBIG runs an exciting event schedule including networking, webinars, project specific events, and knowledge sharing between universities, governments and other key stakeholders.

DISCOVER UPCOMING EVENTS | anzbig.org/events

OPPORTUNITIES

ANZBIG provides advice regarding access to funding, Venture Capital support and access to mentorship and grant opportunities. ANZBIG increases member visibility through our network, events and collaborative projects involving cross pollination with other peak clusters, which are emailed in a monthly newsletter to our members.

DISCOVER UPCOMING EVENTS | anzbig.org/events

EDUCATIONAL LIBRARY

ANZBIG provides business advice and export readiness support for all our members through events in collaboration with cluster leaders and access to details of conferences, resources, courses and training opportunities as well as 3.5 years of recordings and research papers by topic.

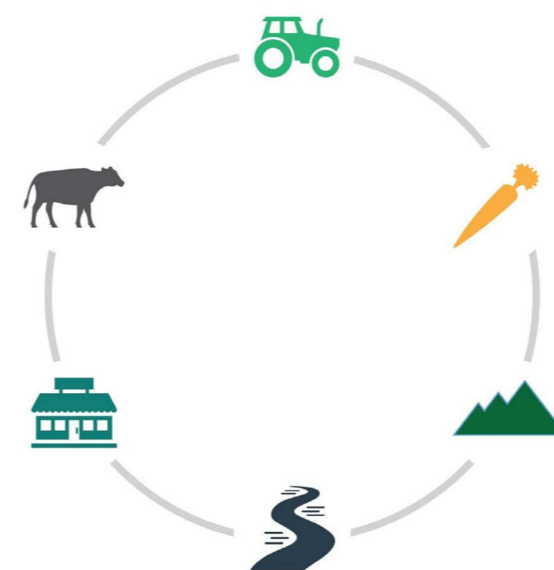
WHO ARE OUR MEMBERS?

ANZBIG has a broad member base; from industry, professional services, universities, government and other key stakeholders. Right across Australia and New Zealand every week, our members progress the aims of ANZBIG - helping it support the region to become global leaders in the sustainable production and use of biochar.



2019/20 ACHIEVEMENTS

- Provided webinars, conferences, training workshops and support for our member base and broader biochar stakeholder network.
- Published a report entitled "The Value of Biochar & Wood Vinegar: Practical Experience of Users in Australia and New Zealand".
- Revamped and updated our website and social media presence.
- Strengthened our industry model by reforming from an initiative to an industry cluster.
- Made representations on the use and effectiveness of biochar and the importance of the biochar sector to governments and peak bodies including the Australian Bioenergy and Technology Roadmaps.
- Developed a Code of Practice for the sustainable production and use of biochar.
- Revised our Business Plan with a list of specific program activities under the cluster model.
- Continued to provide an events calendar to be delivered online due to Covid-19.
- Ran a successful ANZBIG Virtual Conference during COVID-19. Ran a 100 day Biochar Awareness Campaign.
- Circulated a monthly ANZBIG newsletter and LinkedIn page.
- Increased annual revenue by 66% through membership growth and events.



"Successful bioenergy deployment necessitates a cross-sectoral, integrated approach where the efforts of all stakeholders - ranging from energy, agriculture and forestry, infrastructure, environment, technology and innovation, to economic and social affairs - are coordinated into concerted, sustainable action"

COLLABORATIONS & PARTNERSHIPS

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Aimed at bringing down the barriers to providing sustainable, reliable and affordable solutions to biochar production and use.



We bring together key stakeholders from research, government and industry all in the one place. We hold a number of affiliated memberships with sister clusters in other carbon removal industries such as sustainable forestry, soil carbon sequestration & mineral carbonation.



We also associate, partner and collaborate with other biochar networks around the world.

PRIORITIES AHEAD

- ANZ BIOCHAR CONFERENCE
- VIRTUAL & LIVE – AUGUST 2021
- EXCITING 2021 EVENTS CALENDAR, WITH EMPHASIS ON MEMBER NETWORKING OPPORTUNITIES
- 2030 BIOCHAR INDUSTRY ACTION PLAN
- ANZBIG CERTIFICATION PROGRAMME - LAUNCHING EARLY 2021

Interested in potential partnerships with ANZBIG?

STAFF & TEAM



DON COYNE
Executive Director



SAM ZAGAMI
Cluster Manager

"Biochar can be used to address some of the most urgent environmental problems of our time — soil degradation, food insecurity, water pollution from agrichemicals, and climate change."

*Dr. Johannes Lehmann,
Cornell University*

SPECIAL THANKS TO OUR ADVISORY BOARD

Laura Fell
Shaun Scallan
Karen Enkelaar
Graham Lancaster

Patrice Newell
Euan Beamont
Annette Cowie
Adrian Morphet

Andre Van Zyl
Jennifer Lauber- Patterson
Craig Bagnall
Ignatius Verbeek

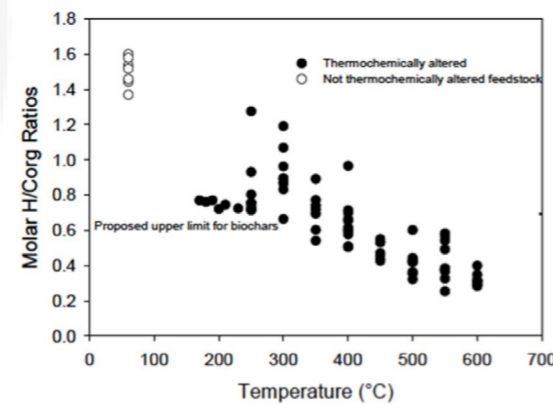
CODE OF PRACTICE & BIOCHAR CERTIFICATION

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ANZBIG has developed a “Code of Practice for the Sustainable Production and Use of Biochar in Australia and New Zealand”. This Code of Practice sets out industry best practice for the sustainable production and use of biochar. Biochar is currently being used for many different applications, including soil conditioning, compost additives, carrier for fertilisers, manure treatment and litter (bedding), materials to silage additives, feed-additives and medical applications, and the list of potential uses is continuing to expand.

As the number of applications for biochar increases, so too does the number of manufacturers. This in turn leads to new challenges in ensuring the quality and sustainability of biochar. It is important to ensure biochar is being produced from a sustainably sourced and supplied feedstock, is not contaminated and is safe for its intended end-use application. The production should not violate emission or health and safety regulations.

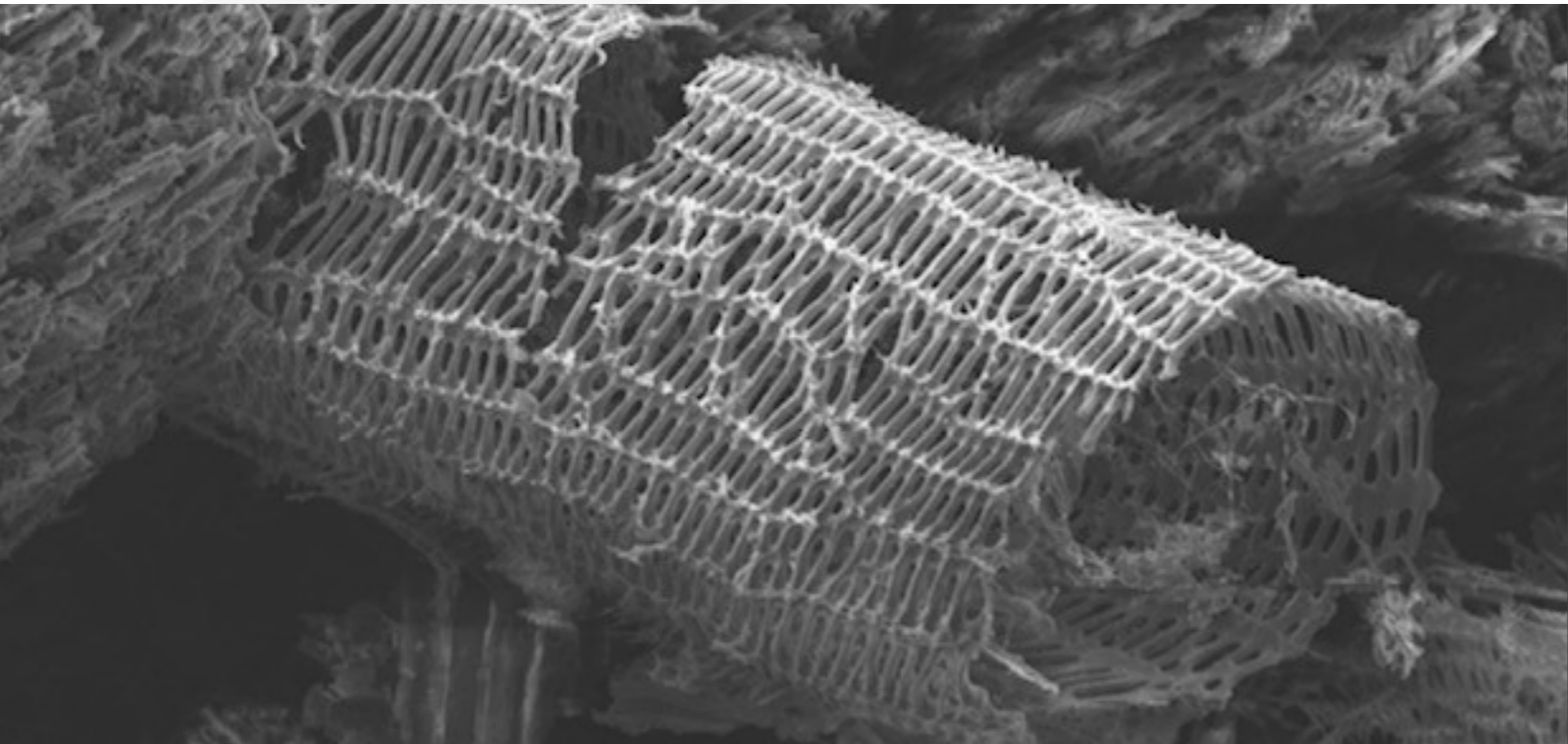
ANZBIG has a plan via a certification process to implement this code of practice to those manufacturers wanting to protect their brand as the highest possible quality for safe and effective emissions monitoring and applications from agriculture to construction materials. The code sets out three grades, Biochar Premium Grade (BPG), Biochar Standard Grade (BSG) & Biochar Industrial Grade (BIG).



OUR IMPLEMENTATION PLAN FOR THE CODE FOR THE FIRST HALF OF 2021

- Finalise Version One of the Code of Practice.
- Establish ANZBIG Biochar Certification Assessment Board.
- Finalise Assessment Protocol.
- Create brand for certified product (9 categories)
- Undertake certification of products with trial companies.
- Update and revise Code of Practice based on work above.

DISCOVER RESOURCES | anzbig.org/resources



“Biochar – that black charcoal like substance discussed so often in recent days for its miraculous effects on soil and compost - is good for more than just your garden. One of the key materials for a sustainable future of the planet, biochar has many other uses that can be integrated into new organic systems for farming, building, clothing, electronics and a whole range of consumer products. Biochar can initiate multiple cascades to optimize and recycle current material, nutrient and energy flows.”



NIGEL MURPHY | Board Chair

A founder and Director of Earth Systems and Cyclic Carbon, companies that have been actively innovating and commercialising technology in the Cleantech sector over the last 25 years including biochar. Nigel's biochar experience covers product development, IP protection, capital raising, commercialisation and market development. He has experience in working in Australia, China, S.E. Asia, Africa and the Pacific.



PETER BURGESS | Vice Chair

Trained as a metallurgical engineer Peter has held senior operational, corporate and advisory roles with several large Australian and international mining and manufacturing projects including Alcoa in Western Australia, Victoria and USA, served as Chair of the Federal Government and Industry Light Metals Action Agenda, on the Board of Engineers Without Borders Australia and as consultant to Alumina Ltd and CSIRO Minerals and Energy.



DON COYNE | Executive Director

A Qualified Horticulturist with over 25 years experience in the industry. Don has worked with NSW DPI Soils team as Technical Assistant on Biochar projects and coordinated three ANZ Biochar Conference's & one Study Tour. Currently event coordinator for this year's 2nd Australia New Zealand Biochar Study Tour & 4th Conference (ANZBC20) and previous to this role was the First Public Officer & President for Australia New Zealand Biochar Initiative (ANZBI) from 2017 - 2020.



DENNIS ENRIGHT

With more than 20 years experience in soil and fertiliser research with AgResearch, as well as organic production and certification. Dennis is a keen advocate to have biochar recognised and used as a tool for sustainable management. He is currently the Chairperson of the Biochar Network New Zealand, recently nominated for a second year term.



HILARY FURLONG

Now retired and living on Tamborine Mountain QLD, Hilary's Professional experience spans across advertising, publicity and production. She has worked as the National Press Officer for The Australian Opera and as a theatrical agent for M&L Casting Consultants as well as a Director of the Special Production Fund for the Australian Film Commission. An actress and independent film maker, producer, publishing supervisor and editor, Hilary has also been an administrator for the School of Drama, VCA, Melbourne.



DR. STEPHEN JOSEPH

Stephen Joseph holds a Bachelor of Applied Science in Metallurgical Engineering and a doctorate in Architecture and Applied Anthropology. He is a Fellow of the Australian Institute of Energy, a chartered engineer and has been a senior adviser to both commercial, government and non-government organizations, in renewable energy, and sustainable agriculture and forestry. Stephen has extensive experience worldwide in all forms of renewable energy.



MELISSA REBBECK

Director of Climate & Agricultural Support Pty Ltd, also a Councillor for the Goolwa Hindmarsh Island Ward of the Alexandrina Council, Project manager/developer, business management/development, innovator, stakeholder manager, facilitator, researcher, extension professional, board and group support, farmer. 20 years experience as an applied climate, agricultural and environmental scientist.

"Carbon sequestration in soil also has significant potential. Biochar, produced in pyrolysis of residues from crops, forestry, and animal wastes, can be used to restore soil fertility while storing carbon for centuries to millennia. Biochar helps soil retain nutrients and fertilizers, reducing emissions of GHGs such as N₂O. Replacing slash-and-burn agriculture with slash-and-char and use of agricultural and forestry wastes for biochar production could provide a CO₂ drawdown of ~ 8 ppm or more in half a century."

Dr. James Hansen, Columbia University - Director of NASA's Goddard Institute of Space Studies"

OCT
2019

1ST ANZ BIOCHAR STUDY TOUR & 3RD CONFERENCE (ANZBC19)

The ANZ Biochar Industry Group (ANZBIG) hosted it's 1st Study Tour & 3rd annual conference simultaneously in the Green Triangle Region on the Victoria & South Australian border. Then, onto Royal Melbourne Institute of Technology (RMIT) in Melbourne's Central Business District. Theme and topics covered included;

- MAINSTREAMING BIOCHAR IN OUR REGIONS & CITIES
- ANIMAL & SOIL HEALTH
- DIVERSION FROM LANDFILL OR BURNING
- WATER QUALITY
- ROAD BUILDING
- REGIONAL ENERGY AND JOBS

Working in with Local Council and Regional Development Corporations. Including field trial visits, visit to a working biochar facility, practical seminars and networking opportunities for 200+ stakeholders.

JULY
2020

2ND ANZ BIOCHAR STUDY TOUR & 4TH CONFERENCE (ANZBC20)

Due to Covid-19 this was a totally virtual event run over 4 days but split into two weeks. The entire event was broadcast live and recording to 100+ stakeholders worldwide. A great program for both events with a talented and experienced list of presenters. Theme and topics covered were;

- REGENERATING SOILS & TRANSFORMING
- MATERIALS: RESTORING REEF CATCHMENTS
- BETTER SOILS
- ANIMAL HEALTH 7 WEALTH
- CLEANER RUNOFF
- WASTE TO ENERGY
- BUILDING THE FUTURE
- NEW CARBON ECONOMY

WEBINAR & WORKSHOP SERIES

ANZBIG continued to run valuable webinars throughout the course of the year usually seasonal but now morphing into a monthly webinar towards the end of this year. Some of the topics covered which have been uploaded into the extensive members only library included;

- BIOCHAR FOR BEEF, DAIRY & AVOCADO HEALTH & PRODUCTIVITY (N.Z. WORKSHOP)
- REFORESTATION USING DRONE TECHNOLOGY & BIOCHAR SEED BALLS
- PURO.EARTH - THE WORLD'S FIRST MARKETPLACE FOR CARBON REMOVAL
- THE WONDER OF WOOD VINEGAR
- HOW TO USE BIOCHAR BASED MATERIALS IN CONSTRUCTION
- BIOCHAR FOR ANIMAL HEALTH, WEALTH & CLIMATE

The ANZBIG Board also reached out directly to the advisory board and members to seek their input into the session to ensure the topics covered met their needs. The webinars focused on line items within our strategic plan.

COMMUNICATIONS

100 DAY MEDIA BLITZ

Our team hired a Communications Intern from Monash University to help with a 100 Day Media Blitz involving articles on social media every day of the week for just over 3 months and incorporated the ANZBC20 Event. It also included interviewing a number of key stakeholders from government, research and industry particularly showcasing success stories from both producers and users of biochar and wood vinegar. This lead onto a monthly webinar series.

COMMUNICATIONS STRATEGY

The communications intern also completed an internal document or communications strategy to be used by our team whenever promoting our brand or event. Table of contents

1. Statement of purpose
2. Strategy module
3. Current situation – SWOT Analysis
4. Organisational objectives
5. Communication messages
6. Key Stakeholders
7. Communication Guidelines
8. Mapping the Biochar Sector.

SUBMISSIONS

The ANZBIG Advisory Board meet monthly to help implement our business plan including a number of program specific activities that covers the broad range of biochar applications. We are proud to have submitted our contribution to the Federal Government's Technology Roadmap & Bioenergy Roadmap



FOUNDATIONAL MEMBERS



GREEN MAN CHAR



Rainbow Bee Eater



Stephen Joseph

Visiting Professor at UNSW, UNE, Univ. of Wollongong & Nanjing Ag. University

CORPORATE MEMBERS



The global biochar market size is estimated to reach USD 3.1 billion by 2025 and expand at more than 10% per annum over the next five years. Globally increasing demand for the product in organic farming has been a major factor influencing the growth. In addition, increasing consumption in livestock feed and growing awareness pertaining to benefits of biochar as a soil amendment are expected to drive the demand.