Dear Members,

The second year of a pandemic has proven to make life difficult for most of us, and even in such trying times, the emerging ANZ Biochar Industry has grown. Australian and New Zealand technology is being exported to the world, awareness continues to grow, more uses and users are revealed and politicians now have biochar on their radar, as they realise we can't reach 2050 NET ZERO without it. Biochar stands alone too as a waste reduction technology, turning it into valuable resources such as heat, gas, distillate, biochar, graphene and wood vinegar. This in turn benefits our economy and society by growing better and more abundant food, taking pressure off ecosystems, transforming materials that we use every day in the built environment and electronics, just to name a few different markets.

ANZBIG has also grown stronger this year with a stable membership base now in place and growing, sponsorship of our key events and securing our first research grant using biochar in regenerative agriculture, another fast-growing sector. We furthermore enjoy strong relationships with our international partners particularly the IBI, USBI and EBIC.

I must also thank and acknowledge once again the strong governance by both our advisory and executive boards who volunteer their time to work on important and key programmes for our growth. The code of practice is a huge milestone for ANZBIG which eventually feeds into carbon sink product certification, providing strong income for ANZBIG into the future which will be poured back into the industry's growth. This is why ANZBIG exists.

Finally, thank you to you, all our members who continue to support and show confidence in biochar and help drive the sector towards sustainability in all its facets. It's a great sector to be part of and every day is a privilege to be part of the story. Here's to continued growth out to 2030 and beyond with sufficient drawdown to have a significant impact on our economy, environment and societies.

Best Chars,
Don Coyne
CEO, ANZ Biochar Industry Group (ANZBIG)
"I have a chance to promote our company through ANZBIG."

ANZBIG Member

"Solidarity! Being part of a group of enthusiastic members and taking advantage of a great information source."

ANZBIG Member

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.

ANZBIG runs an annual conference, monthly webinars, field days, workshops, public awareness events and a podcast series.

DISCOVER UPCOMING EVENTS | anzbig.org/events

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 FREE RESOURCES | anzbig.org/resources

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 four years of recordings and research papers by topic.

 Join ANZBG at anzbig.org/membershipdetails/

WHO ARE OUR MEMBERS?

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2020/21 ACHIEVEMENTS

• Delivered monthly biochar webinars and newsletters
• Delivered an annual conference
• Developed and ran biochar training workshops
• Ran a biochar podcast series featuring experts in the area
• Continued development of our library of biochar recordings, papers and reports
• Liaised with State and Federal Governments, authored and contributed to submissions to government regarding biochar
• Supported key research programs into the use of biochar
• Launched the first live version of a Code of Practice for the sustainable production and use of biochar

"Do our best, remove the rest"

1. Double down on cutting emissions, initial focus on air travel with -30% flight CO2 reduction target for 2021
2. Introduce triple-digit Carbon Steering Levy that incentivises low-carbon decision making; from 100$/t in 2021 to 200$/t by 2030
3. Use Levy funds to compensate remaining emissions through high-quality carbon removal certificates” Swiss Re Group
Good, strong relationships with the International Biochar Initiative, United States Biochar Initiative and European Biochar Industry Consortium Group. Exchanging promotion of each others events, articles and programmes

We also associate, partner and collaborate with other sectors to apply for grant funding and to carry out trial work.

Interested in potential partnerships with ANZBIG?

**PRIORITY AHEAD**

- COMMERCIALISATION OF CODE OF PRACTICE
- EXCITING 2022 EVENTS CALENDAR
- MORE SERVICES and PRODUCTS
- 2030 BIOCHAR INDUSTRY ACTION PLAN
- ANZBIG CERTIFICATION PROGRAMME

"A carbon net-negative product absorbs more CO2 than it emits in its production, with the net effect of removing carbon from the atmosphere. Sustainable and certified feedstock is a key requirement for the suppliers."

Antti Vihavainen - Puro.Earth
ANZBIG has developed the first live version of the “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 six grades, Biochar Premium Grade (BPG), Biochar Standard Grade (BSG) & Biochar Industrial Grade (BIG) each with various grades.

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The first live version of the Code of Practice is made public

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

Our Implementation Plan for the Code for the First Half of 2021

“Biochar can support the development of a circular economy at regional and farm scale by improving nutrient recovery and nutrient use efficiency. The economic case for biochar production is strongest for biochar made from residue materials, especially when the residues contain high concentrations of nutrients, such as animal manures and sewage sludge. Concerns that these feedstocks may contain contaminants restrict their beneficial reuse. Fortunately, most organic contaminants are destroyed with high efficiency during pyrolysis, by thermal degradation and volatilization followed by destruction during vapor combustion.”

How biochar works, and when it doesn’t: A review of mechanisms controlling soil and plant responses to biochar - Joseph et al 2021
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.

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.

PROF. 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.

“There has not been much scale-up as yet, which is reasonable – we can’t expect the technology development and the scale-up to happen in the same decade – but we also can’t afford to wait any longer to find out what the actual potential is. Modern photovoltaic and wind energy technology existed in the 1950s, but it took another 50 years to see real scale-up and adoption of those technologies. We need to move much more quickly to position biochar to achieve its sustainable potential to help mitigate catastrophic climate impacts.”
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 recorded to 100+ stakeholders worldwide. A great program for both events with a talented and experienced list of presenters. Theme and topics covered were:

- CLEANER RUN-OFF; RESTORING REEF CATCHMENTS
- REGENERATING SOILS & TRANSFORMING MATERIALS
- WASTE TO ENERGY
- BUILDING THE FUTURE: NEW CARBON ECONOMY
- ANIMAL HEALTH & WEALTH

A great program for both events with a talented and experienced list of presenters. Theme and topics covered were:

- Food, fibre and recreation
- Infrastructure
- Energy
- Biosphere Standards

Once again our annual conference was forced to go fully virtual. We ran our two half-day plenary sessions in week one and then spread out our five topic areas over five weeks, finishing with our launch of the first live version of our code of practice and next steps discussion. The theme was Biochar in the Carbon Drawdown Decade: 2030 and Beyond with topic areas covering:

- Traditional Practices for Producing Biochars
- The Properties of Fresh and Aged Biochar
- Enhancing Biochars to Meet Soil Labour and Financial Constraints; Building Viable Markets
- The Art and the Science of Applying Biochars

In the lead up to ANZBC21, we launched The Biochar Podcast, one of the first podcast series on biochar that we are aware of. We covered biochar in roads, our code of practice, protected cropping, the How Biochar Works paper, analysis of chars and auditing requirements for carbon removal certificates. You can listen to free interview recordings on all podcast platforms including Spotify and Apple Podcasts.

Using a plugin called Memberpress, we have upgraded our memberships to be fully automated, freeing up time for our team to pursue other activities. Paying by credit card, members will receive notifications when memberships are due to renew automatically with an opt-out option.

ANZBIG continues to improve it's communications strategy each year and to regularly receive feedback from its members via surveys.

The ANZBIG Advisory & Executive Boards meet monthly to help implement our business plan including a number of program specific activities that covers the broad range of biochar applications. Our boards review new voluntary methodologies, submit on new policies such as the recent NSW Waste to Energy Policy, write articles and advocate on a regular basis the advancement of biochar as one of six carbon negative technologies recognised by the IPCC since 2018.

Regular monthly webinars ran throughout the year on various topics ranging from carbon drawdown to animal health and wealth. We have numerous free webinars on our YouTube, & Vimeo Channels and 'The Biochar Podcast,' can be found on all podcast platforms, including Spotify & Apple Podcasts.
"Mixed with the subsurface of agricultural lands, biochar is also a proven way to sustainably improve water and nutrient retention in soils and thus crop yields (…) Biochar production process releases renewable energy in the form of gas, which can be transformed into electricity," a note prepared by Cameroon and its partner NetZero, for the COP26.”