



Beyond Zero Emissions

# **Annual Report**

2018 - 19



# **Recognition Of Traditional Custodians**

Beyond Zero Emissions stands in solidarity with First Nations people in calling for the establishment of a First Nations Voice in the Constitution, as described in the Uluru Statement from the Heart. We recognise that Aboriginal people's sovereignty over their land was never ceded and the impact of this ongoing dispossession continues to this day. We further support calls for the establishment of a Makarrata Commission on agreement-making and truth-telling between Aboriginal and Torres Strait Islander peoples and governments.



#### Data

Name Beyond Zero Emissions Address Ross House, Room 3.9 Address 2 247 Flinders Lane

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#### Tax information

Tax Status DGR Item 1 ABN 48554925975

Beyond Zero Emissions respectfully acknowledge the Traditional Owners of this land and their Elders past, present and emerging.



BZE does not have a financial / auspice partner organisation.

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# Message from the Chair and CEO

This year we accelerated climate action by showing that 'jobs and growth' are not only compatible with a zero carbon economy - they are dependent on it.

The next wave of industrial revolution is coming - the zero carbon economy. Our global first Electrifying Industry project demonstrates how fuel switching away from fossil fuels to renewable electricity will boost the competitiveness of Australian manufacturing by reducing costs and producing zero-carbon goods.

At Beyond Zero Emissions we know that it is not enough to lead change with rhetoric - you have to do the work to show how zero emissions is possible. To answer the question 'how do you electrify industry,' our team of 16 volunteer researchers and 30 pro bono experts scoured the world for electrical heating technologies. Under the leadership of Michael Lord, we pieced together thousands of technical journals and real life case studies to develop a coherent and compelling strategy for making the big switch.

To launch the work we brought hundreds of energy, government and manufacturing leaders together to start building the foundations of a thriving manufacturing sector powered by renewables. We're excited by this positive engagement because it's further proof that Australia's industry leaders

are ready to led the transition to zero carbon. Our work continues, as we work with our partners to build Australia's first zero carbon factory.

Our partnership for Transurban highlights the leadership of Australian companies moving us to a zero carbon future. We were thrilled to build on Rethinking Cement to develop Rethinking Cement in Australian Roadways, and we look forward to seeing this vision become a reality.

Renewables have the potential to drive regional economic development. The 10 Gigawatt Vision shows how renewable energy can power jobs and investment in the Northern Territory. The incredible, positive support our vision has enjoyed proves how vital it is that communities are given a future to say yes to. Since launching, the exciting SunCable project has received major project status from Government, investors are mobilising, and the Northern Territory Government has embraced much of our work in their forward thinking draft Climate Response.

Zero Carbon Communities continues to give community leaders a boost by empowering them with knowledge. We're building a network of leaders that can support each other as they lead their communities towards renewable solutions. This year we established the Investment Reference Group, to bridge the gap between

investors and local communities seeking funding. We also started work on Snapshot, an innovative web tool that provides free emissions snapshots for local government areas.

We're proud that Beyond Zero Emissions is a highly regarded, trusted thought leader in climate solutions. People often say we 'punch above our weight' – which we do. But the key to our success is choosing strategic projects that mobilise community, having the courage and ambition to tackle problems that are seen as 'too hard' by others, and by harnessing the people power of our wonderful volunteers.

We love being a part of the Beyond Zero Emissions community. Our staff, our Board, our volunteers, and our funders. Together, we're doing work that will take Australia beyond zero.



Eytan Lenko, Chair



Vanessa Petrie, CEO

# **About us**

At-a-glance

#### **Beyond Zero Emissions (BZE)**

is a climate solutions think tank, showing through independent research and innovative solutions how Australia can reach beyond zero emissions.



Beyond Zero Emissions (BZE) has been in operation since

2009

more than 4,000

people listen to our two radio shows broadcasting on 3CR, and podcasting on iTunes and Stitcher



Participation in and representation at conferences, festivals and events every year

BZE has a national focus with a head office in

# Melbourne



BZE retains a dedicated team of seven Board members and six full-time/ equivalent staff



We work collaboratively with every level of government, business, finance and community

> We have published every single one of which has influenced climate action



We host a regular discussion group along with special events to share our research and connect people with expert and the latest in climate solutions



Our Zero Carbon Community program implements our work at the local /regional level

We have an engaged social media following

14,000√13,000

m 1,900

working with more than 100 volunteers



Our funders support our staff workforce, superpower our volunteers and supercharge our impact.



Together we can achieve a zero emissions Australia where everyone thrives.

# 2018-19 Achievements

At-a-Glance

#### The launch of

# **Electrifying Industry**

 a major new, global first report showing how manufacturing can fuel switch to renewable electricity

The launch of

# **The 10 Gigawatt Vision**

an economic development plan show how renewable energy can power jobs and investment in the Northern Territoryrenewable electricity

Partnering with Transurban to develop

Rethinking Cement in

Australian Urban Roadways

Supporting

Zero Carbon Communities

Progressing research to support the transition to a renewable economy or Collie, WA and the Hunter region, NSW Introducing exciting new initiatives



# Investment

# Reference Group,

which aims to link community initiatives with impact investment



# **Zero Carbon Factory,**

which aims to bring knowledge, partners and funding together to build Australia's first zero carbon factory



### **Zero Carbon Communities**

Mentoring, which amplifies community leadership with support from pro bono mentors



discussion groups

Philanthropic funding partners, and many regular, personal donors









Community radio episodes

110 exceptional volunteers who generously provided

>10,000

volunteer hours



>1,300 hours from Professionals >7,000 hours from Outreach volunteers





...to show a zero emissions Australia is achievable and affordable now.



- People
- **Partners** Stakeholders Volunteers
- **Board of Directors** Staff team
- **Enterprise** 
  - Office & Equipment
    - Reputation Expert staff and project communities-of-practice

Previous work

Knowledge base



# Activity



#### Research

Practical solutions. focused, ambitious and clear



# **Engagement**

Mobilising a network of volunteers and communities to bring to life and implement our research



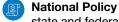
# **Operations**

A well-functioning and sustainable organisation



- National and regional (economic sector and place-based) transition plans Vision and strategy for communities case studies and pilots policy recommendations submissions
- Media articles Radio shows Strategic social media Conferences Boardroom presentations
- Compliance activities Fundraising





state and federal governments adopt policies, programs and funding to accelerate transition to renewable energy and zero carbon technology across all economic sectors.



#### **Business**

our reports create a vision for and a platform to engage with business. When big business adopts change it is less risky for the government to follow eg. 10GW Vision

**Finance** 

our volunteers include a network of investors and banks working together to change financial systems.

eg. Zero Carbon Investment Group

Communities

activated, empowered people that understand their own agency to create change in the political dialogue. eg. Port Augusta

# **Publications**

# Electrifying Industry (September 13 2018)

manufacturers to transform raw materials into everyday products. This 'process heat', often produced using fossil gas, is responsible for 8% of Australian greenhouse gas emissions. Globally, the contribution of process heat is higher – about 12% of all emissions.

It takes huge amounts of heat for

The Beyond Zero Emissions' Electrifying Industry (2018) report demonstrates how manufacturers can generate heat differently, through the smart use of renewable electricity. By electrifying industry, Australian manufacturers can dramatically improve energy productivity and eliminate up to 8% of national emissions.

Electrifying Industry brought together dozens of experts from Australia and abroad to produce world leading guides for the electrification of manufacture of prepared meals, beer, milk powder, recycled paper, aluminium casting, bricks, plastic, glass, steel and ammonia.

Electrifying Industry has been enthusiastically embraced by leading industry associations and has been presented at major events including:

- BZE's Electrifying Industry Summit on September 13, 2018 (Melbourne)
- Moreland Energy Foundation's Spark! 2018 Conference on September 20-21, 2018 (Melbourne)
- All Energy Conference on October 24-25, 2018 (Melbourne)
- BZE's Newcastle Electrifying Industry Summit on 29 November, 2018
- Electrifying Industry Seminar on February 26, 2019 (Adelaide)

# Electrifying Industry

# "

"BZE's recent Electrifying Industry report has helped shift the focus of Australian policy makers to the opportunities of the industrial and manufacturing sectors to fully decarbonise. Industry demand for heat is responsible for 8 per cent of Australia's greenhouse gas emissions. Despite the size of the problem, it has been neglected by policy makers. The Electrifying Industry report showcases innovative methods of producing materials with less energy, using technologies such as waste to energy, hydrogen for heatand electrification of heat.

I was one of over 200 attendees at the Electrifying Industry summit where the report was launched, and it has been fantastic to see the coverage that this report has received in the media and trade circles, as well as internationally. I am pleased to see that BZE are now working with the Australian Renewable Energy Agency to facilitate manufacturing businesses to become Zero Carbon Factories based on the findings of the Electrifying Industry report, and I have supported their role in this alongside my other work in the manufacturing energy productivity space."

"

Alan Pears AM

Volunteer Advisory Committee

### BZE Lead Author

Michael Lord

### Volunteer Advisory Committee

Alan Pears AM
Dylan McConnell
Jeremy Osborne
Philip Harrington

#### Volunteer researchers

Afrina Samain Andrew Gelbart Anthony Voyage

Azadeh Keshavarzmohammadian

Cameron Martin
Calum Sutherland

Eytan Lenko

Jingheng Liang

Julius Keller

Mathew Smith

Michelle Brownlie

Nasim Pour Patrick Blain

Priyank Shriyan

Thomas Harvey

Tom Burr

#### Editors

Colin Irving

Elle Zimmermann

Imogen Jubb

Madeleine Brennan

Rachel Hennessy

Sarah Quick

Vanessa Petrie

# Professional partnerships

The following industry organisations also provided input and advice to the research:

**RMIT** 

Cryogrind

Nel Hydrogen

Newtecpoly

ITK Services Australia

Calix

Carbon Nexus

Electroglass

**Ecostore** 

Viking Heat Engines

Allviron

Cementa

Kallesøe Machinery

Danish Technological Institute

Polymeric Powders

Mayekawa Australia

Cranfield University

ScanArc

Eurotherm

SINTEF

Likido

Outotec

Brno University of Technology

Austrian Institute of Technology

Organisations

C-Tech Innovation

FlowPower

Furnace Engineering

**GLP** Renewables

International Energy Agency

# Funding partners

Hamer Family Fund Lenko Family Foundation

Lord Mayor's Charitable Foundation

Mullum Trust

NR Peace and Justice Fund

Pace Foundation

Pixel Seed

Robin Friday

As a result of our work on Electrifying Industry, BZE has been invited to participate in NSW Energy and Resources Knowledge Hub and has carried on the work in our Zero Emissions Factory proposition. In this way, we are translating our cutting edge research into real world change.



# **Publications**

# The 10 Gigawatt Vision:

How renewable energy can power jobs and investment in the Northern Territory

(20 June 2019)

The Northern Territory is uniquely positioned to thrive in a low-carbon world. The NT can set itself up for decades of sustainable growth by converting abundant sunshine into renewable energy, to be used for energy exports, mineral beneficiation, manufacturing, repowering remote communities, and more.

The 10 Gigawatt Vision is BZE's forward thinking alternative to status quo economic strategies based on fossil fuels. The report describes how the NT Government can drive investment in 10 gigawatts of renewable energy. This low cost energy can then be used to retain more of the NT's mineral wealth, help to decarbonise our Asian neighbours' energy systems and lower living costs for Territorians. The strategy outlined in the report would create 8,000 jobs and generate more than two billion dollars of additional value.

In the face of plans to frack the NT, our report makes it clear the shale gas industry is financially unstable and wholly unsuited to the needs of the coming zero-carbon economy. Low-cost, clean energy can create many more

jobs than the shale gas industry and prevent over 20 billion tonnes of carbon emissions from entering the atmosphere.

Our report was launched in Darwin in partnership with Environment Centre Northern Territory.

"

Solar is the cheapest source of energy in most places in the world. As one of the sunniest places in the world, NT has a competitive advantage as a global leader in exporting and generating renewable energy. This is a huge opportunity to create a new and growing industry, deliver a lot of quality jobs, and foster long term sustainable social and economic development to the community

"

Jeremy Kwong-Law Investment Manager at Grok Ventures A reasoned, economic vision and strategy for growing jobs and investment in the Northern Territory with renewables.

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# Northern Territory 10GW Vision

In the week following the launch of the 10 GW Vision report, SunCable announced plans for a 3 gigawatt solar farm near Tennant Creek to export solar energy to Singapore via an undersea cable.



Eytan Lenko @eytanlenko · Jun 22

There is something special happening up in the NT. The @beyondzeronews renewable vision launch and @mcannonbrookes have captured the Territory's imagination. There is no better indication than today's wall-to-wall coverage in the @TheNTNews. This is the start of a bright future.



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**Kane Thornton** @kanethornton · Jun 22 Great work Eytan & team. NT has so much renewable potential.

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Mike Cannon-Brookes A & Omcannonbrookes

Replying to @kanethornton@eytanlenko and 2 others

Huge kudos to @eytanlenko & @ beyondzeronews for a massive amount of hard work here

They're not whinging about fossil fuels, they're showing the path forward with science, economics and heart.



#boundlesspossible

Investing in the North takes people w huge hearts & big vision. We are world class for exporting cattle amangos We will be world class exporting prawns solar & we are going to space A huge groundbreaking year for #TheTerritory - future so bright

6:06 PM · Jun 23, 2019 · Twitter for iPhone

# BZE Lead Author

Michael Lord

#### Team

Lachlan Rule Madeline Townsend Heidi Lee

Advisory committee

Eytan Lenko Shar Molloy

# Advisory committee

Brian Chapman Eren Fraser

# Expert consultation & review

Alan Langworthy
Graham Davies
Karrina Nolan, Director Original
Power
Scott Hamilton, Director H4CO &
Panel Member, Australian - German
Energy Transition Hub

# Funding partners

NR Peace and Justice Fund
Lenko Family Foundation
Melliodora Fund (Sub-fund of the
Australian Communities Foundation)
The Pace Foundation
The Hamer Family Fund
The Mullum Trust
Olsvik

# **Publications**

# Rethinking Cement in Australian Roadways Vision

Commissioned by Transurban

### BZE Lead Author

Dr Marita Berndt

Cement production generates more CO2 than any other manufacturing process, at 8% of the world's total. Despite this huge impact, cement-related emissions receive little attention, often seen as "too hard".

In 2017, BZE showed how Australia could lead the world in tackling this growing emissions source via our report Rethinking Cement. The report proposed a world-first pathway for eliminating emissions from our national cement sector and was recognised in our award as the Best International Energy and Environment Think Tank from the 2018 Prospect Think Tank Awards.

Transurban is an Australian infrastructure company and one of the world's largest toll-road operators, with 17 major roads in Australia and North America. Transurban has set itself a corporate emissions reduction target of 52% by 2030 and to meet this goal Transurban is focused on its most significant source of embodied emissions: cement.

Following our work in the Rethinking Cement report, in 2018 Transurban commissioned BZE to produce a roadmap to employ low-carbon cement in their operations. BZE commissioned cement experts Dr Marita Berndt and Dr James Aldred to produce this groundbreaking and transformative research. Our Transurban Cement Report is another example of BZE's work having real world impact driving down emissions.



# Submission

# **Submission to National Hydrogen Strategy**

Renewable Hydrogen: an enormous opportunity for Australia (March 2019)

Hydrogen has been getting a lot of attention recently, touted as a solution to everything from green steel to cleaning up gas networks. How can we make sure we're making the most of hydrogen's decarbonising potential without providing a cover to fossil gas companies?

In recognition of Australia's natural advantages in the production of hydrogen, the National Hydrogen Strategy is being drafted to support the development of a domestic industry.

"

Renewable hydrogen is a big opportunity for Australia, but beware the fossil-fuel industry co-opting "clean" hydrogen to further delay climate action.

Submissions to strategies, inquiries and consultation processes are another way BZE translates our research into real world impact.

The position outlined in BZE's submission has been adopted by several national ENGOs.



# Initiatives progressed

# **Zero Carbon Communities Investment Reference Group**

# Project Leads Imogen Jubb & Nicki Colls

# Reference Group Members

Donna Luckman (Chair)

Christian Keel

Marilyn Cretias

Jeremy Burke

Daryl Brooke

Phil Vernon

Kate Nicollazo

Darren Dawson

Fran MacDonald

Holly Dillabough

Chris Weir

Sonya Williams

Natalie Bucknell

# Working Group from GCG

William Chen

Anna Ruddell

Carrie Shao

Henry Ho

Samantha Tirtajaya

Zachariah Ahmad

Candice Chen

Steven Lam

Nimaashawn Nimalachandran

Cindy Wei

### Researchers

Hasitha Jayatilake

Hamish Cruden

Rachel Armstead

Raman McCaskill

Giselle Perez

Azain Raban

Kedar Deshmukh

Cindi Li

Christian Keel

Angus Keck

BZE's Investment Reference Group is working towards developing models which facilitate investment in community projects.

Our Investment Reference Group is ably supported by a working group made up of talented final-year student interns from The Global Consulting Group (GCG).

GCG interns created a 'pre-feasibility checklist' that helps groups determine which renewable energy projects are worth pursuing in their communities.

"The ZCC investment reference group has been really successful to date. It has brought extremely useful connections and insight into the bigger picture that, as investors, we just wouldn't normally see. We have challenged our thinking and gained a deeper understanding of the issues community energy projects faces. It has been great to be involved with and I think we can continue to fast track progress to zero emissions and great investments for communities around Australia."

"

Jeremy Burke Impact Investment group

## **GCG** says:

# 66

Working on a project that has a tangible benefit was highly rewarding. As climate change is a social issue of significant importance, the ability to help drive Australian communities towards the goal of zero emissions provided an experience that our university studies couldn't match.

Working with BZE was a highly enjoyable experience, as we were able to develop consulting experience in tandem with an impactful solution for communities. The process of gathering information was immensely insightful, as we were granted access to a plethora of resources comprised of BZE's research and related connections.

We would definitely recommend this experience to others as we loved working on such a meaningful project which will positively impact communities and beyond.

# **Snapshot website**

 In partnership with Ironbark, Lord Mayor's Charitable Foundation, Sustainability Victoria and Renew Sustainability

Communities and the councils that represent them have a proud history of leading climate action. In recent years, BZE has supported these communities in striving for and achieving ambitious local abatement. Continuing this work, BZE and our partners at Ironbark Sustainability have developed Snapshot, a website to help communities know where they're starting from.

Snapshot is the first national tool providing community wide greenhouse gas profiles for every council across Australia. It offers a 'snapshot' of local emissions data, ensuring communities are equipped with the information they need to continue to drive change.

The tool is currently in Beta testing mode at

https://snapshotclimate.com.au/

# -- Collie at the Crossroads

# Renewable south west Western Australia research team

- Project Lead
   Lachlan Rule
- Volunteer researchers

Jan Wisniewski Matt Cohen Omar Ali Achille Victor

Collie, a town in south west
Western Australia, is home to the
state's three remaining coal power
stations and its only coal mine.
As more renewables have entered
WA's electricity network, these coal
plants are struggling to keep up.

At BZE, we believe tackling climate change should pay social dividends. We want to see coal communities come out on the other side of the transition to cleaner energy as thriving, sustainable towns, confident of their future. To this end, in 2018/19 we scoped and started research on a transition strategy for Collie. Collie at the Crossroads will show how a rapid

renewable energy transition and clean industry can more than replace jobs lost in the town's failing coal industry.

WA is the only state lacking both an emissions reduction target and a renewable energy target. Collie at the Crossroads aims to break through this policy impasse by clarifying and emphasising that addressing climate change can be a powerful job creation strategy.

In 2018/19 we undertook significant stakeholder engagement activity, including two stints in WA for meetings and briefings with key decision makers. Working with unions and locals in Collie has been the central focus of our engagement.

"

I appreciate that I have had the chance to work on a meaningful project. I hope that I have made valuable contributions in this regard. I truly hope for other opportunities in the future as I am keen to remain involved and support BZE with its endeavours.

,,,

Achille Victor
Volunteer researcher



Volunteering at BZE was an incredibly enriching experience, and one that was radically different to what I had studied at uni (computer science). The best part about the role was the feeling of fulfilment and satisfaction, as it was easy to see the tangible impacts that BZE was having on reducing Australia's carbon footprint. Not to mention the great culture at the organisation, which always made the workday a tonne of fun.



Matt Cohen Volunteer researcher

# **Zero Carbon Factory Project**

### **Zero Carbon Factory team**

- Project Lead Heidi Lee
- Volunteer contributors

Dr. S Lakshmi Yerramilli Chris Grose

The Zero Carbon Factory project brings our Electrifying Industry report to life. Through case studies and knowledge sharing we are working to bring stakeholders together to build Australia's first electrified manufacturing plant.

While researching Electrifying Industry, our volunteer research team found a lack of knowledge across Australia about existing technology that can reduce manufacturing emissions. The Zero Carbon Factory project is designed to accelerate our national learning curve through establishing a first case study, where learnings can be shared across the sector.



As a research volunteer with BZE I am passionate about contributing to its zero-carbon emissions project for developing and providing climate solutions. The work involves looking at current and future practices in energy consumption of manufacturing in various sectors world over. It has been challenging and enjoyable working on the BZE project contributing through my skills and experience in Applied Sciences, Industrial Chemistry and Environmental Science. At the same time, I get an opportunity to learn in this project. I feel I am a proud part of BZE vision of achievable and affordable zero carbon emissions.



#### Dr Lakshmi Yerramilli

Volunteer researcher

Activities in the 2018/19 fiscal year include scoping the project, developing information products, and undertaking information briefings with stakeholders.

# Best International Energy Think Tank

BZE are proud to have received the Best International Energy and Energy Think Tank 2018 award from Prospect Magazine in recognition for work undertaken on our 2017 Rethinking Cement report. UK's Prospect Magazine has run these awards annually since 2001 to recognise the important and influential work carried out by think tanks around the world.

In their assessment, the judges noted that the Rethinking Cement report was "innovative, focused and extremely well written" and referred to BZE as "a think tank from Australia who did a great job looking at what sounds like a narrow field, but finding enormous importance in there".

# Events

# **Electrifying Industry Summit**



September 13, 2018 Melbourne

https://www.electrifyingindustry.org.au/

#### Presenters

Vanessa Petrie

CEO. Bevond Zero Emissions

Michael Lord

Head of Research

Beyond Zero Emissions

Kay Wennagel

Beyond Zero Emissions

Michael Staindl

Beyond Zero Emissions

Adrian Boden

Executive Officer, South East Melbourne

Manufacturers Alliance

Alan Pears AM

Australian Alliance for Energy Productivity

**Austin Phillips** 

SEA Electric

**David Hiley** 

Wattever

Dr Kendra Wusiluk

Monash University

**Edmund Boland** 

**ANCA CNC Machines** 

John Griffiths

City of Melbourne

Karla Peaglis

Manager Sector Development **Energy Efficiency Council** 

**Marilyne Crestias** 

Renewable Energy Insights

**Matthew Linden** 

Flow Power

Peter Hansford

**DELWP** 

**Phil Vernon** 

Australian Ethical

Richard Simpson

Furnace Engineering

Ryan Wavish

CEO, Marchment Hill Consulting

**Scott Bocskay** 

Sustainable Melbourne

Scott Hamilton

Renewable Energy Insights

Simon Corbell

Victorian Renewable Energy Advocate

Stan Krpan

CEO, Sustainability Victoria

**Tennant Reed** 

Australian Industry Group

Timothy Hoben,

Monash University

**Toby Roxburgh** 

Electromotiv - EV Fleets

Will Mosely

Raygen

The Electrifying Industry report was officially launched at Beyond Zero Emissions' Electrifying Industry Summit on September 13. 2018 held at the Australian Synchrotron in Clayton in partnership with the Victorian Government (Sustainability Victoria and Department of Environment, Land, Water and Planning), Moreland Energy Foundation, GLP Renewables and the South East Melbourne Manufacturers Alliance.

The event brought together experts in manufacturing, heat processes and renewable energy technology to address the question: "How can renewable energy support south east Melbourne manufacturers to be a vibrant, growing powerhouse in the Victorian economy?"



# **Electrifying Industry Seminar**



February 26, 2019 (Adelaide)

### Presenters

Vanessa Petrie (BZE)

Michael Lord (BZE)

Margaret Hender (CEDAMIA)

Vladislav Dunis (The Solar Project)

Matthew Johnson (1414 Degrees)

# **Electrifying Industry Newcastle Launch**



November 29, 2018

### Presenters

Em. Prof. Tim Roberts, University of

Newcastle

Dr John Shiel, BZE Newcastle

Bradley Anderson

David Hoffman

Daniel Lazarus

Liz Hutton

Frank Sammut

Michael Lord

# **Discussion Group** topics & guest presenters

BZE Discussion Groups are open to everyone and connect participants in Melbourne with leading climate solution thinkers and people dedicated to a zero emissions Australia. They represent a great opportunity to exchange information and ideas to encourage the urgent transformation of Australia into a zero-carbon economy.

#### **Presentation**

by Liz Fletcher, Flow Power

Flow Power is a wholesale electricity retailer that gives businesses flexible pricing, demand response, reliability of supply, solar Power Purchase Agreements (PPAs) and minimises the need for new infrastructure. Liz Fletcher presented on Flow Power's advanced energy technology that connects the wholesale market to give data and signals that result in real cost savings for business energy consumers.

# Solar thermal airconditioning

Electricity prices continue to rise. There are two potential options to counter this: renewable energy or reducing demand. This seminar discussed the options for reducing energy consumption, with a focus on SolXEnergy, a company that has patented technology that can reduce energy consumption by up to 60 per cent on most types of commercial refrigeration and HVAC.

### **Presentation by**

Elisa de Wit, Partner at Norton Rose Fulbright and Director of Beyond Zero Emissions

Elisa presented on the recent carbon risk disclosure and legal opinion, and discussed the implications of recent court cases.

# **Presentation by**

Donna Luckman, CEO of Renew

Donna Luckman, CEO of Renew (formerly ATA), presented on her advocacy work behind COAG's recent commitment to lift energy ratings for new homes to 6.5 or 7 stars, and further policy changes Renew is pushing for new and existing homes.

### **Presentations by BZE**

Vanessa Petrie, Michael Lord, Lachlan Rule, Nicki Colls, Madeline Townsend, Bob Hale The Beyond Zero Emissions team presented on the various initiatives underway to accelerate Australia's move to a zero carbon status this year.

# BZE Science and Technology radio show

www.3cr.org.au/beyondzeroscience

Friday 8:30am to 9:00am

🆖 Volu

Volunteer team

Michael Staindl Erin Jones

Kay Wennegal Natalie Bucknell

In 2018 we continued to bring the work of leading experts to our listeners.

A special highlight was our Electrifying Industry focus, where we took a deep-dive into renewable manufacturing solutions with experts. We heard from Liz Fletcher, and how renewable Power Purchase Agreements are cutting costs for industry. John Jutsen, Chair of the Australian Alliance for Energy Productivity talked about how electrical technologies can drive productivity. And Tim Hoban shared how Monash Uni is building a zero emissions campus.

In June, we travelled to Darwin to cover the launch of The 10 Gigawatt Vision.

Kay and Nat test drove the Ionia, and shared their experience with listeners. An the team continued to bring the latest development in electric vehicles to air with leading experts including Scott Nargar of Hyundai and Bruce Gaston of the Australian EV Association.

# BZE Community radio show

www.3cr.org.au/beyondzero





#### Volunteer team

Andy Britt

Erin Jones

Kurt Johnson

Vivien Langford

A special thanks to Roger Vize who retired from the team but was a big part of the show's success, reaching thousands each Monday and through the podcasts.

The radio show has heard from a range of guests this year, including Robert Llewellyn on clean transport, Naomi Klein on the Green New Deal, Christine Milne on taking clean energy financing to Malaysia and Eytan Lenko on how the NT could export clean energy and not gas.

A highlight this year, we were at the launch (we are usually the only media at these events) of a brave project in Tathra for pumped hydro storage to move the town towards 100% renewable energy. Also at the launch, alongside BZE Radio, was a team from ABC's Four Corners. We continue to deliver in-depth coverage and the ABC's presence at this launch marked a new focus.

Since the "climate" election, we've noted a renewed vigour and creativity in community climate campaigns - whether to save Western Port from gas exploration, to prevent fracking in the NT, to rebel against extinction or to describe how fossil fuel fuelled climate disruption is affecting citizens in Kiribati. These groups, and others like them, create a palpable sense of movement forward and BZE Radio works hard to ensure the reverberations from these campaigns are felt far and wide.

It's not a simple journey, with issues ranging from rail workers hauling coal, MUA hoping to transition from offshore gas rigs to offshore wind jobs and young people worried sick about the future. But we are not afraid of complexity. The Beyond Zero Emissions Community radio show speaks to informed listeners like adults and aims to give them courage and voice as the nation makes a U-turn at the edge of the cliff and then takes a step forward.

# Our unique operating model

BZE's mission is to demonstrate how a zero emissions Australia is achievable and affordable now. We draw on the expertise of our volunteers to develop research, communicate outcomes and influence others.

#### >90% of our active contributors are volunteers

Our volunteers almost double the total hours contributed by staff

9.0% staff

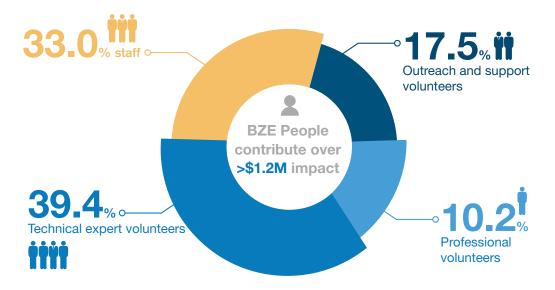
BZE People

91% Volunteers

We empower our volunteers in developing practical solutions and transition plans; policy recommendations and submissions; and community engagement.

Through engaging with the highest level of technical experts in their field to produce and champion our work, we are influencing the influencers of government, business and civil society.

At BZE, with every dollar we achieve a tenfold impact through working with our volunteers.



We develop positive solutions to give all Australians a vision of a future to "Say Yes" to.



# EYTAN LENKO, B.Eng (Hons), B.CSc

Chair, 2012-2016, 2019 Director, 2012-2019

Eytan Lenko is a technology entrepreneur and clean-energy transition advocate. He has an engineering background and has deep knowledge around the current state of our energy transition. He is passionate about the exceptional opportunities that we have to transform our economy in response to climate change.

Eytan also sits on the board of Australian Environmental Grantmakers Network, a member based organisation that aims to help members become more effective environmental grantmakers, and the Climate Mobilization, a US-based organisation that assists cities around America to rapidly transition to zero-emissions.



COLIN IRVING, M.Man, B.Eng, PMP

Treasurer, 2017-2019 Director, 2016-2019

Colin Irving is a regional manager with Schneider Electric, overseeing a multi-million dollar portfolio of energy management projects. He has more than 20 years of experience in business leadership, consultancy, product development and project delivery. He has led major programs for government, public and private organisations, both within Australia and internationally.

Colin started volunteering with Beyond Zero Emissions in 2013, and was elected a member of the Board of Directors in 2016. He assumed the role of Treasurer in late 2017 and was nominated in the 2018 Not-for-Profit Treasurers' Awards. He is a member of the Governance Committee and contributing editor of BZE reports.



DR ANNE K HELLSTEDT, PhD (Aerodynamics), B.Eng (Mech)(Hons)

**Director, 2018-19** 

Anne is a leading expert in sustainability, specialising in the built environment. She has experience on professional industry boards and committees as a member, deputy chair and chair. She is a recognised engineer and leader, as evidenced by being named Victorian Professional Engineer of the Year by Engineers Australia in 2012 and being invited to become a Fellow of Engineers Australia.

Anne is the executive director leading the creation of ANSTO's Innovation Precinct in Southern Sydney. She has extensive experience in driving sustainable outcomes, and has previously worked in environmental sustainable design for companies such as AECOM and Lendlease.



Chair 2016-2019

PHIL VERNON,
BEC, MCom, MBA, FAICD, FCA
Director, 2014-2019

Phil has extensive experience in financial services with a particular focus on sustainable finance. He was Managing Director of Australian Ethical Investment, Australia's leading ethical superannuation fund and investment manager and Group Executive, Corporate Trust of Perpetual Limited, one of Australia's leading investment managers.

He is also a Director of the Planet Ark Environmental Foundation and of Environmental Defenders Office Australia and serves on the Steering Committee of the Sustainable Finance Roadmap Initiative. Phil is a Fellow of the Australian Institute of Company Directors and of Chartered Accountants Australia and New Zealand.



TOM QUINN,
B. International Relations
Director, 2016-2019

Tom is Manager of Executive
Office and Stakeholder Strategy at
Sustainability Victoria. Tom was the
founder and inaugural CEO of the
Future Business Council, author
of The Next Boom: A surprise new
hope for Australia's economy, and
commissioned the Noel Hutley SC
legal opinion on fiduciary duties and
climate change.

Tom grew up in rural Victoria and has a background in public policy, research and business innovation with particular focuses on climate change, technology and sustainability. He regularly appears in the media to discuss the rapid transitions underway in our economy and how we can seize the opportunities the changes represent.



ELISA DE WIT, BA; LLB (Masters)

Director, 2018-2019

Elisa de Wit is a partner in the Melbourne office of international legal practice Norton Rose Fulbright and heads the firm's Climate Change and Sustainability practice. She has more than 28 years of legal experience and has practised in three Australian jurisdictions and the UK. Elisa is considered one of Australia's preeminent climate change lawyers and advises clients on policy, regulation and compliance issues.

Elisa is a graduate of AICD and is a Director of the Carbon Market Institute, Australian Legal Sector Alliance and the Grampians Wimmera Mallee Water Corporation.



DAVID HOOD AM, HonFIEAust CPEng

Director, 2013-2019

Professor David Hood AM is a civil and environmental engineer with more than 30 years experience across major civil and military projects, professional development in emerging economies, senior management in both the public and private sectors and in education.

In late 2014 David Founded the Long Future Foundation, a registered charity that aims to ensure a long future for all life on Earth. David is a Queensland Councillor of the Australian Conservation Foundation (ACF).



Christina McFail, Secretary, 2016-2019 Director, 2015-2019

Christina is a strategist, social innovator, and entrepreneur. As a reformed strategic marketer, she now consults for and founds innovative projects that achieve results for climate action and conservation, human rights and freedoms, and political change. Strategy, for good.

Christina brings a wealth of experience from the private sector, non-profits, social movements, and political arena.

Christina has been a board member at BZE since 2015, and Secretary of the BZE board from 2016.



Vanessa Petrie, BE (Env) Hons, ME

#### CEO, 2016-2019

Vanessa has extensive experience across policy, strategy and infrastructure planning, specialising in sustainability. Well known for being a collaborator, Vanessa brings people, knowledge and ideas together to spark the change we need in a zero carbon world.

Vanessa joined BZE in early 2017, and in that time has partnered with her team to successfully launch Rethinking Cement, Electrifying Industry, The 10 Gigawatt Vision, Zero Carbon Communities Guide and the 2018 Australian Local Government Climate Review.

Prior to joining BZE, Vanessa worked in diverse roles across local and State Government.

Vanessa is a Board Director of the Goulburn Valley Waste and Resource Recovery Group, and a committee member of Climate Emergency Darebin and Keon Park Kindergarten. She has a Bachelor of Environmental Engineering from RMIT and a Master of Environment from Melbourne University.

Launching Electrifying Industry at our one day summit, with over 200 people from energy and manufacturing, was my highlight. It's exciting to see people energised by BZE's huge ambition and vision.



Michael Lord, MSc, LLB (Hons)
Head of Research, July 2018-May 2019

"

Prospect magazine recognising Rethinking Cement by naming BZE Best International Climate Think Tank was my highlight for the year.

"



Imogen Jubb, Grad Dip SciComm, Grad Dip Ed, **BSc (Hons)** 

Zero Carbon Communities National Manager, July 2018-November 2019

"

It has been such a privilege to work with amazing people across Australia on our new Zero Carbon Communities Investment initiative, which will help overcome barriers to community investment in zero carbon projects. Seeing projects happen on the ground will be the ultimate reward for our efforts in this space.

"



Nicki Colls, BE (Env) BA

**Zero Carbon Communities National Manager** (Parental leave position), November 2018-June 2019

Bringing together different stakeholders and sectors to break down barriers for community groups





Lachlan Rule, MPPM, BA, MEIA

Repower our Regions Project Lead, November 2018-June 2019

My highlight was propping up the bar at the Collie Crown Hotel chatting with coal workers about the town's future. Getting to visit Collie and the Hunter has been a real privilege and is a really important part of producing work which reflects the aspirations and needs of local communities.



Heidi Lee, MArch, BArch, MAICD

Industry Investment Lead, October 2018-June 2019 "

I loved working with manufacturing businesses to overcome the barriers to electrifying their processes and converting to zero carbon factories. Participating in ARENA's A-Lab 2019 was fantastic, I worked with a multidisciplinary team to prototype a business case for a renewable powered steel factory.

"



Madeline Townsend, Dip. Bus (Gov); FICDA

Volunteer Coordinator, July 2018-June 2019

"

It's been fantastic to see such a wide range of volunteer engagement, from research to delivering radio shows, discussion groups and community outreach, as well as the support we receive from graphic designers, copywriters and editors to help deliver high quality and well-designed reports and documents. Thanks to all our volunteers who so generously donate their skills, experience and time to BZE.

"



**Bob Hale** 

Office Manager, July 2018-June 2019

"

I don't get directly involved with the research and publications, it has been an honour working behind the scenes, enabling others to produce such important and significant work.

"

2018

Achille Victor Afrina Samain Alan Langworthy Alan Pears Am Alan Strickland Alec Roberts Alex Hoeper Amy Stephens Anders Jensen Andre Cook Andrew Gelbart Andrew Gunner Andy Britt Angus Keck Anna Ruddell Anne K Hellstedt Anthony Voyage Artemis Siourthas Azadeh

Keshavarzmohammadian

Azain Raban
Barb Kneebone
Ben Saxon
Brad Schultz
Brent Cassidy
Brian Chapman
Brian Tehan
Calum Sutherland
Cameron Martin
Candace Nascimento

Candice Chen
Cara Dowe
Carrie Shao
Charmaine Sevil

Chris Grose
Chris Weir
Christian Keel
Christine Rogers
Cindi Li
Cindy Wei
Claudia Cepeda
Colin Irving

Darren Dawson
Daryl Brooke
David Hood
Donna Luckman
Dr John Shiel (Exec
Committee)
Dylan Mcconnell
Elisa De Wit
Ellen Lu
Elliot Gingold
Eren Fraser
Erin Jones
Eytan Lenko
Fran Macdonald

Francis Conroy
Freya James
Gemma Weedall
George Parry
Gill Caunce
Giselle Perez
Glen Fernandez
Graham Davies
Hamish Cruden
Harmandeep Singh
Hasitha Jayatilake

Heather Smith

Heather Stevens
Henry Ho
Himanshu Haridas
Holly Dillabough
Hugh Venables
Ivander Lay
James Petchey
Jan Wisniewski
Jane Carter
Jennifer Maverick
Jennifer Thomas
Jeremy Burke
Jeremy Osborne

Jessalynn Bailey

Jingheng Liang John Gare John Hayes John Shiel Julia Lee Julius Keller Jyoti Sharma Karrina Nolan Kate Nicollazo Kath Teagle Kathleen Wild Kay Wennegal Kedar Deshmukh Kerry Walker Khadija Mansur-Williams Kira Rundell Kurt Johnson

Lakshmi Yerramilli

Leigh Martin

Linda Harper

Lucas Rutten Maddy John Margaret Henderson Marilyn Cretias Martin Powell Mathew Smith Matt Cohen Matt Stubbs Megan Hill Melanie Merz Melanie Tasker Melissa Farrelly Michael Staindl Michelle Belcher Michelle Brownlie Miwa Tominaga Mortaza Azfali Nasim Pour Natalie Bucknell Nigel Stace Nimaashawn Nimalachandran Omar Ali Patrick Blain Pete Ambrosie Peter Caunce Phil Vernon Philip Harrington Priyank Shriyan

**Prof Tim Roberts** 

Rachel Armstead

Raman Mccaskill

Rasika Wijekoon

Mudiyanselage

**Rob Rowe** Roger Vize Samantha Tirtajaya Sandy Su Sara Eitemai Sarah Johnson Scott Hamilton Sean Frost Shar Mollov Sonya Williams Stephanie Allison Stephen Tansing Steven Lam Sue O'mahoney Sylvia Tawfik Thess Reeders Thomas Behrendt Thomas Harvey Thomas Yu Tilak Sunwar Tim Forcey Tom Burr Ton Quinn

Vicki Brooke

William Chen

Vivien Langford



#### **Alan Pears**

Alan is an engineer, academic and consultant with extensive background in energy efficiency, renewable energy, climate policy and sustainable design. He is regularly called on to review and input to state and national policy decisions in my various roles. Alan's work has been rewarded by a number of awards from the Energy Efficiency Council and Australian Alliance to Save Energy as well as wider recognition through a Centenary Medal and becoming a Member of the Order of Australia.



I have been volunteering with BZE since around 2010, and have contributed expertise to a number of projects, including their Zero Carbon Australia Buildings Plan, Energy Freedom Home and their recent Electrifying Industry report. It has been a pleasure to be a part of BZE's diverse community of highly regarded engineers, economists and policy advisors. Volunteering at BZE is a very positive experience because I can see the direct link between BZE research and meaningful policy change. I have been impressed by BZE's ability to attract expert, talented and enthusiastic volunteers to work on their projects. This reflects well on both the quality of their work and their focus on creating a friendly culture in which people feel valued and learn from eachother. When I lectured in Sustainable Energy at RMIT, I would regularly send graduates to volunteer at BZE and it is rewarding to see these people continuing to donate time at BZE as they progress through their careers.

BZE has been a leader in tackling difficult emissions sectors and delivering well-researched, positive, solutions-focussed messages that can galvanise communities around making necessary change. It has played an important role in building capacity in communities and professional circles.



#### **Afrina Samain**

Afrina studied her Master of Environmental Engineering at the University of Melbourne, focusing on sustainability and energy topics. She heard about the opportunity to volunteer with BZE's Electrifying Industry project through the university's careers website. According to Afrina, 'it instantly intrigued me as I wanted to progress my career in the energy industry!'

Afrina was part of a team of volunteers from around Australia and across the world that helped deliver Electrifying Industry. Electrifying Industry is a world-first report, showing how manufacturers can generate heat differently through the smart use of renewable electricity, and demonstrating that Australian can eliminate up to 8% of national emissions.

Looking back on what she enjoyed most about volunteering, Afrina nominates the support offered by BZE staff, as well as the organisation's culture, and the chance to build networks, industry contacts and knowledge while undertaking research tasks. Taking part in BZE's regular discussion group in Melbourne also expanded Afrina's networks and connections. Afrina is now working as an Energy Auditor/Consulting Engineer, focusing on a project undertaking energy assessments for the primary producers across regional Victoria, and says that her BZE volunteer experience helped 'in every possible way' while she was seeking employment in the sector.



# **Maddy John and Cara Dowe Monash University**

Interning has been an incredible opportunity to speak with those at the forefront of defining and creating the concepts of a zero-carbon Australia. BZE has allowed us to contact people involved in the plans to qualitatively and quantitatively determine and discuss the changes in the national conversation around energy consumption and decarbonising Australia.

Working alongside the likes of Heidi, Vanessa, Madeleine, Sandy, Nikki and Lachlan has allowed us to be amongst like minded individuals who are not only hardworking but forward thinking, sustainable minded people.

From the keep cups around the office to the sustainable plans for the future, we look forward to the connections we will make for the future as we strive for a carbonless Australia.

There is always a slight gap between the theoretical knowledge we gain at university and its application in the real world. Even in this short amount of time, we've both learned a lot from everyone at BZE and from this opportunity to apply and test our own skills. It's been great working at an organisation that has created a real difference in Australia and getting to document its impact. It's given us both an appreciation for all the many ways that change can be created.



**Adam Jones GBCA's Future Green Leader of the Year, 2019** 

66

The Rethinking Cement project was a world first report included 5 strategies that focused on reducing our reliance on portland cement. When I heard about the report, I immediately wanted to take part, but knew I'd find it difficult to contribute effectively by working weekends or after work. So I asked my employer, engineering consultancy WSP, to allow me to spend 2 days per week on the report in return for recognition as a contributer. WSP agreed, believing this work contributes to the company's core values.

I was the lead researcher for Strategy 4 - Using Less, which looked at opportunities in efficient structural design and use of timber.

This research project opened many new doors for me, mainly the contacts I made at WoodSolutions in researching the sustainability credentials of timber. Following this project, WoodSolutions hired me and I am now part of the Mid-rise Advisory Program, which aims to convert concrete into sustainably sourced timber buildings.

Working with Beyond Zero Emissions on Rethinking Cement was a key project that led to me winning the Green Building Council of Australia's Future Green Leader of the Year Award.

# Our supporters and funders

### **Current project partners**

### The 10 Gigawatt Vision: How renewable energy can power jobs and investment in the NT

- Environment Centre NT
- Global Strategic Communications Council (Support)
- Climate Media Centre (Support)
- NR Peace and Justice Fund

Lenko Family Fund

Melliodora Fund

(Sub-fund of theAustralian Communities Foundation)

The Pace Foundation

The Hamer Family Fund

The Mullum Trust

Olsvik

Many monthly and occasional donors

### Collie at the crossroads: Planning a future without coal

- Koorabup Trust
- NR Peace and Justice Fund Lenko Family Fund The Pace Foundation The Hamer Family Fund The Mullum Trust Many monthly occasional donors

### Low-Carbon Cement initiatives

- Transurban
- Low-carbon cement reference group (leading engineers and researchers)

# Zero Carbon Factory

- Lord Mayors Charitable Foundation (Funding partner)
- ARENA (Project delivery partner)

### Zero Carbon Communities

The ZCC program is funded by:

- Equity Trustees
- Lord Mayor's Charitable Foundation.

All of these groups work partner with us on delivery of Zero Carbon Communities projects that are mutually beneficial including development of reports and tools, communications and engagement and joint events:

 ICLEI, Climate Council, Renew, Ironbark, Transition Towns, Sustainability Victoria,
 Department of Environment NSW, C4CE,
 CANA, Global Consulting Group and
 Australian Energy Foundation
 Zero Carbon Investment Group • Members include:

Ethical Investment Australia, Impact Investment Group, Renew, Bank Australia, Bendigo Bank, Victorian Greenhouse Alliances, Community Power Hub, Climate Council and Clean Energy Nillumbik.

# Hunter Valley Zero Carbon energy, industry and exports scoping research

- Transition Hub (Newcastle University)
- BZE Newcastle Chapter
- Steering committee and partners currently being engaged

## Electrifying Industry

Hamer Family Fund
 Lenko Family Foundation
 Lord Mayor's Charitable Foundation
 Mullum Trust
 NR Peace and Justice Fund
 The Pace Foundation
 Pixel Seed
 Robin Friday
 Many monthly
 occasional donors

# **Lord Mayor's Charitable Foundation**

"

As a key funder of several BZE projects, LMCF has been very pleased with the significant outcomes delivered and will continue to support BZE as demand for its services continue to grow. The dedicated team, influential Board and its network of world-class researchers have achieved amazing results with few resources. Demonstrating the technological and economic feasibility of the clean energy transition is critical – and BZE has proven itself time and time again.

LMCF is a lead funding partner for BZE's recent Electrifying Industry report and current Zero Carbon Factory initiative, showing how fuel-switching to electrical technologies - powered by renewables - can solve the national gas crisis at the same time as eliminating

carbon emissions from all manufacturing businesses in Australia. We also supported BZE to partner with three communities in Victoria to guide a transition to 100% renewable energy within ten years. BZE teamed up with Nillumbik, Baw Baw and Benalla to develop baseline emissions reports and transition plans to achieve 100% RE. BZE also wrote the Zero Carbon Communities Guide to outline steps showing how any community can achieve a shift to 100% renewable energy and beyond.

BZE are an effective and engaging organisation to support. They are making significant progress towards achieving a zero carbon Australia and we strongly encourage others to join us in amplifying their impact.

"

#### **Daniel Pediaditis**

Senior Program Manager Environment and Sustainability

# **Equity Trustees**



The Robert Hicks Foundation, managed by Equity Trustees is proud to have provide funding to BZE for their Zero Carbon Communities work over the last four years, with 18 months of further committed funding. We have been delighted with outcomes achieved to date.

BZE is in a unique position to mobillise individuals, organisations, and whole communities towards making national transformative change. Research and advocacy by BZE has been influential at the local, state and national level. BZE has leveraged volunteers to provide energy, transport, land use and industrial solutions and opportunities for over ten years.

Investing in BZE's national volunteer program will unlock expertise, passion, capacity and capability to determine the most pragmatice and effective pathways forward to a safe climate future. This work will have national implications and improve the social, environmental and economic opportunities for Australia for decades to come.

"

**Briar Stevens** 

**Grant Program Manager** 

# Financial Report & Disclosures

# General disclosures

Beyond Zero Emissions is currently in a dispute relating to a copyright matter with Fairfax, and we are in receipt of legal advice on this matter.

# Financial statements

BEYOND ZERO EMISSIONS INC. ABN 48 554 925 975

**FINANCIAL STATEMENTS** 

FOR THE YEAR ENDED 30 JUNE 2019

### FINANCIAL STATEMENTS

# FOR THE YEAR ENDED 30 JUNE 2019

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# STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 JUNE 2019

	Note	2019 \$	2018 \$
INCOME		•	*
Donations		305,373	304,657
Sponsorship		19,268	-
Grants		206,593	90,500
Memberships/Subscriptions		1,130	2,080
Consulting Fees		141,583	8,762
EFI Joining Fee & Commission		-	308
Interest Received		3,267	2,445
Other Revenue		16,211	5,415
		693,425	414,167
EXPENDITURE			
Accounting Fees		7,556	-
Auditor's Remuneration		1,460	1,501
Bad Debts Written Off		-	20
Bank Charges & Merchant Fees		290	330
Board Costs		-	612
Communication Development		822	-
Compliance Costs		198	604
Corporate Governance		2,395	-
Depreciation		4,861	1,845
Equipment < \$1000		698	908
Equipment - non capital		-	140
Event Expenses		20,556	20,403
Fundraising expenses		1,114	-
Holiday Pay- Provision		(4,958)	12,009
Insurance		62	6,134
I.T. Expenses		10,903	2,782
Lonng service leave provision		2,479	-
Payroll Costs		1,767	-
Postage and Stationary		384	358
Printing Costs		5,998	7,496
Project Expenses		41,298	9,141
Radio Fees		4,550	6,217
Recuitment		839	770
Rent		18,823	12,140
Research		32,628	8,560
Salaries & Wages		395,286	258,501

# STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 JUNE 2019

No	ote 2019 \$	2018 \$
EXPENDITURE (cont.)	•	•
Staff training & Welfare	1,204	239
Subscriptions	1,110	1,085
Sundry Expenses	7,817	245
Superannuation Contributions	36,804	23,811
Telephone	982	708
Travelling Expenses	4,234	6,131
	602,160	382,690
Surplus/(deficit) for the year before income tax	91,265	31,477
Retained Profits - Beginning of Year	-	330,574
Total comprehensive income after income tax for the period	91,265	362,051

# STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2018

	Note	2019 \$	2018 \$
CURRENT ASSETS			•
Cash and cash equivalents	2	494,909	390,401
Trade and other receivables	3	1,001	2
TOTAL CURRENT ASSETS		495,910	390,403
NON-CURRENT ASSETS			
Plant and equipment	4 .		4,861
TOTAL NON-CURRENT ASSETS		-	4,861
TOTAL ASSETS		495,910	395,264
CURRENT LIABILITIES			
Trade and other payables	5	23,882	12,022
Provisions	6 .	18,712	21,191
TOTAL CURRENT LIABILITIES		42,594	33,213
TOTAL LIABILITIES		42,594	33,213
NET ASSETS		453,316	362,051
MEMBERS' FUNDS			
Retained surplus		453,316	362,051
TOTAL MEMBERS' FUNDS		453,316	362,051

# STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 30 JUNE 2019

	Reserves	Retained	Total
	\$	Surplus \$	\$
Balance at 1 July 2017		330,574	330,574
Surplus for the year	-	31,477	31,477
Other comprehensive income			
Balance at 30 June 2018		362,051	362,051
Surplus for the year	-	91,265	91,265
Other comprehensive income			
Balance at 30 June 2019		453,316	453,316

# STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2019

	Note	2019 \$	2018 \$
CASH FLOWS FROM OPERATING ACTIVITIES			
Receipts from Customers Payments to Suppliers and Employees Interest received		689,159 (589,916) 3,267	416,337 (379,823) 2,445
Net cash provided by/(used in) operating activities	8	102,510	38,959
CASH FLOW INFLOW FROM OPERATING ACTIVITIES			
Net increase/(decrease) in cash held		102,510	38,959
Cash at the beginning of the year		390,401	351,442
Cash at the end of the year	2	492,911	390,401

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2019

#### Note 1: Statement of significant accounting policies (cont.)

#### f. Revenue

Revenue is brought to account when received and to the extent that it relates to the subsequent period it is disclosed as a liability.

#### Grant income

Grant income received, other than for specific purposes, is brought to account over the period to which the grant relates.

#### Deferred income

Unspent grant income received in relation to specific projects and events is not brought to account as revenue in the current year but deferred as a liability in the financial statements until spent for the purpose received.

#### Interest revenue

Interest revenue is recognised using the effective interest rate method, which for floating rate financial assets is the rate inherent in the instrument.

#### **Donations**

Donation income is recognised when the entity obtains control over the funds which is generally at the time of receipt.

All revenue is stated net of the amount of goods and services tax (GST).

#### g. Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with other receivables or payables in the assets and liabilities statement.

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2019

30 JOINE 2013		
	2019	2018
	\$	\$
Note 2: Cash and Cash Equivalents		
Petty cash	46	526
Cash at bank	494,863	389,875
	494,909	390,401
Note 3: Trade and Other Receivables		
Trade Debtors	1,001	2
	1,001	2
Note 4: Plant and Equipment		
Office Furniture & Equipment	31,408	31,408
Less accumulated depreciation	(31,408)	(26,547)
	-	4,861
Note 5: Trade and other payables		
Current		
Sundry Creditors	7,456	5,925
Trade Creditors	15,496	64
Provision for GST	930	6,033
	23,882	12,022
Note 6: Provisions		
Current		
Provision for Holiday Pay	16,233	21,191
Provision for Long Service Leave	2,479	-
	18,712	21,191
Note 7: Reconciliation of cash flow from operations with		
surplus from ordinary activities after income tax		
Surplus after income tax	91,265	31,477
Non-real flours in complex		
Non-cash flows in surplus	4.064	1.045
- Depreciation	4,861	1,845
Changes in assets and liabilities		
Changes in assets and liabilities:	(000)	(4.011)
- (Increase)/decrease in trade and other receivables	(999)	(4,911)
<ul> <li>Increase/(decrease) in trade and other payables</li> <li>Increase/(decrease) in provisions</li> </ul>	11,860	(1,461)
Net cash provided by operating activities	(2,479) 104,508	12,009 38,959
net cash provided by operating activities	104,300	30,333

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2019

	2019	2018
	\$	\$
Note 12: Operating lease commitments		
Operating leases contracted for but not recognised in the financial statements		
Payable - minimum lease payments:		
- no later than 12 months	18,014	18,823
- between 12 months and five years	-	-
- greater than five years		
	18,014	18,823

The Association has a property lease commitment, it is a non-cancellable operating lease with a one-year term, with rent payable monthly in advance. The lease does not have an option to renew and expires 30 June 2020.

# NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2019

	2019	2018
	\$	\$
Note 12: Operating lease commitments		
Operating leases contracted for but not recognised in the financial statements		
Payable - minimum lease payments:		
- no later than 12 months	18,014	18,823
- between 12 months and five years	-	-
- greater than five years		-
	18,014	18,823

The Association has a property lease commitment, it is a non-cancellable operating lease with a one-year term, with rent payable monthly in advance. The lease does not have an option to renew and expires 30 June 2020.

# STATEMENT BY MEMBERS OF THE COMMITTEE FOR THE YEAR ENDED 30 JUNE 2019

The Committee has determined that the Association is not a reporting entity and that this special purpose report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

In the opinion of the committee of Beyond Zero Emissions Inc.:

- a) the financial statements and notes of Beyond Zero Emissions Inc. are in accordance with the Associations Incorporation Reform Act (Vic) 2012 and the Australian Charities and Not-for-profits Commission Act 2012, including:
  - giving a true and fair view of its financial position as at 30 June 2019 and of its performance for the financial year ended on that date; and
  - ii. complying with the Australian Charities and Not-for-profits Commission Regulation 2013; and
- b) there are reasonable grounds to believe that Beyond Zero Emissions Inc. will be able to pay its debts as and when they become due and payable.

This statement is made in accordance with a resolution of the Committee and is signed for and on behalf of the Committee by:

Chairperson Treasurer

Dated: 2/11/2019 Dated: 1/11/2019

# AUDITOR'S INDEPENDENCE DECLARATION UNDER SECTION 60-40 OF THE AUSTRALIAN CHARITIES AND NOT-FOR-PROFITS COMMISSION ACT 2012

In accordance with the requirements of section 60-40 of the Australian Charities and Not-for-profits Commission Act 2012, as auditor for the audit of Beyond Zero Emissions Inc. for the year ended 30 June 2019, I declare that, to the best of my knowledge and belief, there have been:

- no contraventions of the auditor independence requirements of the Australian Charities and Not-for-profits
   Commission Act 2012 in relation to the audit; and
- ii. no contraventions of any applicable code of professional conduct in relation to the audit.

Sean Denham

Dated: 11th November 2019

Sean Denham & Associates Suite 1, 707 Mt Alexander Road Moonee Ponds VIC 3039

# INDEPENDENT AUDIT REPORT TO THE MEMBERS OF BEYOND ZERO EMISSIONS INC.

#### Opinion

I have audited the accompanying financial report, of Beyond Zero Emissions Inc., which comprises the statement of financial position as at 30 June 2019, statement of changes in equity, statement of cash flows and the statement of profit or loss and other comprehensive income for the year then ended, notes comprising a summary of significant accounting policies and the certification by members of the committee.

In my opinion, the accompanying financial report of Beyond Zero Emissions Inc. has been prepared in accordance with Div 60 of the *Australian Charities and Not-for-profits Commission Act 2012 (ACNC Act)* including:

- a) giving a true and fair view of the Association's financial position as at 30 June 2019 and of its financial performance for the year then ended; and
- b) complies with Australian Accounting Standards to the extent described in Note 1 to the financial statements, and the requirements of the Associations Incorporation Reform Act 2012 (Vic) and Div 60 of the Australian Charities and Not-for-profits Commission Regulation 2013.

#### Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of my report. I am independent of the association in accordance with the Associations Incorporation Reform Act 2012 (Vic) and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to my audit of the financial report in Australia. I have also fulfilled my other ethical responsibilities in accordance with the Code.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

#### Emphasis of Matter - Basis of Accounting

We draw attention to Note 1 to the financial report, which describes the basis of accounting. The financial report has been prepared for the purpose of fulfilling the association's reporting responsibilities under the Associations Incorporation Reform Act 2012 (Vic) and the Australian Charities and Not-for-profits Commission Act 2012. As a result, the financial report may not be suitable for another purpose. My opinion is not modified in respect of this matter.

#### Responsibility of the Committee for the Financial Report

The committee of the association are responsible for the preparation of the financial report that gives a true and fair view and have determined that the basis of preparation described in Note 1 of the financial report is appropriate to meet the requirements of the Associations Incorporation Reform Act 2012 (Vic) and the Australian Charities and Not-for-profits Commission Act 2012 and the needs of the members. The committee's responsibility also includes such internal control as the committee determine is necessary to enable the preparation of a financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the committee are responsible for assessing the association's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the committee either intend to liquidate the association or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibility for the Audit of the Financial Report

My objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial report.

As part of an audit in accordance with Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the association's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the committee.
- Conclude on the appropriateness of responsible entities' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the association's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions that may cause the to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Sean Denham

Dated: MA NOVEMBER 2019
Suite 1, 707 Mt Alexander Road
Moonee Ponds VIC 3039

### BEYOND ZERO EMISSIONS INC.

# CERTIFICATE BY MEMBER OF THE COMMITTEE

(name)	, of	(address)	, certify that:
a. I attended the annual general meeting o	of the association held on	(date)	-
b. The financial statements for the year en at its annual general meeting.	ded 30 June 2019 were su	bmitted to the members of the	he association
Committee member			
Dated:			