



# **Annual Review 2022 – 2023**

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## 1.0 SHORT AND LONG-TERM OBJECTIVES AND STRATEGY FOR ACHIEVING OBJECTIVES

ZEB's **purpose** is to accelerate Byron Shire's transition to net zero emissions by continuously engaging our local community to increase their uptake of emission reduction activities.

The **rationale** for ZEB is to successfully champion, educate, inform and inspire action aimed toward zero emissions for the Byron Shire and beyond.

Our current stated **objectives** are to engage the community in emissions reduction activities.

1	<b>Transport</b>	<b>To inspire and increase the uptake of electric vehicles in the Shire, and to encourage fuel efficiency, and use of car share platforms.</b>
2	<b>Land Use</b>	<b>Increase and encourage native revegetation and/or regenerative agriculture. Develop and promote Good Fire project.</b>
		Foster, promote, monitor and record the impact of any land use changes in the Byron Shire leading to carbon sequestration.
3	<b>Buildings &amp; Energy</b>	<b>Promote the uptake of sustainable and flood-resilient buildings, retrofitting for energy security</b>
		Conduct a series of small events, such as 'Open Homes' days, to illustrate best practice towards 'Rebuilding Flood Resilient' homes.
4	<b>Emissions Tracking</b>	<b>Promote emissions tracking for the Byron Shire.</b>
		Consolidate all data and communicate outcomes toward zero emissions in Byron Shire.

## 2.0 PRINCIPAL ACTIVITIES DURING 2023

### Land Use - the 'Good Fire' project grants Stages 1 and 2.

Operating under a **\$25,000 grant** from the **InGrained Foundation**, **Stage 1** of our Good Fire project ran from 2022 and was completed in June 2023.

**Stage 1** comprised the following:

- Fire Interval Status Mapping of the Koonyum Range and Broken Head.
- Development of a peer-reviewed Good Fire Restoration Plan template.
- Delivery of a Good Fire Restoration Plan on private property.
- Delivery of a Good Fire Workshop and demonstration burn on the above property.

Numerous additional public engagement and educational activities were undertaken during this period including a forum at the Regeneration Festival, The Echo print media, Green drinks presentation and direct engagement with numerous landholders of fire-dependent vegetation.



In November 2023, ZEB was successful in obtaining a subsequent **\$24,00 grant** from the ***Foundation for Rural and Regional Renewal*** for **Stage 2** of the Good Fire project.

**Stage 2:**

- Engage landholders of open forests and produce 3 Good Fire Restoration plans
- Deliver one Good Fire Workshop on a property with a Good Fire Restoration plan

It is anticipated there will be additional public engagement and educational opportunities throughout the life of this grant.

**Other ZEB activities in the 2022-2023 financial year:**

- Organised and delivered an electric vehicle expo in Sept 2022, with thousands of attendees, displaying a range of new and privately owned EVs, holding a Q&A session from EV experts and owners, and with stalls provided by the local council, NSW Office of Energy & Climate, and local businesses.
- Produced a series of Ecological Restoration and CO2 Drawdown case studies and educational pieces (text and video).
- Contributed to Sustainable House Day, in the new flood resilience category, producing a series of educational videos featuring homeowners and tradespeople who have rebuilt or designed with flood adaptation in mind, in order to share their experience and knowledge.
- A short film was finalised about retrofitting a home for energy independence and offers advice on improving a home's thermal performance, which highlights the importance of rebuilding flood-damaged homes with resilient alternatives and provides resources for homeowners looking to make their homes more energy-efficient and resilient to flooding.
- Provided a regular newsletter to our nearly 1000 subscribers, with regular blogs on a range of topics relating to reducing carbon emissions and climate change. <https://zerobyron.org/news/>
- Participated in community action groups, with representation at the **Sustain Energy Group, Northern Rivers**. This working group is a network of Councils, regional peak bodies, and community renewable energy groups, facilitating the transition to renewable energy in the Northern Rivers of NSW. ZEB is also pleased to be a "community member" on Byron Shire Council's **Climate Change and Resource Recovery Advisory Committee**. Its purpose is to "assist Council in the development, implementation and review of relevant sustainability, resource recovery and climate change mitigation and adaptation plans, policies and projects."
- ZEB proposed in the 21<sup>st</sup> September meeting of the Climate Change and Resource Recovery Advisory Committee Meeting, an option to retrofit Bangalow 10 Heritage House as an eco-house demonstration site. An energy and water efficiency audit of Bangalow Heritage House was conducted by ZEB director Seb Crangle, to understand baseline energy and water usage and identify actions to improve energy and water consumption at the facility. These include (but are not limited to) replacing the gas hot waters system with a heat pump, water tanks, insulation, and induction cooktop. This project is currently on hold as the Council reassesses the future use of the building.

A summary of our timeline of activities can be found on our website here:

<https://zerobyron.org/about/our-history/>



### 3.0 Communications

ZEB has continued to disseminate informative videos to its YouTube channel (<https://www.youtube.com/@zeroemissionsbyron>), with three main playlists: **Building and Energy Sector**, **Transport Sector**, and **Land Use Sector**, including a series on **C02 Drawdown** and another on **Flood Resilience**.



CO2 Drawdown Series - Episode 6 - Rotational Grazing - Joey Ruigrok - ...



Sustainable House Day - Mullumbimby 19th March 2023



CO2 Drawdown Series - Episode 5 - Native Regeneration on Mevlana...



CO2 Drawdown Series - Living Agro Ecology with Bunya Halasz of...

ZEB's communication team and staff produced blog posts covering local, regional and global news and initiatives on emissions reduction and drawdown topics.



A series for the 'Decade of Ecological Restoration' was produced interviewing local carbon drawdown

champions and having them explain their understanding of how they are sequestering carbon. E.g., [Living agroecology with Bunya Halasz](#).

These blog articles were posted to the ZEB website (<https://zerobyron.org/news/>) and then compiled into ZEBs monthly newsletter, disseminated via ZEB's email.

Several articles relating to achieving zero Emissions were also published by members of ZEB's board in local publications, including the *Byron Wave* (<https://www.thebyronwave.com.au/magazine>) and *Bangalow Herald* (<https://www.bangalowherald.com.au/index.php/magazine/>).

**environment**

## What can I do to save energy?

by Sebastian Crangle

Pictured above: Sebastian Crangle hard at work.

**Did you know that:**

- the average Australian household contributes 11 tonnes of carbon dioxide from energy-use activities, including electricity and fuel for vehicles?
- over 8 million homes in Australia are more than 30 years old, built before building energy standards? Even homes built since the 1990s often have inadequate thermal performance and inefficient appliances, meaning they are hot in summer, cold in winter, and expensive to run.

window coverings and draught proofing, through to more expensive technological solutions - like hot water systems that use a quarter of the energy.

Solar PV is an obvious solution, if you own your home and it's suitable, but the bulk of the recommendations I provide focus on reducing the need for energy in the first place. So that even if you do have solar you have more energy spare for other future purposes, like charging an electric vehicle or a home battery.

**The beauty of a low-energy home are all the other flow on benefits**

footprint are reduced, and if you want to be, you can be 'carbon zero'.

The improvements you make to the energy efficiency of your home can be small and incremental, or dramatic and widespread, depending on your capacity and inclination. There are plenty of resources available to support you in your energy efficiency journey.

Here's a few great online resources: [yourhome.gov.au](http://yourhome.gov.au), [zerobyron.org/save-energy](http://zerobyron.org/save-energy) and [homeenergyadvisor.com.au/resources](http://homeenergyadvisor.com.au/resources). The important thing is not to be overwhelmed, to do what you can, and to get support along the way.

(Byron Wave, March 2023)

## 4.0 DIRECTORS and QUALIFICATIONS

**Dr Anne B Stuart (Chair)** has worked with state and federal government agencies and government-owned corporations, in environmental policy development, legislation and stakeholder engagement. Currently an Adjunct Research Fellow, lecturer and tutor in Humanities, Languages and Social Science at Griffith University.

**Sebastian Crangle (Secretary)** is a sustainability consultant specializing in home energy efficiency and renewable energy. An accredited assessor with Residential Efficiency Scorecard, a national program supporting households to lower their energy consumption and carbon footprint, by implementing practical, customised solutions to their homes. He also serves on the National Advisory Panel and

Quality Advisory Panel of the Scorecard program, delivered by the Department of Environment, Land, Water and Planning (Victorian State Government).

**Beth Wilson (Treasurer)** is a highly qualified BAS Agent with 23 years' experience in the finance industry. As the owner of a successful bookkeeping practice, she has provided expert financial services to a range of local businesses, including NGOs and NFPs. Beth's proven track record in compliance, accuracy, and her strategic decision-making ensures our organisation's fiscal health.

**Wren McLean**, has 1<sup>st</sup> Class Honours in Conservation Management, and has a strong sense of responsibility to protect the health of our planet for future generations of all species and has committed her working life to the environmental sector. As a conservation professional, her experience covers varied projects in the fields of protected area management, biodiversity conservation, environmental education and ecological restoration and has led her to establish strong project management and collaboration skills.

**Dr Michelle Olivier** is an advocate for sustainability, localisation and wellbeing, with a 35-year career dedicated to this pursuit. She has wide experience in and knowledge of sustainability. She has wide experience working in the fields of sustainability, education and conservation projects including working in universities, TAFE, business, and local and state government, non-government sectors, in private consultancy and advisory roles. Michelle was mentored in her early career by a Narungga, Kurna and Ngarrindjeri elder and worked with the Indigenous community in South Australia. She has been in the Shire for 15 years and is slowly regenerating her property outside Mullumbimby.

**Dr Andy Baker** is a highly respected fire and vegetation ecologist with 25 years of experience across the NSW North Coast and South East Queensland. Since founding Wildsite Ecological Services in 1997, Andy has established himself as a leading regional expert in fire ecology and the restoration of fire-dependent Eucalypt forests and heathlands, and is a lecturer at Southern Cross University.

**Simon Richardson** served as a Councillor in Byron Shire for 13 years, including 9 years as the Mayor of Byron Shire. He initiated various sustainability and emission reduction projects across both the Council organisation and wider Shire. Since retiring from office in 2021, Simon has established, Launcher, a consultancy based on helping make great ideas happen. He also speaks across the country on being safe on social media, and in case his workload was insufficient, is co-founder and Director of Bewilderness, an immersive, interactive arts activation company.

## 5.0 BOARD MEETINGS AND DIRECTORS' ATTENDANCE 2022/2023

Date	Board members in attendance
<b>AGM</b> 24 November 2021	Christobel Munson (Chair), Katrina Shields, Robert Goodwill, Anne Stuart, Muriel Watt, Jennifer Grainger,
09 May 2022	Anne Stuart, Sebastian Crangle, Bridie Smidt, Wren McLean
14 May 2023	Anne Stuart (Chair), Robert Goodwill, Muriel Watt, Ron Huban (observer)
13 November 2023	Anne Stuart (Chair), Wren Mclean, Andy Baker, apologies Sebastian Crangle and Simon Richardson.

