

Zero Emissions Byron – Power to the People



November 2017

Vicki Brooke Chair Zero Emissions Byron Limited

Why zero emissions?

- Address climate change impacts and help create a renewable energy society with economic, social and environmental benefits.
- Our vision is to achieve net zero emissions in Byron Shire by 2025.
- Holistic approach covers Energy, Buildings, Transport, Land Use, Waste
- Pilot project



Our mission

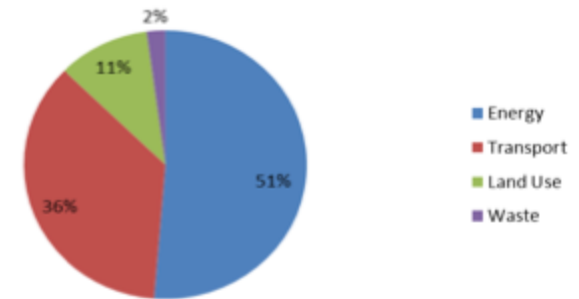
- Zero Emissions Byron's mission is to implement zero emissions strategies by inspiring and working with the community.
- We work with other communities around Australia to help them achieve similar goals.



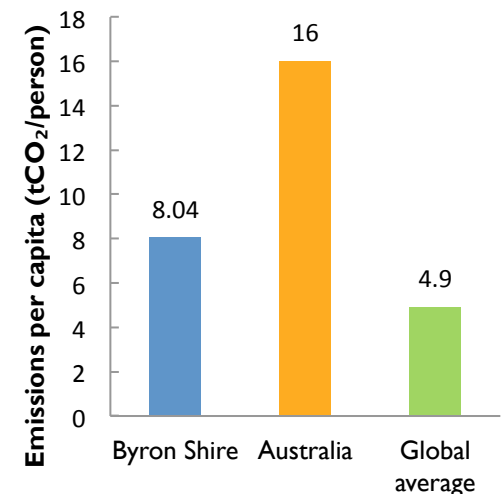
2016 Inventory of Greenhouse Gas Emissions

- ◆ 5 sectors of **ENERGY, BUILDINGS, WASTE, LAND USE, TRANSPORT** assessed
- ◆ Total annual greenhouse gas emissions in Byron Shire = 263,199 tonnes CO₂e, over half from energy sector (buildings)
- ◆ Equivalent to ~8 tonnes CO₂e per person
Australian emissions 16 tonnes, global 4 tonnes
- ◆ Published as the Greenhouse Gas Emissions Baseline Report in June 2016, ground-breaking work at local government level.

Greenhouse Gas Emissions for Byron Shire



Emissions per capita



Goals of Zero Emissions Byron

- Zero Emissions Byron will monitor and report emissions reductions in the 5 sectors and help facilitate new, sustainable projects to meet our emissions reduction targets.
- Key action is to develop a greenhouse gas abatement plan and to engage the community and stakeholders in the implementation and planning of emissions reduction.
- Ongoing work to ensure our baseline data is updated and continues to meet international reporting standards such as GPC and Compact of Mayors protocols.
- Provide leadership and models for regional transition, work with existing initiatives and stakeholders.

Opportunities in Byron Shire

Social, economic and environmental benefits

- Economic diversification and job creation, cost savings
- Improved biodiversity, revegetation
- Clean air and water, healthier lifestyles
- Better building design, energy efficiency, zero waste



Energy and Buildings

Energy

- Community ownership of renewable energy in solar farms and rooftops. ITP Report indicates 30MW+ of solar farms.
- Energy efficiency education and individual calculators.

Buildings

- Retrofitting
- Sustainable design
- Buildings 'passport' trial, GIS mapping



Land Use

- Holistic land management
- Replanting for biodiversity and land remediation
- Strategies for management of methane in cattle
- Carbon sequestration
- Minimise use of chemicals



Transport

- Electric vehicles and EV charge stations
- Better public transport, powered by electric buses and trains (solar) or conversion of petrol/diesel engines
- Better connections, important for town planning
- More cycling infrastructure
- Car free areas
- Encourage walking, cycling



Waste

- Organics management and utilisation of waste for zero waste to landfill.
- Methane capture and storage leading to bio energy for electricity
- Community education programs, partnering with existing projects



Community Strategy

Community involved from the start. Volunteer groups set up to drive the development of research and strategy.

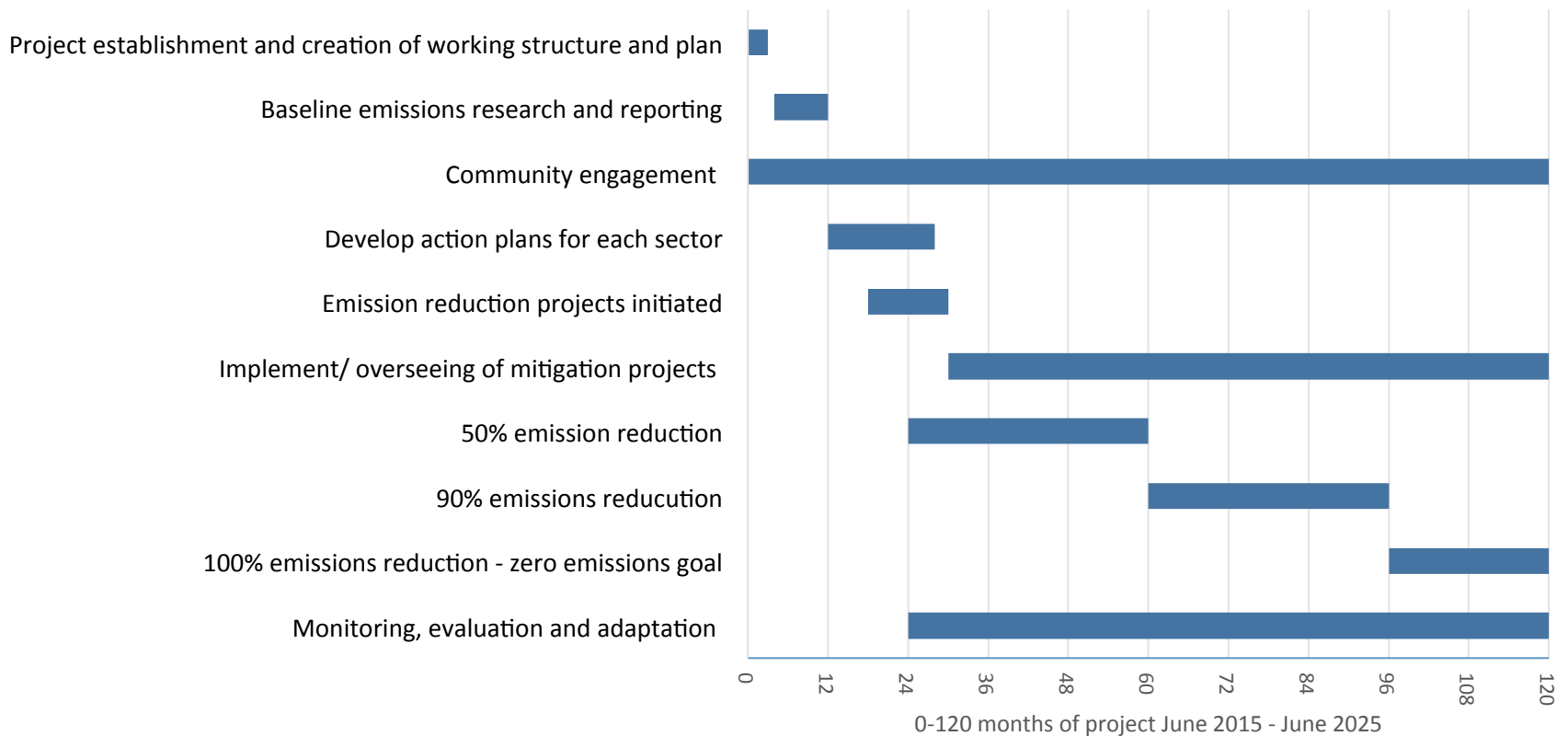
Community education and engagement projects eg. Zero Emissions Schools project, Repower Byron Shire.

Opportunity for **community empowerment** and decision making in how we evolve as a region.



Process and Strategy

Zero Emissions Byron Timeline of Key Project Phases



Current projects



Repower Byron Shire

- Street-by-street program in Byron Shire
- Joint project between Zero Emissions Byron, Community Owned Renewable Energy Mullumbimby (COREM) and Enova Community (local community-owned energy retailer).
- Households and streets sign up to take action to:
 - reduce energy consumption through energy efficiency measures
 - switch to renewable energy consumption by either installing solar or buying green power.

Current projects

Zero Emissions Schools Initiative

- Education platform and strategy for addressing climate change for Byron Shire High Schools
- Assess school emissions, undertake actions to reduce emissions across five sectors
- Engage the youth of the Byron Shire around mitigation strategies and empower them to deliver their own emissions reduction projects



Zero Emissions Byron structure

- Non-profit company limited by guarantee (no shareholders), registered charity, waiting for DGR endorsement as a tax deductible gift recipient
- Board of directors (7) from technical, financial, governance and community backgrounds, Byron Shire Council Mayor and General Manager *ex officio*
- Advisory Panel of experts in various fields
- Close links to Byron Shire Council, major stakeholders such as Enova Community, COREM, Byron Community College



ZERO EMISSIONS BYRON

Please feel free to contact us!

Email: zeroemissionsbyron@gmail.com

Website: zerobyron.com

Vicki Brooke

Chair

Zero Emissions Byron Limited

vjbrooke@tpg.com.au

Tel: 0425 243 860