

SUN-POWERED QUEENSLAND SUMMIT

COMMUNITIES FOR A CLEAN ENERGY FUTURE.

- Thursday 16 November 2017 - Griffith University EcoCentre -



SolarCitizens

Adj Professor David A Hood AM

HonFIEAust CPEng FENZ FISEAM MASCE

Chairman Long Future Foundation

Deputy Chairman, Beyond Zero Emissions

QLD Councillor, Australian Conservation Foundation

Al Gore Trained Climate Reality Leader

2012 National President, Engineers Australia

Earth Protector Trustee



SolarCitizens

**Acknowledgement
of
Traditional
Owners**

Acknowledgement

of

Traditional Custodians

In keeping with the spirit of Reconciliation, I acknowledge the Turrbal, Jagera/Yuggera, Kabi Kabi and Jinibara Peoples as the Traditional Custodians of the lands on which we meet.

On our behalf, I to pay respect to their elders – past, present and emerging – and acknowledge the important role Aboriginal and Torres Strait Islander people play in assisting the Engineering community to better understanding



Beyond Zero Emissions

Beyond Zero Emissions (BZE) is an award-winning Australian NGO and climate solutions think-tank, now in its 9th year of delivering outstanding research on solutions for a zero carbon economy, and beyond.

BZE co-authors the acclaimed *Zero Carbon Australia* series, is host on the Energy Freedom Alliance, and is facilitating Zero Emissions Communities across Australia.



***Zero
Carbon
Australia***



Australian Sustainable Energy

Zero Carbon Australia Stationary Energy Plan

- > A ten year roadmap for 100% renewable energy
- > Baseload energy supplied by renewable sources
- > Affordable at \$8 per household per week



BZE's Zero Carbon Australia Stationary Energy Plan

clearly showed that Australia could get off Coal fired electricity in ten years if politicians had the will, and had the guts to stare down the fossil fuel industry.

The total cost over ten years would be less than the ten year Defence Budget, and in the same vicinity as Federal spending on health, or on social services.



***Zero
Carbon
Australia***



Zero Carbon Australia

and much more in 2010.

Brisbane, 2010 - BCEC



A research
collaboration



Australian Sustainable Energy Zero Carbon Australia Stationary Energy Plan

- > A ten year roadmap for 100% renewable energy
- > Baseload energy supplied by renewable sources
- > Affordable at \$8 per household per week



This Plan is too expensive. QLD has plenty of cheap COAL!



“Rubbish
!”



BRISBANE
convention
& exhibition
CENTRE



WCEAM

World Congress on
Engineering Asset Management

NICS®

PRODUCTS

Application



PLC Series
Industrial Replacement
Inverters



100-AC
Switches



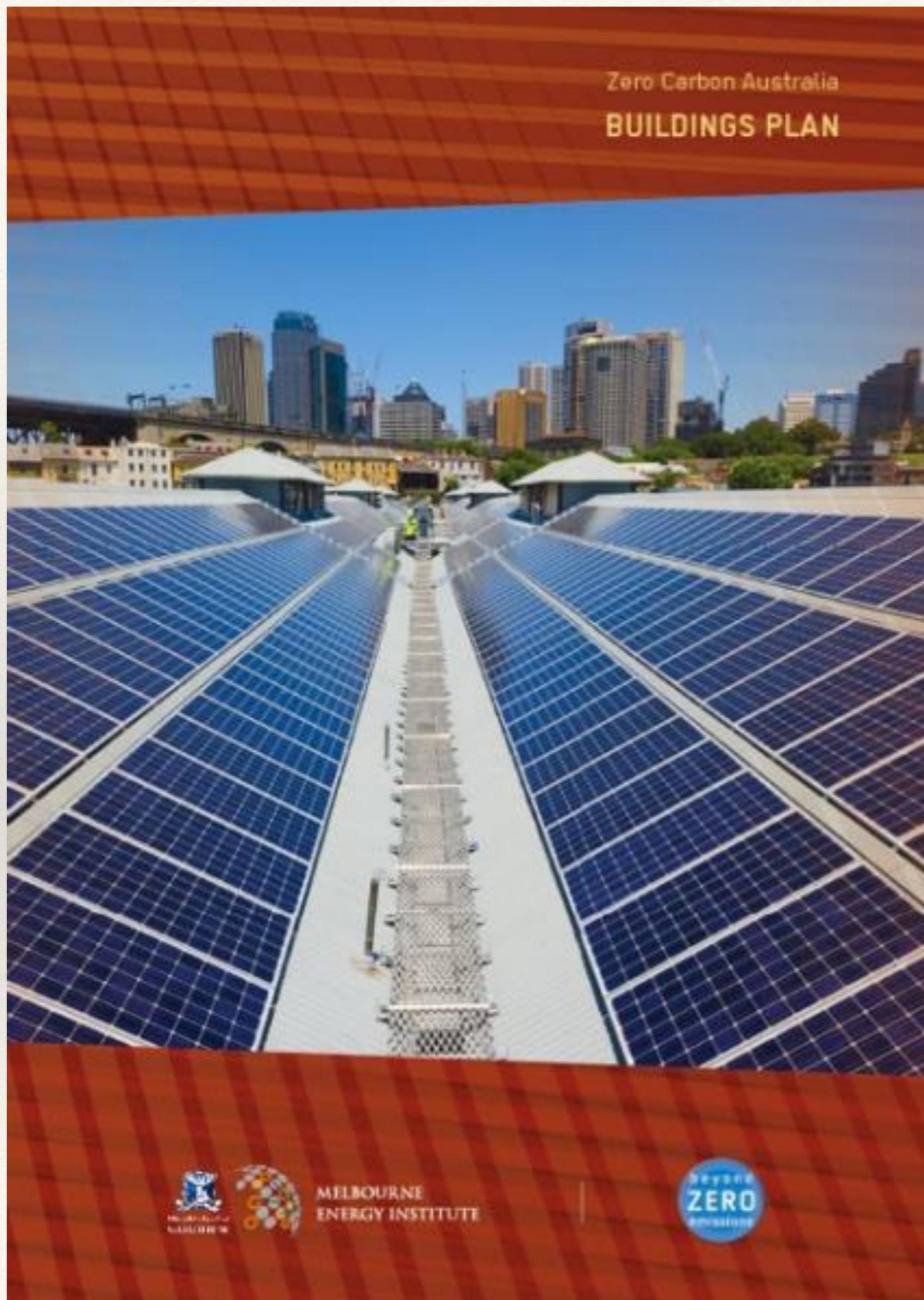
S Series
Inverters

Aussie Made



onics.com

DESIGNED IN AUSTRALIA

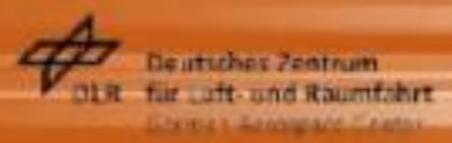


2012 - South Bank TAFE

**Brisbane Launch
of the
BZE Buildings Plan**

All electric buildings - NO GAS.

Zero Carbon Australia High Speed Rail

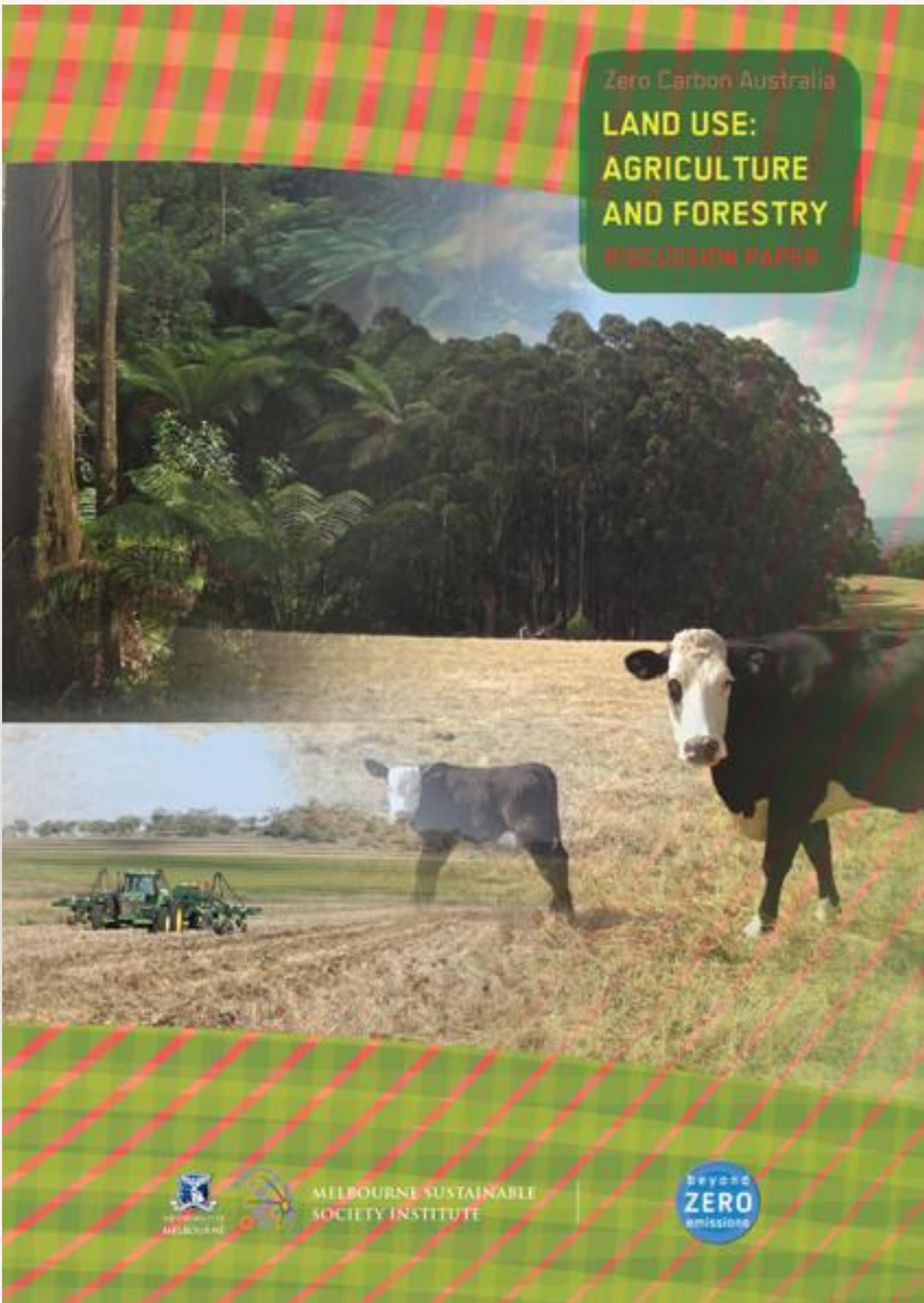


QUT 2014

High Speed Rail



BZE's High Speed rail Plan
Melbourne/Canberra. Sydney/Brisbane
\$30b less than the Australian Govt's proposal...



QUT - Dec 2014



BZE's Land Use

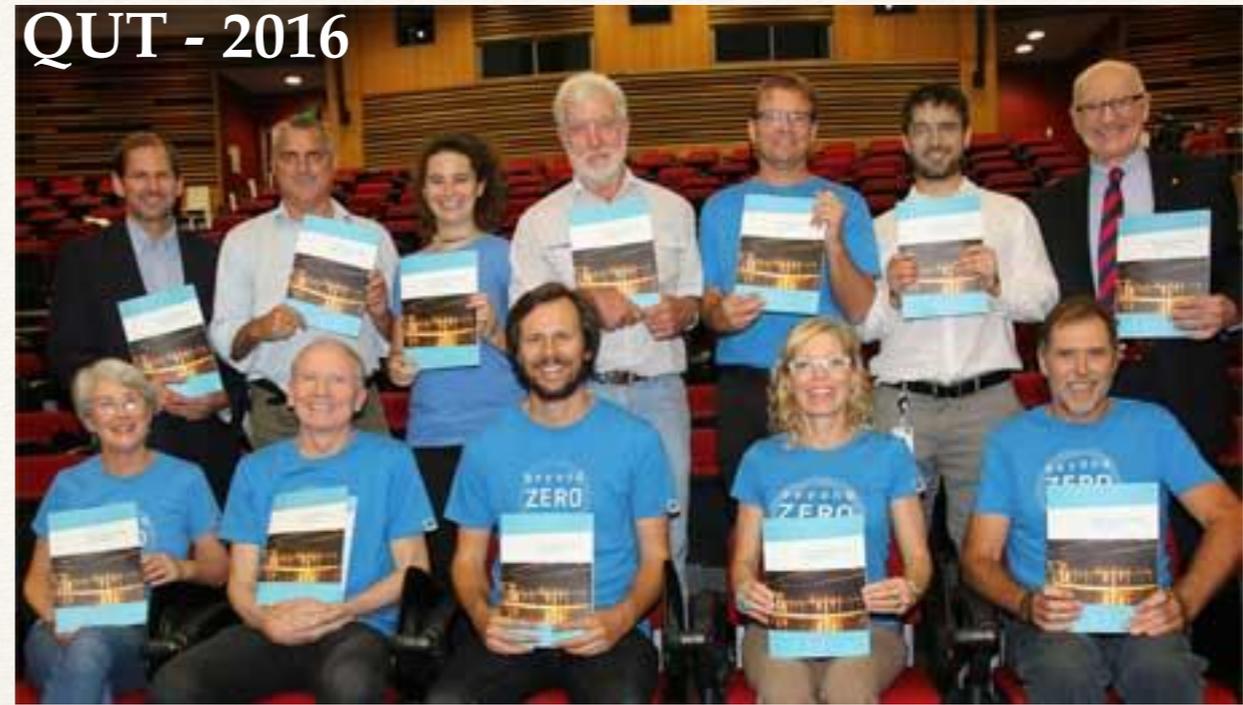
Discussion Paper



Zero Carbon Australia

Renewable Energy Superpower

QUT - 2016



Australia as a Renewable Energy *Superpower*



Zero Carbon Australia
Electric Vehicles

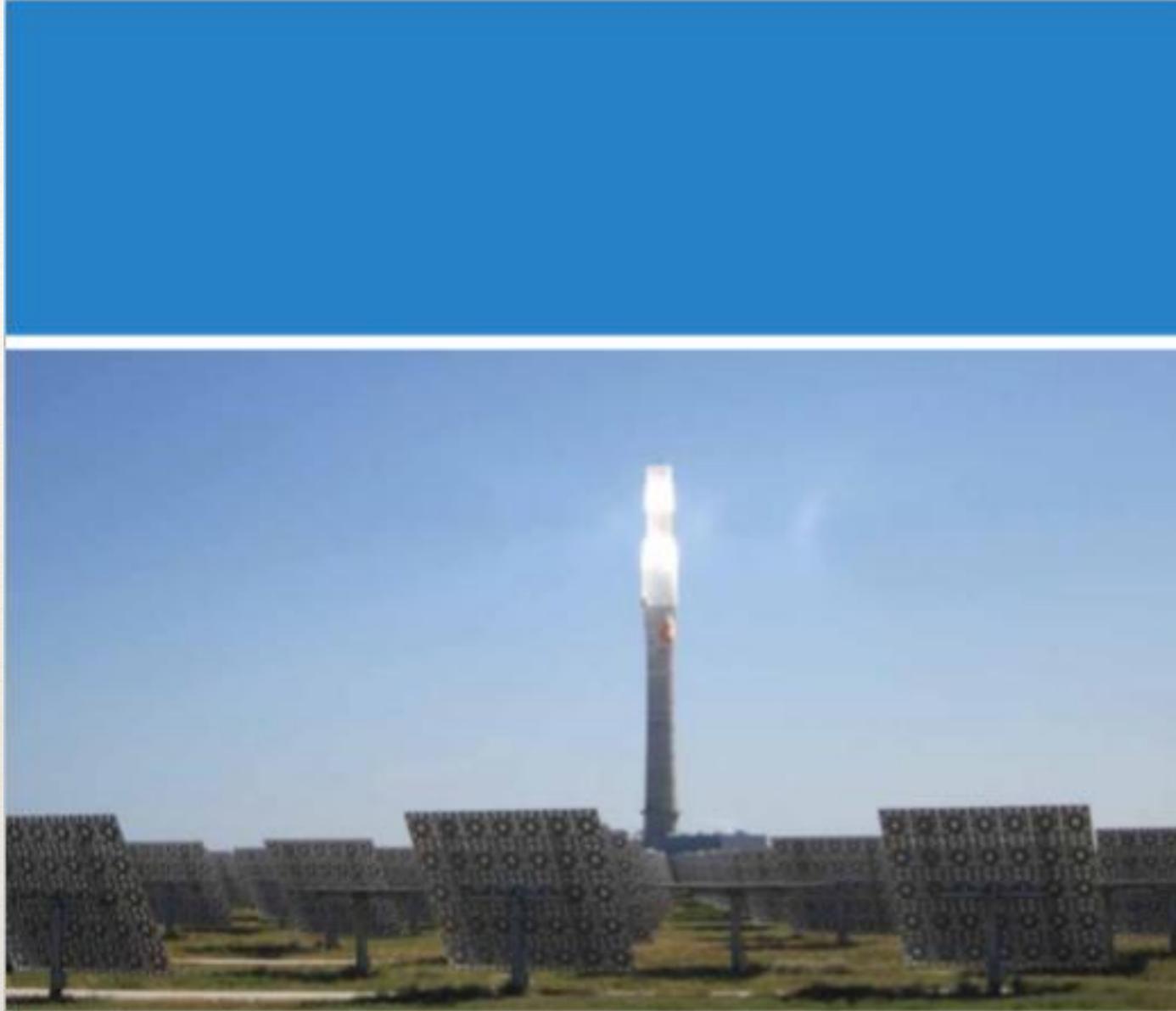


UQ - Aug 2016



**Brisbane Launch
of the
BZE Electric Vehicles Plan**





Repowering Port Augusta

A blueprint to replace Northern and Playford B coal power stations with renewable energy

- » 1800 jobs
- » Protect the health of the Port Augusta community
- » 5 million tonnes of CO2 saved each year
- » Lower and stable electricity prices
- » Energy security for South Australia



BZE's Incidental Research Papers

© NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Laggard to Leader

How Australia Can Lead the World to Zero Carbon Prosperity

- » Australia must stop using the promise of a global treaty that won't eventuate to duck responsibility for its ballooning coal and gas exports.
- » A moratorium on coal and gas expansion followed by a phasedown will drive a massive increase in global renewable energy investment.
- » Australia can lead the world to cheap, abundant renewable energy by deploying off-the-shelf, zero carbon technology that will grow Australia's prosperity.

Fossil economy

2012

HEALTH AND SOCIAL HARMS OF COAL MINING IN LOCAL COMMUNITIES

Spotlight on the Hunter Region



THE ENERGY-FREEDOM HOME

Lighting ■ Draught Proofing ■ Insulation
■ Windows ■ Appliances & Cooking
Heating & Cooling ■ Hot Water ■
Energy Monitoring & Control ■ Solar Power

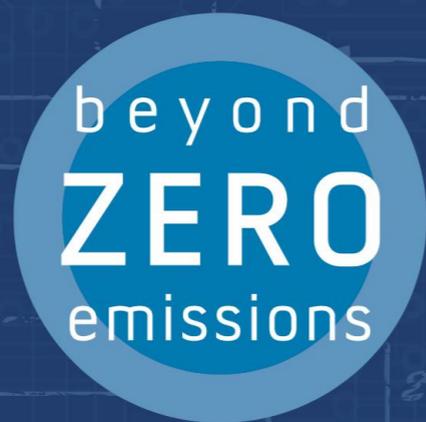
HOW TO WIPE OUT ELECTRICITY
AND GAS BILLS IN NINE STEPS

BEYOND ZERO EMISSIONS

**Energy freedom -
a comfortable,
high performance
home that costs
nothing to run.**

**Energy Freedom
protects you from rising
gas and electricity prices
and puts the power back
in your hands.**

**By combining simple
energy efficiency
measures with quality
electrical appliances and a
rooftop solar system, your
home can produce more
power than it uses.**



Zero Carbon Communities Guide

Zero Emissions - Achievable & Affordable Now

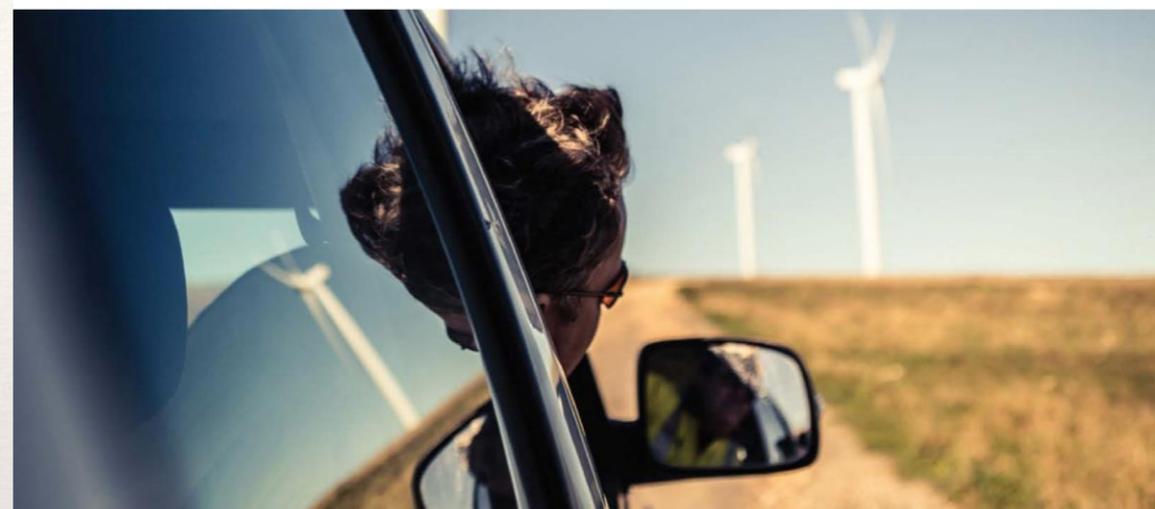


The Zero Carbon Communities Project

Adapting BZE's Zero Carbon Australia research to local communities

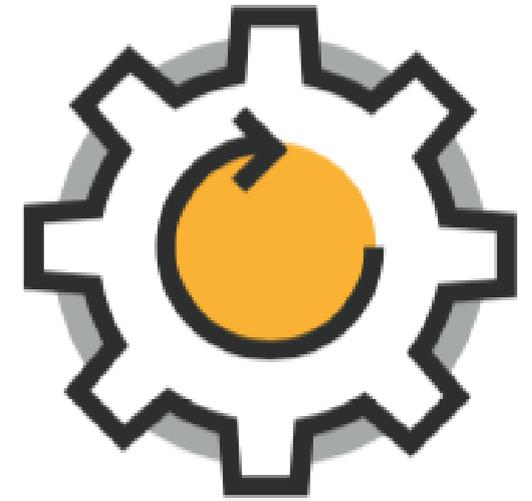
Looking at different sectors including;

- > Energy
- > Buildings
- > Land Use
- > Transport
- > Waste



BZE ranked in the top 10 of global think tanks to watch in 2016





TRANSITION

IS

INEVITABLE

THE HOMEGROWN POWER PLAN

How we can repower the country with renewable energy, reboot our failing electricity system and remove the roadblocks holding back the renewables boom.

GetUp!  SolarCitizens

REBOOT THE SYSTEM

Our electricity market is a shambles. It combines the worst aspects of multiple regimes in the one system, a system that is neither clean nor cheap, neither simple nor sophisticated, neither public and fair nor private and competitive.

REPOWER THE COUNTRY WITH RENEWABLE ENERGY

Australia is the sunniest continent on earth, and one of the windiest. In the race to repower the world with renewables, we've got an edge.

REMOVING THE ROADBLOCKS TO A RENEWABLES TRANSITION

It might seem obvious, but given the disproportionate influence of big fossil fuel companies over Australian politics, we need to spell it out: fossil fuels have no place in a 100% renewable future.

2009

The Queensland Renewable Energy Plan

Our state is rich in renewable energy resources—solar, geothermal, biomass, wind, hydro—and now we've created a raft of new actions and a broad policy platform to expand the sector and accelerate our economy towards a clean energy future.

Signed off by Premier Bligh

2017

**A solar future: powering
Queensland's renewable energy
industries**

The future of solar in QLD

One million rooftops

A fair price for solar

Queensland's statutory voltage limit review

Solar for public housing trial

Advancing Clean Energy Schools

Solar 150: large-scale solar investment

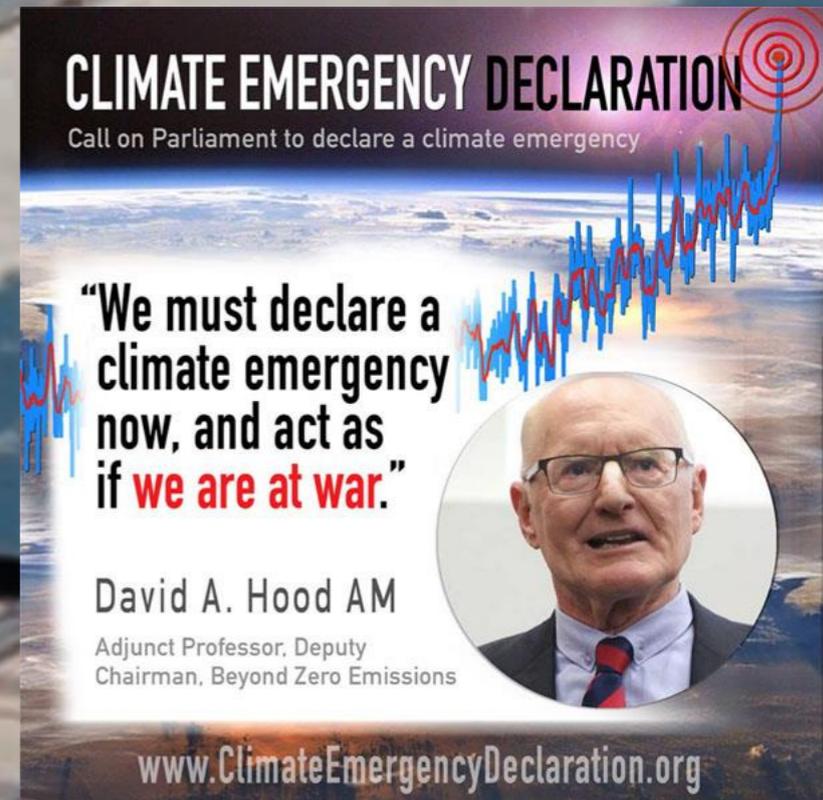


**#STOP
ADANI**

Ivanpah CSP - 375 Mw 24/7



NOW IS THE TIME FOR STRONG ACTION ON CLIMATE CHANGE



CLIMATE EMERGENCY DECLARATION
Call on Parliament to declare a climate emergency

“We must declare a climate emergency now, and act as if *we are at war.*”

David A. Hood AM
Adjunct Professor, Deputy
Chairman, Beyond Zero Emissions

www.ClimateEmergencyDeclaration.org



“Is this CO2 thing
really serious
Grandpa?”

Cameron Hood @ 1 week

Thank you...



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