



Public Works



BZE's Zero Carbon Australia Buildings Plan

Newcastle – 14/11/13

Sponsored by



Hunter & Central Coast
Regional Environmental
Management Strategy



Welcome

- For those Web 2.0 folks...

- Twitter

#bzenewylaunch

- Facebook

Beyond Zero Emissions

Tom Farrell Institute

Hunter TAFE



Welcome

WELCOME

Professor Tim Roberts

Director, Tom Farrell Institute for the Environment

MC – Dr Steve Bygrave, CEO of BZE

Hunter TAFE Solar Desiccant Air Conditioning System

Daniel Rowe, CSIRO Project Leader

Innovative Climate Control Strategies

Andrew Bagnall, GHD Leader - Building Engineering & Sustainability

The “Illawarra Flame” Energy Positive Fibro Retrofit

Dan Daly, Design Team Member, Uni of Wollongong

Sustainability and Digital Learning

Kevin Bryan, Communication and Engagement Lead, Digital Learning Project, Hunter TAFE

BZE Buildings Plan launch

Trent Hawkins, Project Director, BZE Buildings Plan

Q&A

All speakers and Paul Scanlon from NSW Public Works

7:30pm- Supper, Sponsor Displays and networking

8:30pm - Finish



MC – Dr Stephen Bygrave

- Recently appointed CEO of BZE
- Worked on climate change
 - for 20 years, across renewable energy, energy efficiency, transport, agriculture and forestry
 - on international climate change issues at the OECD between 2002-04
- A senior executive on the design on the government's Clean Energy Future package
- PhD was on village scale renewable energy projects in the Pacific Islands



Agenda

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BZE Buildings Plan book launch,

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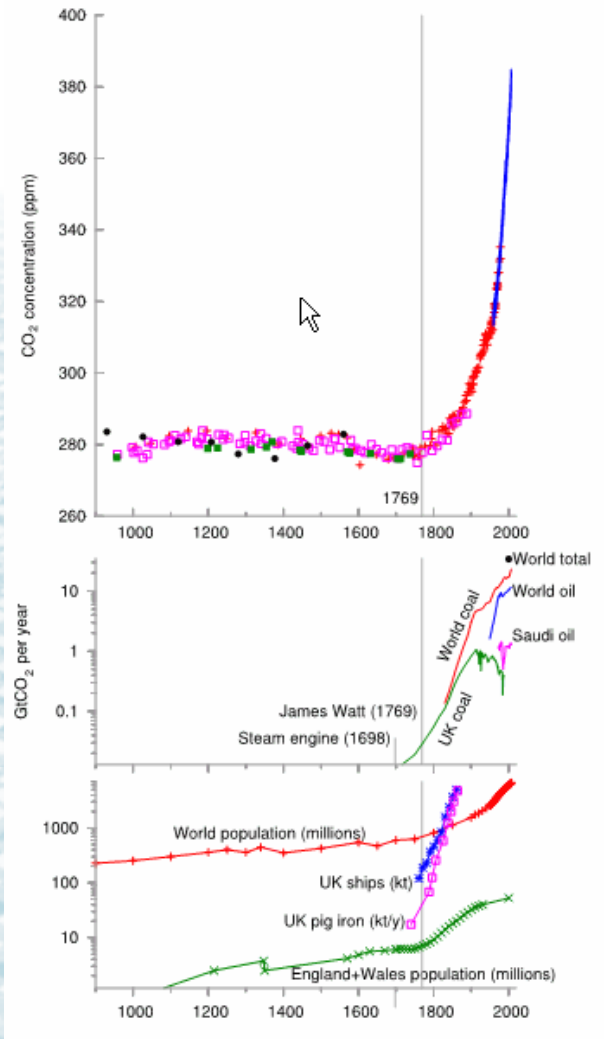
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Man is changing the climate

- In last 150 years, the temperature has increased by almost 1 degree C
 - Therefore the climate has changed
- Evidence that man is the cause
 - The **ratio of Carbon isotopes** in the atmosphere **corresponds** to the **amount of fossil fuel that man has burned**



CO₂ concentration (ppm)

Total CO₂ emissions
World coal & oil

Population
(World & UK)



97% of Published Papers say Man is the Cause of Global Warming

Cook et. al 2013, http://www.skepticalscience.com/docs/Cook_2013_consensus.pdf

THE OVERWHELMING—AND GROWING—SCIENTIFIC CONSENSUS



EVERY YEAR, more and more peer-reviewed scientific papers have concluded that global warming is a reality, and a direct result of our actions.

97%
of published climate papers with a position on human-caused global warming agree:

GLOBAL WARMING IS HAPPENING—AND WE ARE THE CAUSE.

source

MEANWHILE, the number of papers that disagree have remained tiny by comparison.



Rapid Climate Change Evidence

<http://thinkprogress.org/climate/2013/02/14/1594211/death-spiral-bombshell-cryosat-2-confirms-arctic-sea-ice-volume-has-collapsed/?mobile=nc>

- Rapid Global Warming
 - The **temperature** is now changing **10 times faster than** ever
- Extreme Events
 - More intense
 - floods,
 - cyclones,
 - heat waves,
 - bushfires



- We are losing **1 species per day**