Tony Gilding
AUSTRALIAN GREENS/
MACADAMIA CASTLE
Northern Rivers Electric Vehicle Strategy
- Opportunities and next steps
Sustain Northern Rivers

- Formed in 2008
- Northern Rivers Climate Change Collaboration Agreement
- Over 28 contributing organisations
- Transport, Energy, Food, Biodiversity
Sustain Energy

SUSTAIN NORTHERN RIVERS – SUSTAIN ENERGY

STRATEGIC PLAN 2014-2019

GOAL OF SUSTAIN ENERGY:

The Northern Rivers has a resilient and sustainable energy system

HOW WILL WE ACHIEVE THIS?

By enabling our region to reduce greenhouse gas emissions from energy systems and increase the proportion of renewable energy sources to 20% by 2020
Sustain Energy – current focus

- Digestate to Market
- Northern Rivers Grid Innovation
- Large Scale Solar Generation
- Local Generation Network Charges
- EV Friendly Northern Rivers
Northern Rivers Electric Vehicle Strategy

Figure 1: Trends in greenhouse gas emissions in New South Wales by sector to 2013-14

Source: Australian Greenhouse Emissions Information System
Northern Rivers – travel patterns and EV ownership

- Majority of commuters travel less than 170km round trip
- 40% of 3,500 EVs in Australia based in NSW and Qld
- Highlighted the existing public charge points and the need for additional ‘fast charge station’ points between Brisbane and Byron.
Inland and coastal routes

- Primary: distance based
- Secondary: commuter and tourism centres
Best place for EV charge infrastructure
• Lighting and surveillance
• Network capacity
• Solar or GreenPower
• Dedicated parking bays
• 24/7 access
• Co-located

Northern Rivers Electric Vehicle Strategy
What next: Increase EV infrastructure and use
Public EV fast charge points throughout the region
• $200k for infrastructure
• ~$70k P/T project officer
  o secure suitable sites and lease agreements with land managers
  o negotiate energy network access
  o contract works
Wish list

Social science and economic analysis into low emissions transport scenarios in regional areas

• EoI from street-based neighbourhoods across the region
• Travel survey
• Attitudes/behaviour change barriers and opportunities
• Cost benefit analysis – users, service providers
• Impact on the grid, renewable energy supply options
• Options analysis: ownership, ride share, car share, active/public transport
Getting Sydney’s eastern suburbs EV-Ready

Nicola Saltman, Senior Engagement Specialist
Byron Bay, June 2019
• 10km from Sydney CBD
• Harbourside and coastal lifestyle
• Thriving commercial, cafe and shopping precincts
• Densely urban & key tourist destination
• Population: 267,000
Our Low Carbon Future Plan
EASTERN SUBURBS LOW CARBON FUTURE 2030

- Solar on large commercial and industrial buildings
- More low carbon transport options like light rail, cycling, and buses
- Low carbon precincts with energy efficient buildings and renewable energy
- Councils pioneer community solar on public buildings
- Energy from waste converting garbage and sewage to renewable energy
- Existing apartment buildings with efficiency upgrades and solar PV
- Community solar on participating businesses supplying carbon-free electricity
- Higher basix targets producing more efficient apartments
- Higher environmental performance standards driving more efficient new homes
- Electric vehicle charging stations at key destinations
Transport responsible for 22% of emissions in the eastern suburbs
Councils enabling uptake of EVs

Switching to electric vehicles could reduce emissions from cars by up to 47% by 2050 in Australia.
Barriers to EV uptake

- Lack of charging station availability: 71%
- Price: 66%
- Limited range of an EV: 47%
- Unsure about charging/maintenance: 37%
- Time required to charge vehicle: 37%
- See EVs as unreliable/untested: 10%
- Resale value: 9%
- Don't like the idea of hybrid or...: 5%
Would charging infrastructure make a difference?

Would you consider purchasing a hybrid or electric vehicle if there were more public charging stations? (%)

- Yes: 78%
- No: 19%
Why now?
7 Public Electric Vehicle Charging Stations
On-street public charging network

- Dual port Level 2 (22kW AC)
- Charge 150km/hr
- Universally accessible
- Usage fee 60c to $5.50/hr
- Powered by 100% renewable energy
The road less-travelled….can be bumpy

- Took a while to do cheaply
- Identifying sites
- Internal engagement: Traffics committees, asset managers
- Collaboration: University of Sydney, NSW Department of Industry, NRMA, Electric Vehicle Council, Energy Lab
- Learning from other Councils – Moreland, Adelaide
- Crucial software as brains
But rewards are numerous...

- Reducing pollution and noise
- Increased access to charging
- Providing confidence to drive an EV
- Brings tourism dollars to local precincts
- Helps residents with cost of living pressures and inflated petrol prices
- Market transformation in ‘smart city’ solutions
Making news

Sydney councils enlist celebrity power to launch EV charging network

June 5, 2019 8 MINUTE READ / MICHAEL MAZENHAR

Sydney is set to get six public stations by next year.
What next?

- Two installations July-Aug
- Engagement & promotions of network
- Monitoring & evaluation / Knowledge-sharing
- Fleet and carshare
- Supporting charging uptake in clubs, shopping centres
- Planning requirements for new developments
- Medium/high density residential areas
Thankyou
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