

Presentation to ElectraNet Consumer Advisory Panel

Can ElectraNet challenge itself and explore best practices in environmental commitments and reporting?

Tim Kelly 18 July 2017

PLEASE NOTE:

- Tim Kelly serves as a nominated volunteer on the ElectraNet CAP. All views expressed are his own.
- This presentation is prepared to promote discussion about environmental performance. In taking a critical approach, the content is not aimed at criticising the environmental performance or commitments of any organisation. It is aimed at stretching boundaries and exploring new approaches to define the role of ElectraNet in a South Australia which as a state, is seeking environmental sustainability, a low carbon economy and affordability of electricity.

Background & Acknowledgements:

- Conservation Council SA Submission on the Senex Statement of Environmental Objectives 2014
- Tim Kelly presentation to Australian Gas Networks on Best Practice Environmental Commitments and Reporting 2016
- Meeting Phil Court-Kowalski, Executive Manager Safety, People & Technology at ElectraNet and Ann Shaw Rungie in 2016

ELECTRANET ENVIRONMENTAL POLICY

Mission

We are committed to minimising, or where possible preventing, environmental impacts as we pursue energy and infrastructure solutions for a better world.

Key Elements

- developing and maintaining our environmental management system at a scale appropriate to our activities
- assessing our assets and activities to identify environmental risks and prevent pollution
- complying with local, state and national environmental requirements
- training our staff in the management of environmental issues facing the energy and infrastructure industries
- participating in initiatives that contribute to understanding and addressing the impacts of climate change.

Areas of focus

Environmental Operating Requirements (EORs)

Environmental Management Plans (EMPs)

Climate Change

Native Flora and Fauna

Weed and Pest Management

Sustainability

Not public

Not Public

Annual initiatives? GHG Emissions Scope 1,2 &3?

Entrapment reporting?

Infestation mapping & annual progress

How is this being implemented in procurement?

Environmental commitments?

Policy Review ?

- ElectraNet does not provide an annual report.
- It could choose to prepare an annual report, an environmental report or a sustainability report

Environmental Operating Requirements

“ElectraNet has developed a detailed range of EORs, which define our environmental management requirements for staff and contractors. These EORs address key environmental aspects, or themes, during all phases of our activities, and are continuously reviewed and improved where gaps are identified”.

OK, but what is included?

- Can the EORs be public?
- Do EORs require that contractors have an up to date environmental policy?
- Do contractors report on the effectiveness of programs to combat invasive weeds?
- Are contractors also required to have sustainability/environment/climate commitments?
- Do contractors report fauna entrapments/interactions associated with ElectraNet infrastructure?

For example, SA Power networks don't provide annual reports or environmental reports. The SAPN environmental policy is unchanged for a decade and 2 years past the stated review date according to the SAPN website.

Environmental Reporting

National Greenhouse and Energy Public Report availability 2015-16

Controlling corporation	ABN	Total Scope 1 Emissions (t CO ₂ -e)	Total Scope 2 Emissions (t CO ₂ -e)	Net Energy Consumed (GJ)
ELECTRANET PTY LIMITED	41094482416	919	214,546	1,387,929

- What proportion is attributable to South Australia?
- Explanation of transmission loss emissions?
- Explanation of energy consumed?

Other questions stakeholders may be interested in

- Explanation of monitoring insulator gas loss, and achievements of proactive maintenance programs
- Impact of installing energy saving lighting systems in occupied sites and offices (and venue hire?).
- How is ElectraNet supporting Carbon Neutral Adelaide?

Sustainability

ElectraNet Sustainability

“ElectraNet embraces the concept of sustainability, in terms of the triple bottom line: ecological, social and economic. We are striving to embed sustainability in our procurement choices”.

Compared with:

“Sustainable development is development that meets the **needs** of the present without compromising the ability of future generations to meet their own **needs**” (World Commission on Environment and Development , 1987, p. 41).

Sustainability

Embedded into ElectraNet's vision

“ElectraNet’s vision for South Australia’s transmission network is that it will deliver affordable and reliable power supplies that support customer choices for a sustainable future”

That’s pretty good and a great foundation!

Sustainability Commitments

Sustainability is best demonstrated through two streams:

Process commitments (legal obligations and AS/NZS 9001/14001 requirements)

ElectraNet does well

Outcome based commitments in policy and publically accessible programmes.

Room for Improvement

Sustainability Suggestions

Reporting to assist in corporate accountability and continuous improvement:

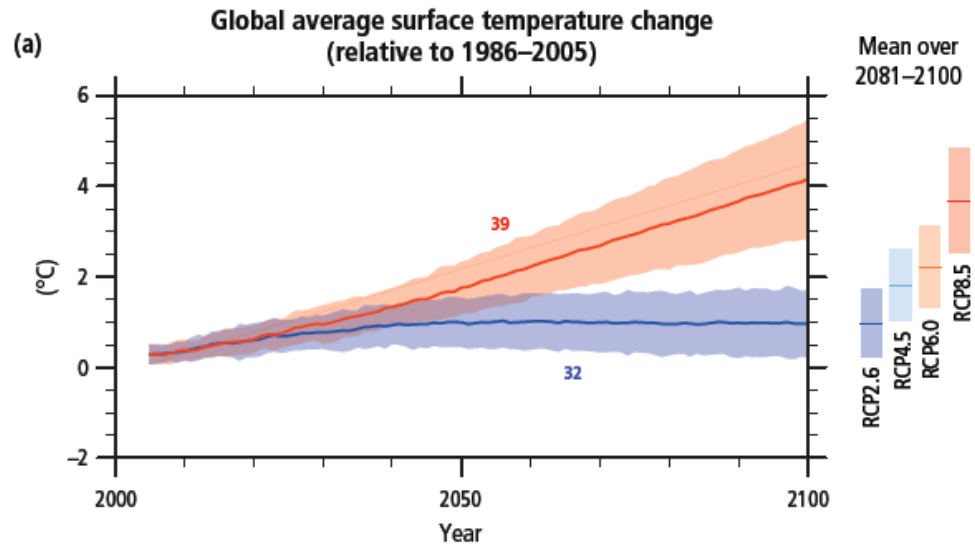
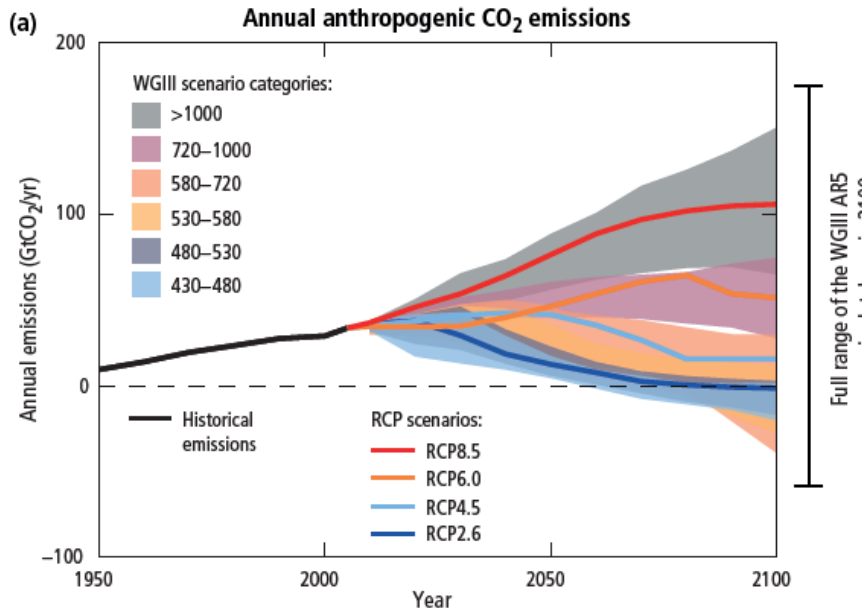
- Providing an annual sustainability report that describes ElectraNet's progress in implementing its policies including:
 - Renewable Energy commitments and activities
 - Energy Storage commitments and activities
 - Fauna interaction incidents and initiatives
 - Progress in land management and weed control
 - Office sustainability initiatives
 - Procurement Sustainability initiatives
 - Influence, advocacy and submissions- that support sustainability
 - Communication and disclosure
- Scope 1, 2 and 3 emissions including for the Transmission Infrastructure, office activities and outsourced services
- Fuel use, transport emissions from flights and vehicles, use of EVs by company staff.
- Environmental incidents relating to ElectraNet including through contracted work

Scenario Planning

ElectraNet have chosen the 'Conventional Wisdom' scenario for planning, and look to signposts that would suggest a shift to another scenario.

Settings	Scenario 1 Decentralised World	Scenario 2 Centralised Comeback	Scenario 3 Conventional Wisdom	Scenario 4 Doldrums
Global Economic Growth	Above long term average	High	Below long term average	Low to stable
Renewable Energy Policy	Moderate RET, High small scale incentives	Strong RET, Moderate small scale incentives	Moderate RET, Moderate small scale incentives	Wind back of RET and all small scale incentives
Carbon Pricing	Moderate carbon price	Strong carbon price	Moderate Carbon price	None
SA RET Share	Population pro-rata	Current share	Population pro-rata	Population pro-rata
Cost Reflective Tariffs	Introduced at moderate pace (within 10 years)	Introduced quickly (within 5 years)	Introduced slowly (within 15 years)	Introduced slowly (within 15 years)
Distributed Energy Resource Prices	Decline faster than historical solar PV rate	Decline slower than historical solar PV rate	Decline at historical solar PV rate	Decline slower than historical solar PV rate
Wholesale Gas Prices	\$10/MMBtu by 2020	\$12/MMBtu by 2020	\$8/MMBtu by 2020	\$8/MMBtu by 2020
Electric Vehicle Adoption	65% of sales by 2035	35% of sales by 2035	25% of sales by 2035	15% of sales by 2035

Scenario Planning



Can ElectraNet scenarios relate to Intergovernmental Panel on Climate Change Scenarios?

If so, which emission scenario will ElectraNet be advocating for?

Paris Agreement: Central aim to keep global temperature rise this century well below 2 degrees Celsius above **pre-industrial levels** and to pursue efforts to limit the temperature increase even further **to 1.5 degrees Celsius**.

Economic Regulation creates barriers for sustainability

Regulatory Investment Test for Transmission 2009

FINAL RULE DETERMINATION

“The NEO is founded on the concepts of economic efficiency (including productive, allocative and dynamic dimensions of efficiency), good regulatory practice (which refers to the means by which regulatory arrangements are designed and operated) as well as reliability, safety and security priorities”.

AEMC

FINAL REPORT 27 September 2013 Reference: EMO0027

Advice on best practice retail price methodology

“The Conservation Council of South Australia has commented that, in their opinion, the long-term interests of customers (i.e. the NEO, discussed below) includes sustainability matters. The AEMC considers that the matters relating to sustainability are beyond the AEMC's remit, and so are not discussed in this review. These are policy matters, and so best dealt with by the Commonwealth and jurisdictional governments”.

The Conservation Council of South Australia (2014) submission on the Energy White Paper

“The current rules based approach by the AEMC has come at the expense of strategic planning of Australia’s Energy Infrastructure. There is a sense that the role of the AEMC in focussing exclusively on economic efficiency, serves as a barrier to the creation of infrastructure towards any planned direction”.

Reflecting on the Events of 2016 & 17

- **10 May 2016** - Northern Power Station at Port Augusta closes
- **28 September 2016** - South Australia, storms, blackout and slow restoration
- **8 February 2017** - South Australia 45 minute load shedding blackout during a heatwave
- **30 March 2017** - Hazelwood Power Station closes in Victoria
- **Finkel Review** – Begins to encourage connection between energy and climate policy
- **1 June 2017** - **AEMC Towards the Next Generation: Delivering Affordable, Secure and Lower Emissions Power**

“Energy and emissions reduction policies have been largely pursued as separate agendas. In the AEMC and the Authority’s view, this fragmentation between energy and emissions policy has placed considerable pressure on the National Electricity Market’s ability to supply secure and low cost electricity for Australian businesses and consumers”.

- **6 July 2017** - SA Government commits to a 100MW grid scale battery installation
- **14 July 2017** - COAG Energy Council Meeting Communique
 - Establishment of the Energy Security Board
 - Energy Security Obligations
 - Generator Reliability Obligation
 - Putting downward pressure on prices
 - Clean Energy Target - Queensland, Victoria, South Australia and the Australian Capital Territory **will separately commission the AEMC to do further work in this area.**

CONTEXT ONLY - Meanwhile as an electricity customer

- Prices are increasing dramatically particularly, for households and small to medium businesses
- There is little confidence that grid electricity will be affordable or sustainable in the short to medium term
- The 100% GreenPower I pay for is charged as a penalty above standard electricity rates and the 'Renewable use' and 'reduced emissions' attributes are allocated across all other customers under the NGER Framework. It is not clear whether my individual effort will again be used as justification to wind back renewable energy progress.

Questions

- How many households and businesses are primed to embrace battery storage, onsite generators and on site renewables to head off grid when the numbers work out?
- How many households and businesses are looking for reasons to stay on the grid?

Conclusions

A sustainable future is about meeting social, economic and environmental needs of current and future communities.

- ElectraNet has a vision for the transmission network but also has the opportunity to **lead in its actions** where it has control, or the ability **to influence others** through its procurement processes and planning proposals.
- ElectraNet has selected a ‘conventional wisdom’ scenario for planning, but could also assess how this compares with **IPCC Emission Scenarios** that it would deem acceptable.
- Where regulatory frameworks may constrain or prevent environmental, sustainability or energy transition progress, ElectroNet should be a **strong advocate for reform** or assist in giving a voice to customers and NGOs calling for reform.
- ElectraNet could better report on its environmental performance and commitments and focus on **being accountable for outcomes** as well as processes.