It ought to be remembered that there is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things. Because the innovator has for enemies all those who have done well under the old conditions, and lukewarm defenders in those who may do well under the new. This coolness arises partly from fear of the opponents, who have the laws on their side, and partly from the incredulity of men, who do not readily believe in new things until they have had a long experience of them.

Niccolo Machiavelli in The Prince – published 1513
This talk will centre on 2 policy measures:
  – A price on carbon via an Emissions Trading Scheme
  – The Renewable Energy Target (RET)

The troubled history surrounding Australia’s hesitating and slow progress with these measures.

The political/economic power structures behind the troubled history
Back in 1998 it all looked so straightforward

- 1998 speech from Alexander Downer (Foreign Minister in Howard Liberal Government and former Liberal Party national leader):
- Some argued then, as some still persist in arguing now, that as the science of climate change is still evolving, that we should simply just wait and see before taking action…
- Well, let me explain why I and my colleagues in government were not prepared to do that. When I was younger not many of us paid any attention to appeals made to us from various sources to protect ourselves from sun damage. However, over time the strength of the science, and the level of concern, about the link between unprotected exposure and skin cancer grew……
- In agreeing to play Australia's part in the global effort to reduce greenhouse gas emissions, our government accepted that same precautionary principle. In the face of the current scientific evidence supporting global warming, to do otherwise would have been foolhardy.
Back in 1998 it all looked so straightforward

- **Alexander Downer 1998 speech continued…**
- The Kyoto protocol is a major step forward. It is an agreement which provides the framework for environmentally effective, equitable and durable action to address climate change.
- **UNDER THE HEADING: Emissions trading: harnessing the power of the market**
- Australia's key negotiating objective will be to develop and design, in consultation with others, an emissions trading framework
- Commonsense, as well as business-sense tells us that a transparent, unimpeded market offers the best prospect of delivering low-cost, non-distortionary outcomes.
• According to Liberal Party leader Tony Abbott an emissions trading scheme will:
  – Be a “great big new tax that is designed to radically change the way every Australian lives and every Australian works”
  – Be a “wrecking ball through the economy”
  – “certainly smash the average household’s cost of living”
  – “wipe out jobs big time”
  – “clean out your wallet”
  – mean, “There’s not a state and there’s hardly a region in this country that wouldn’t have major communities devastated by a carbon tax if this goes ahead”
Fast Forward to 2010’s

- In 1998 the Howard Liberal Government was working on introducing the Renewable Energy Target (admittedly at a very modest level – 9500GWh. Since expanded to about 45,000GWh inclusive of rooftop solar).
- Fast forward to 2017 and former Liberal Party Prime Minister Tony Abbott observed:
  - Despite the reduction that my government secured to the renewable energy target, Australia is still supposed almost to double renewable energy supplies in the next four years. This will increase power costs substantially and further reduce reliability. If it goes ahead, it will be the death knell for the heavy industries of Whyalla and Port Pirie in South Australia and almost certainly will destroy the aluminium industry everywhere.
  - Why should government force Australians to use more and more expensive and unreliable renewable power when we have some of the world’s biggest reserves of clean coal and natural gas? Why should higher prices be inflicted on households and employers when Australia should be the world’s affordable energy superpower?
SA blackout: Nick Xenophon, Barnaby Joyce blame renewables

Deputy Prime Minister Barnaby Joyce and South Australian Senate powerbroker Nick Xenophon have said South Australia's transition to renewables is to blame for the state-wide blackout on Wednesday, in comments disputed by Mr Weatherill and out of line with those of the Grattan Institute’s energy expert.

MATTHEW GUY MP
Leader of the Opposition
Leader of the Liberal Party

Guy: Liberal Nationals will scrap Victorian Renewable Energy Target

Monday 13 February 2017

Liberal Nationals will scrap Victorian Renewable Energy Target

Background

In the past 10 years, Victorian electricity prices have increased 117%.

As of 1 January 2017, Victorian household electricity prices have risen by around 10%, while small businesses are facing a 7.9 to 16.6% increase.
So what happened?

Kyoto

- Kyoto

1997

- Release of Fed ETS disc. papers
- RET begins 9500GWh by 2010
- Tambling Review
  - Increase RET to 20,000GWh by 2020

1998

- Fed CC Forward Strategy

1999

- Howard rejects ETS
- Energy White Paper
  - No RET increase
  - CCS the answer

2000

- States progress ETS process

2001

- Vic RET 3274GWh

2002

- Fed Libs agree to ETS
- Fed Libs increase RET to 30,000GWh

2003

- States progress ETS process

2004

- Senates rejects ETS
- Fed Libs agree to ETS

2005

- Labor wins Fed election
  - ETS + RET: 45,000GWh
- Gillard unveils 3 year fixed price
  - ETS

2006

- Rudd dumps ETS

2007

- ETS begins

2008

- ETS ends

2009

- Rooppet solar split from large
  - renewables

2010

- Rudd dumps ETS

2011

- Large RET cut from 41,000 to 33,000 GWh

2012

- Fed Labor
  - RET review
  - 50% RET by 2030

2013

- Fed Labor

2014

- Fed Labor

2015

- Fed Labor

2016

- Fed Labor

2017

- Fed Labor
So what happened?

Kyoto

- Lip service/Tokenism
  - Release of Fed ETS disc. papers
  - RET begins 9500GWh by 2010
  - Vic RET 3274GWh
  - Energy White Paper No RET increase CCS the answer
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Howard rejects ETS

- States progress ETS process
- Fed Libs agree to ETS
- Fed Libs increase RET to 30,000GWh
- Rudd dumps ETS
- ETS begins
- ETS ends
- ETS disc. papers

States to rescue

- Fed Libs agree to ETS
- Labor elects
- ETS 45,000GWh
- Senate rejects ETS
- ETS begins
- ETS ends

Fossil fuel fights back

- Energy White Paper No RET increase CCS the answer
- Tambling Review Increase RET to 20,000GWh by 2020
- Rudd dumps ETS
- ETS begins
- ETS ends
- ETS disc. papers

Brief victory

- Fed Libs agree to ETS
- Labor wins Fed election
- ETS + RET: 45,000GWh
- Senate rejects ETS
- ETS disc. papers

Lip service/Tokenism

- Howard rejects ETS
- Fed Libs increase RET to 30,000GWh
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- Rooftop solar split from large renewables
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States to rescue

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Rooftop solar split from large renewables

Renewables muscles emerge

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### Why so hard?

- Australian core competence in simple primary goods not sophisticated manufactures
- World’s largest coal exporter
- World’s largest LNG exporter
- Energy-intensive metals
- Mining

### Australian exports by share

<table>
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<th>Commodities Not Specified According to Kind</th>
<th>Ores Slag and Ash</th>
<th>Meat and Edible Meat...</th>
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<td>26%</td>
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### Cereals
- Cereals 8.0%
- Cereals 2.7%
- Cereals 2.6%
- Cereals 2.4%

### Minerals
- Ores Slag and Ash 26%
- Meat and Edible Meat... 4.3%
- Pearls, Precious Stones, Metals, Coins 8.0%

### Energy-intensive metals
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### Other
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### Australian exports by share (full table)

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Tony Abbott while Prime Minister said the biggest fundamental problem with the carbon price was that:

“It said to the wider world, that a commodity which….is our biggest single export [coal], somehow should be left in the ground and not sold. Well really and truly, I can think of few things more damaging to our future.”

• Australia’s biggest export earner has in the past been coal (now iron ore).
• Australia’s electricity mix dominated by coal.
• The carbon emissions intensity of Australia’s electricity supply is the highest in the OECD (excepting Estonia) and higher than China.
• The wholesale cost of generating electricity (not delivered cost) in Australia has historically been some of the lowest in the developed world approx. US$32/MWh or $40AUD
• We also have good solar and wind resources but $40 insufficient.
Australia’s quarry vision

• RET and carbon pricing have faced very powerful enemies:
  – Australia’s economic growth fuelled by a mining and LNG construction boom from 2000 to 2012.
  – Mining + Oil & Gas industry very influential in political deliberations.
  – What little manufacturing we have is heavily dominated by energy-intensive, not knowledge intensive, industries.

• Supporters have been weak to non-existent:
  – Solar modules, wind turbines or electronic control equipment are all imported.
  – Renewable energy seen as threat with little opportunity given our weakness in sophisticated manufacturing.

• This imbalance in business power has also been mirrored in the government bureaucracy who share the vision of Australia as the world’s quarry
A splintering of the quarry vision

- Mining and LNG construction boom has crashed
- Oil price crash has made LNG not very profitable
- But has driven a serious gas shortage and spike in Australian gas prices
- No one will invest in new coal power stations
- Our power prices have skyrocketed as old coal power stations shut down.
A splintering of the quarry vision

- Wind and solar power now our cheapest options for new power supply
- Solar power now used by large proportion of Australian households as they have sought to minimise impact of power price rises.
- Solar power now increasingly attractive to businesses.