ELECTRICITY AUTHORITY
TE MANA HIKO

Commerce Committee Review

19 November 2015

COMPETITION • RELIABILITY • EFFICIENCY

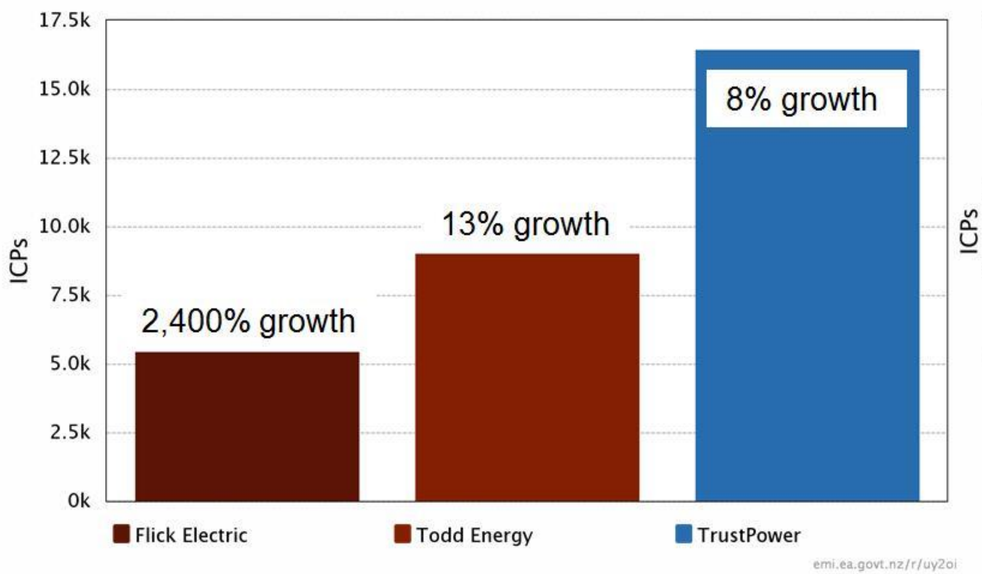
Agenda

- Developments with retail competition
- Overview of two policy initiatives
  - The retail data project
  - Implications of evolving technology for distribution prices
- Developments with security of supply

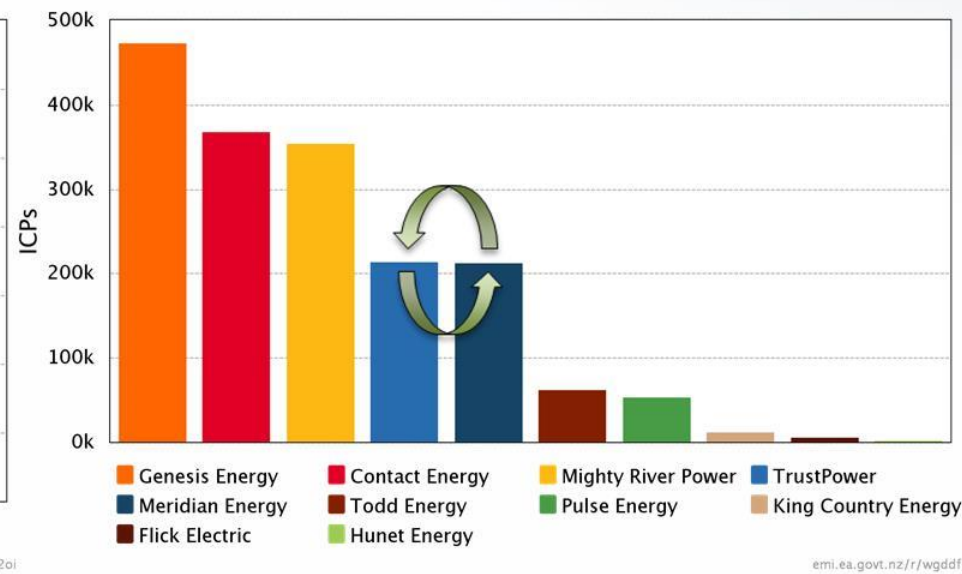
Competition in the retail market continues to be quite intense

- Innovative pricing plans and bundled product offerings led to Flick Electric Co, Todd Energy and Trustpower growing the fastest over the 12 months ending October 2015
- Trustpower has overtaken Meridian in the residential market, in terms of number of residential customers (measured by number of installation control points (ICPs))

Fastest growing retailers – ICP growth November 2014 to October 2015

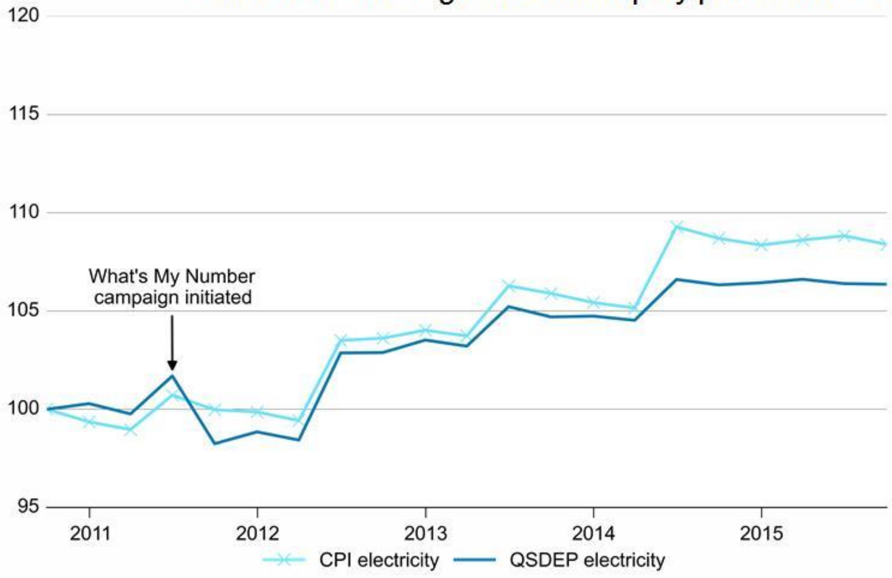


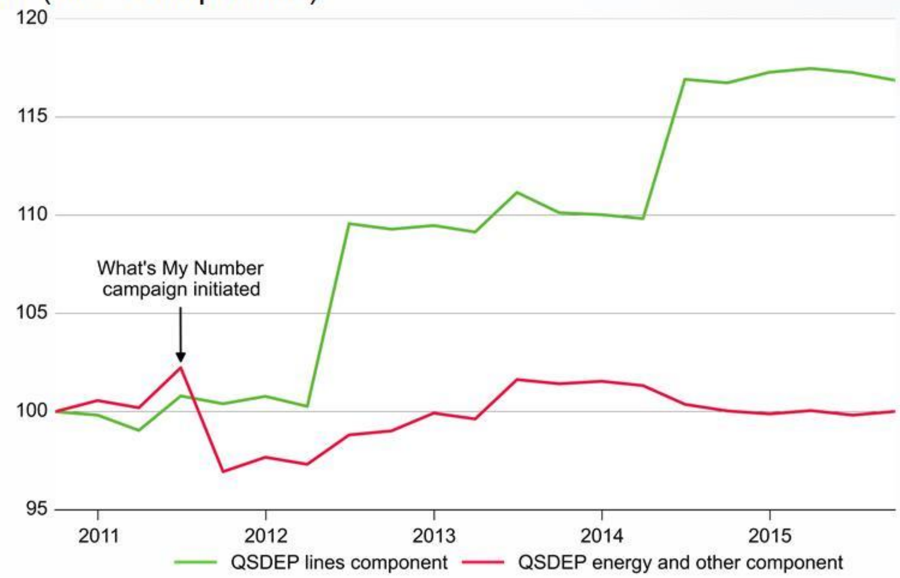
Top ten residential retailers – by ICP September 2015



Competition has constrained price rises over last 5 years; lines businesses the primary source of price increases over that period

- The LHS chart shows two electricity price indices (both are in real terms)
  - The light blue line is the electricity price index in the CPI produced by StatsNZ
  - The dark blue line is the Quarterly Survey of Domestic Electricity Prices (QSDEP) produced by MBIE
- The RHS chart shows the breakdown of the QSDEP into two components
  - The red line shows the competitive part of the sector ("energy and other" component). The chart shows that the energy component of prices is at the same level as 5 years ago
  - The green line shows that the primary source of increases in the QSDEP over the last 5 years has come from the regulated monopoly part of the sector ("lines component")





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We are seeking to further enhance competition by making it easier for consumers to obtain retail data – The Retail Data Project

- From 1 February 2016 consumers will have easier access to the following retail data
  - Consumption data – this allows consumers to make more accurate choices by using their own data rather than the average profiles for the category of consumer they're deemed to be
  - Tariff (price) data
  - Connection data
  - The above data will make it easier for consumers to 'cut through complexity'; and make quick and confident decisions about retail offers

- We are planning to use our 2016 What's My Number (WMN) campaign to inform consumers about easier access to retail data

Evolving technologies have significant implications for pricing of distribution services

- Evolving technologies (such as consumer apps, electric vehicles, batteries, solar panels) will bring substantial benefits for consumers and give them far greater choice
- Current price structures for distribution discourage the uptake of electric vehicles (EVs) and batteries and artificially stimulate investment in household solar panels
- Distributors need to adopt a fundamentally different mind-set so that consumers can get the most from evolving technology
  - Distributors need to resist the 'monopoly mind-set' of raising fixed charges
  - They need to be clear about what services and service levels they're delivering to consumers
  - Eg. Consumers with solar panels and batteries may want to use the grid as a back-up service; some of them will rightly choose a low capacity level from their distributor (and pay a correspondingly lower price)

	Type of charge	Unit	Comments
Current	Daily charge	cents/day	Remove this charge?
	Consumption charge	cents/kWh	Reduce this charge substantially
Proposed	Peak demand charge	cents/kW	Adopt this charge if the distributor is facing need to invest in its network
	Capacity charge	cents/kW	Adopt this charge if distributor is not needing to invest in its network

The Authority is encouraging distributors to evolve their pricing

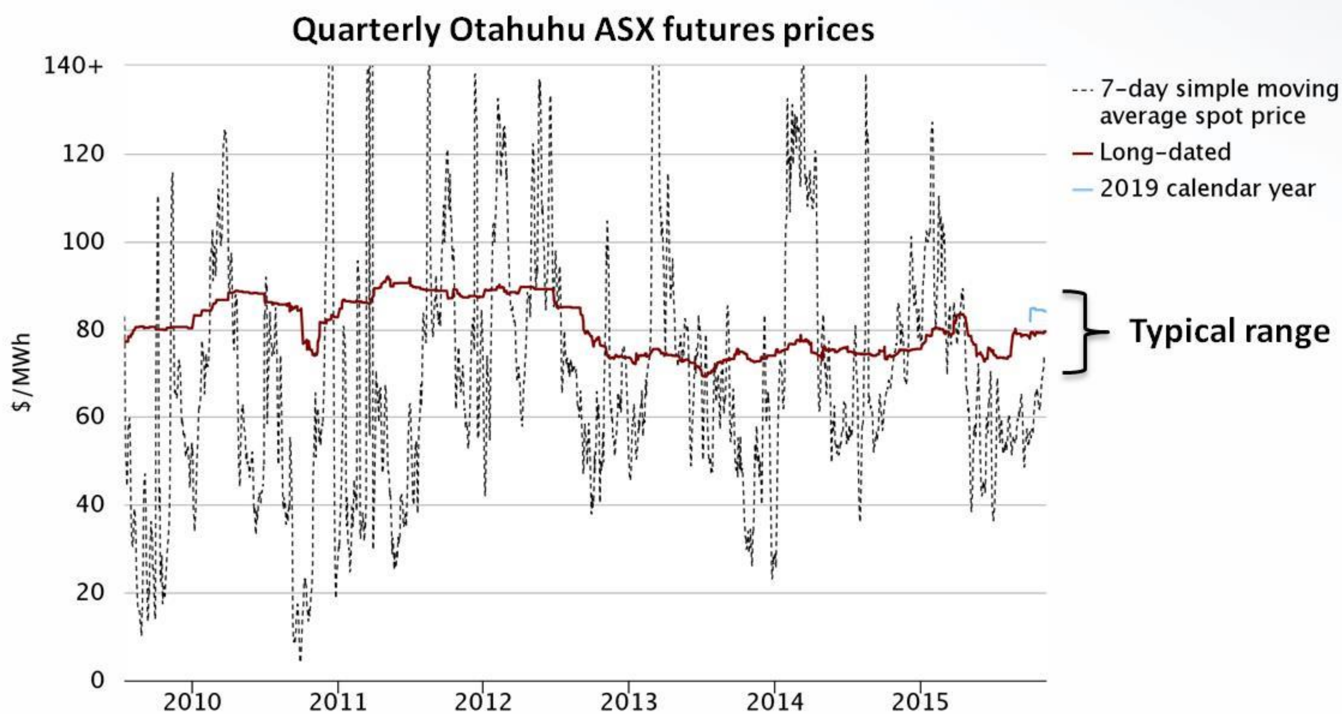
- New Zealand is well positioned to take advantage of evolving technologies
  - Our grid-delivered generation is much "greener" than in other countries (~ 80% renewable), giving greater potential to switch away from thermal fuels for transport

- Note that electricity prices will increase if there is no action by distributors
  - Initial analysis indicates that distribution charges for consumers without solar panels could increase by more than 10% in five years, and by up to 30% in 10 years

- We are adopting a facilitative approach to this issue as distributors should lead change
  - There is not a single 'right' approach to pricing – each distributor faces different circumstances
  - Distributors should talk to their consumers
  - Better designed prices can be phased in gradually for the bulk of consumers
  - But price structures need to change soon for consumers that invest in evolving technologies (particularly solar)

Prices on the ASX futures market indicate that participants expect generators will make decisions that avoid security risks for 2019

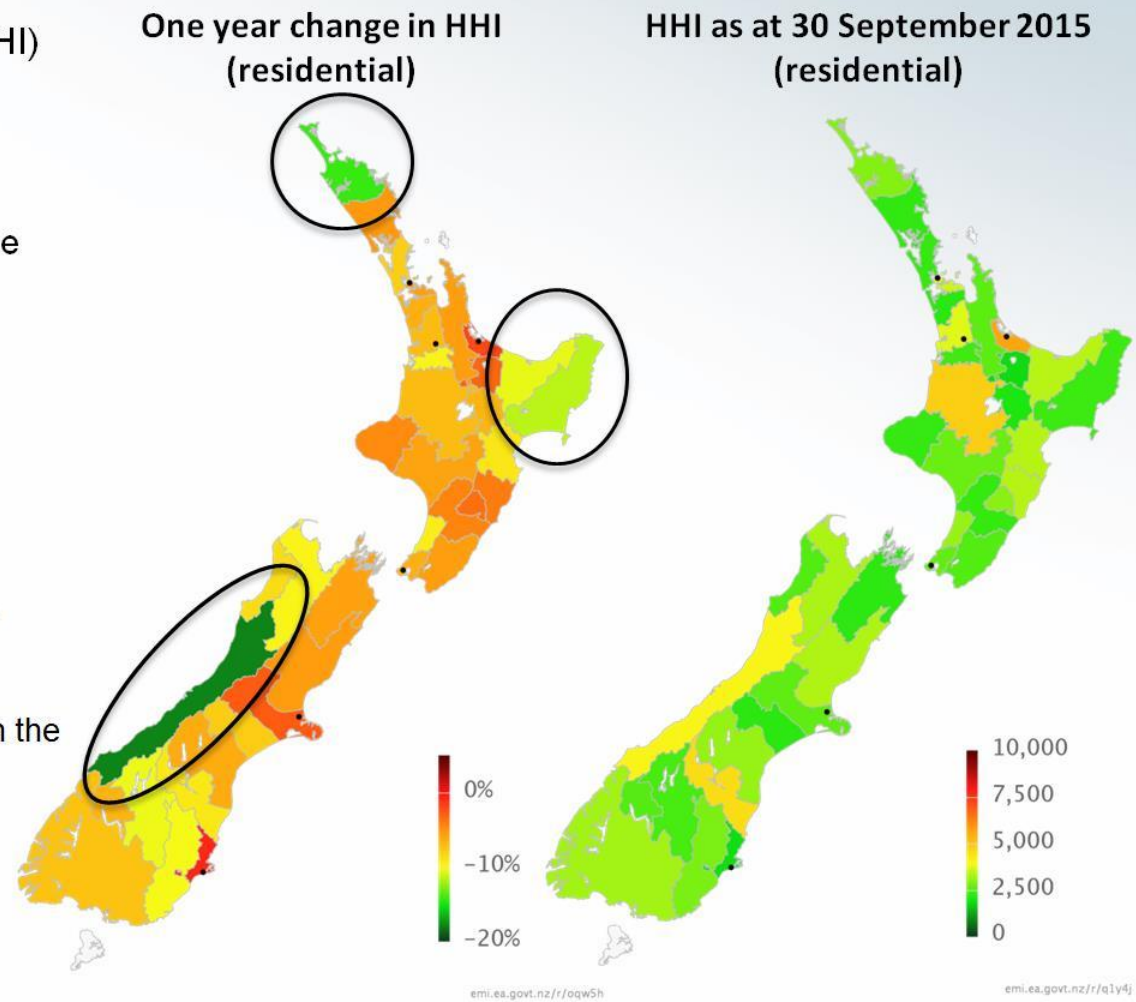
- Genesis has indicted it may retire its two coal-fired Huntly units at the end of 2018; creating heightened security risks for 2019 if they do retire these units <u>and if there is no market reaction</u>
- Prices for the 2019 futures contracts (the light blue line) reveal the market's view of those risks. Prices for 2019 currently are sitting at $85/MWh, within the range of prices for long-dated contracts (the red line)



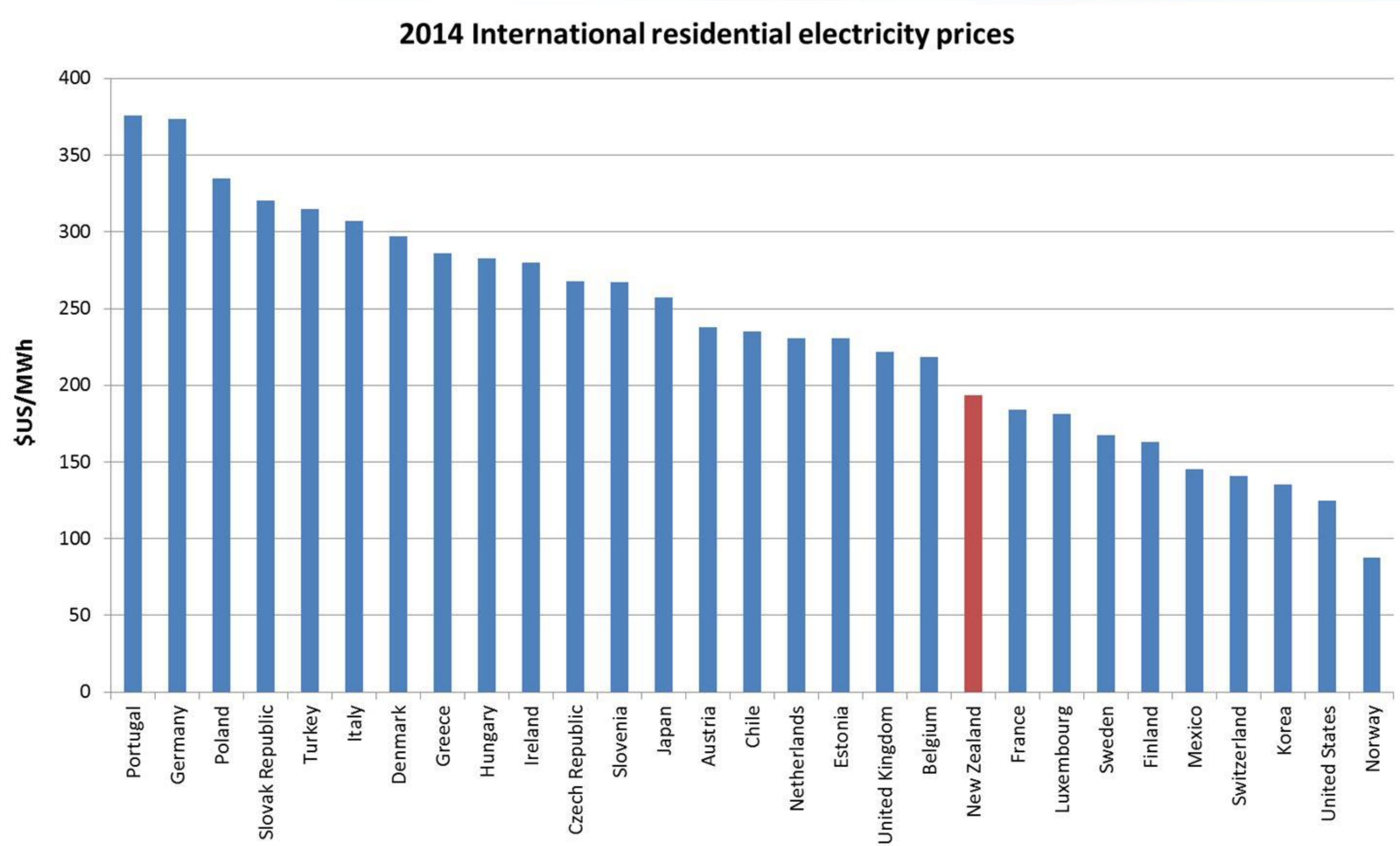
Background material

Retail market structure continues to improve in the regions

- The Herfindahl-Hirschman Index (HHI) is a measure of the degree of concentration in any market
- The HHI continues to decrease in the regions; providing evidence of an improving competitive environment
- Key drivers of the large decrease in HHIs in the highlighted regions
    - Mercury (MRP) competing strongly against Contact in the Bay of Islands
    - Genesis, Nova and Glo-bug (MRP) competing strongly against Contact in the Eastland region
    - Mercury competing strongly against Trustpower on the West Coast



NZ residential electricity prices lower than most OECD countries



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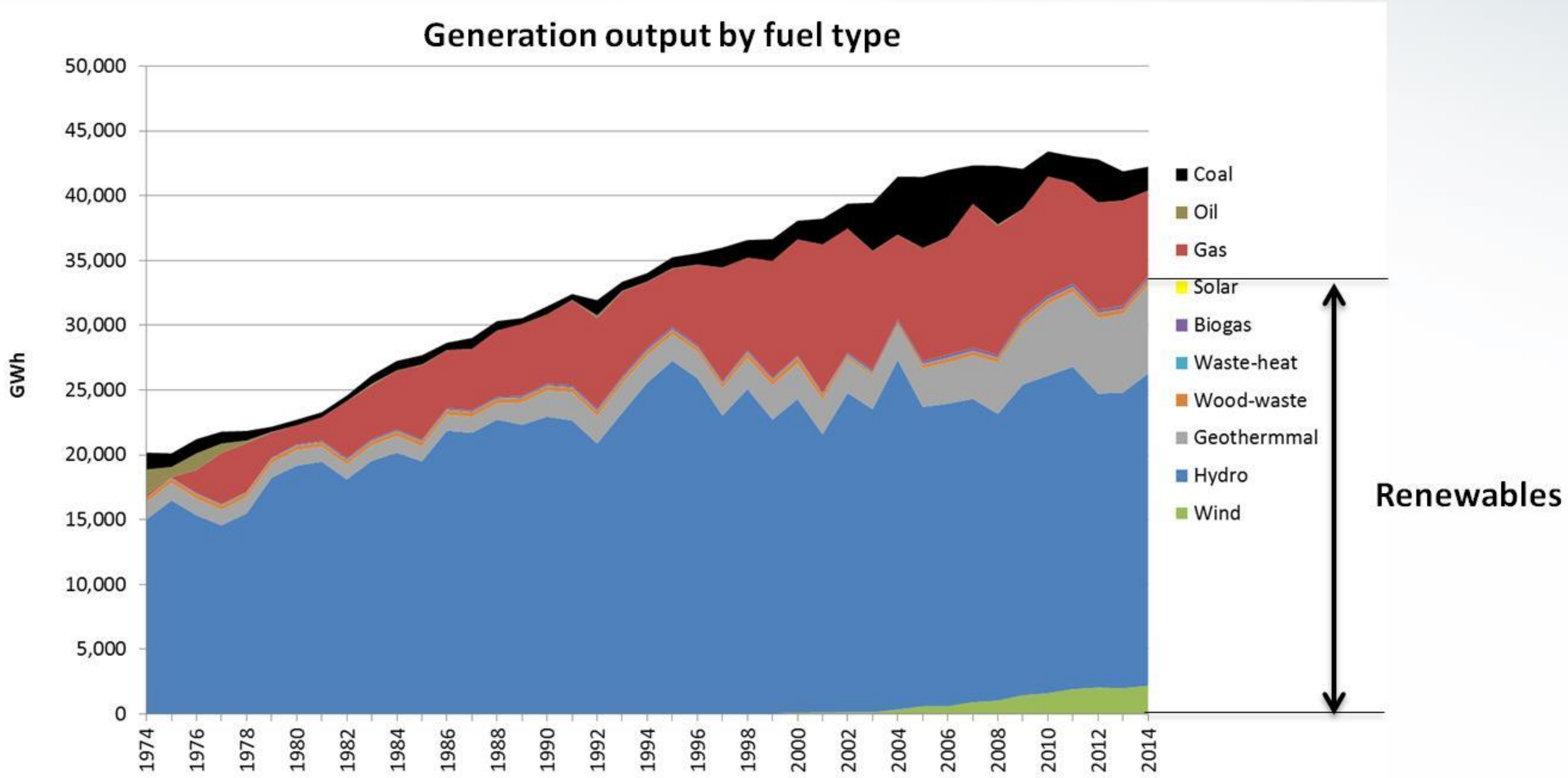
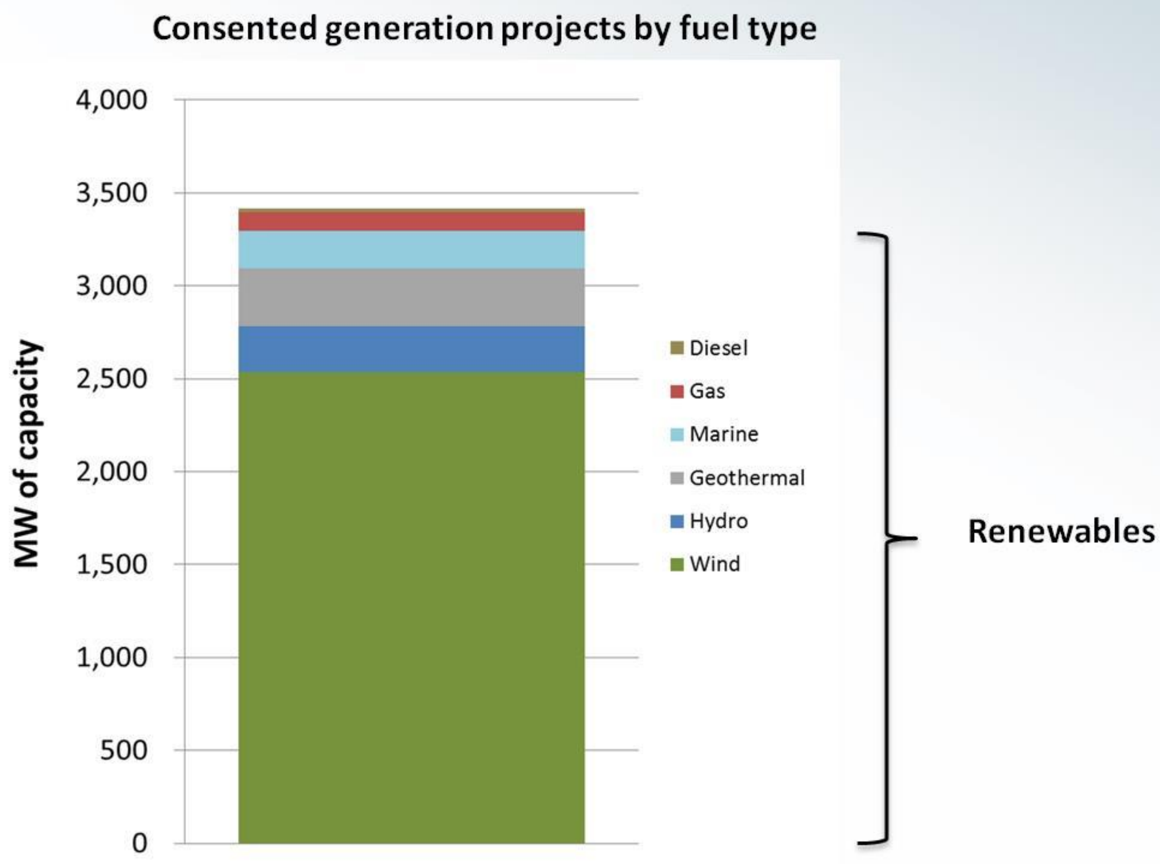
Renewables are increasing their share of the generation mix

- Renewable energy contributed 82.8% of New Zealand's generation in the June quarter of 2015
- As a result of the higher levels of renewable electricity generation, fossil fuelled generation was down by 19.6% in the June quarter 2015, compared with the June quarter 2014



Renewables comprise 96% of consented generation options



- Compares to existing installed generating capacity of 9600 MW
- The Authority keeps a record of potential new generation projects using information available in the public domain. All information presented is subject to uncertainty and will change as more data comes to light