

Theme 2

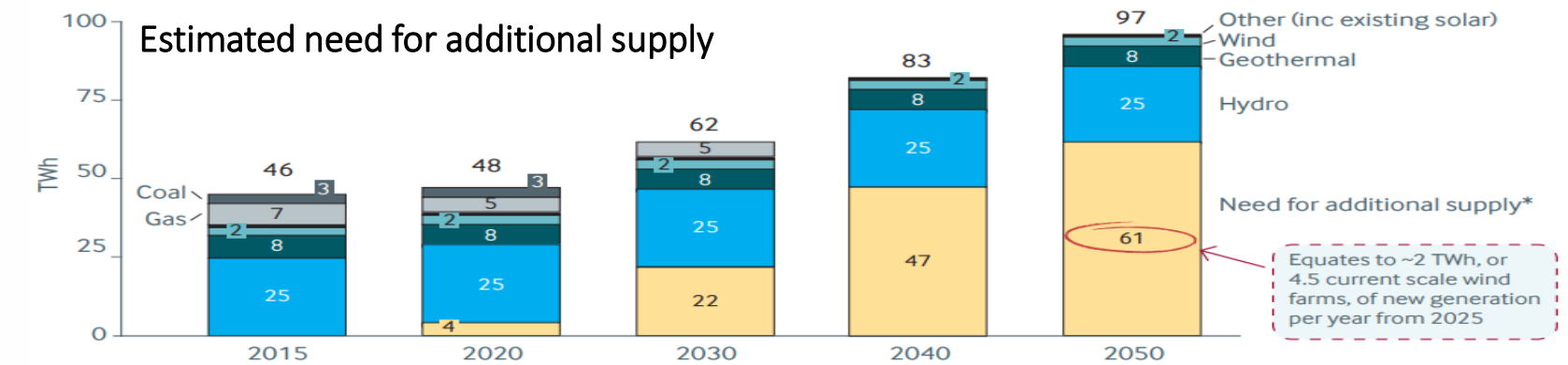
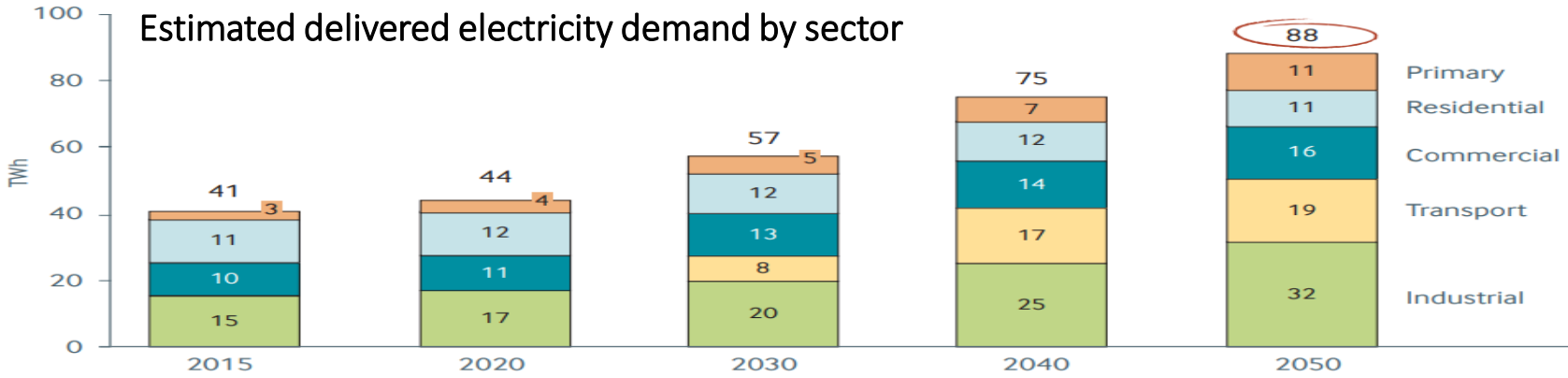
Competitive and investable energy market

Lana Stockman, Board Member Electricity Authority

New Zealand

28 November 2018

New Zealand is forecast to need new generation to meet demand growth from transport and industrial sectors

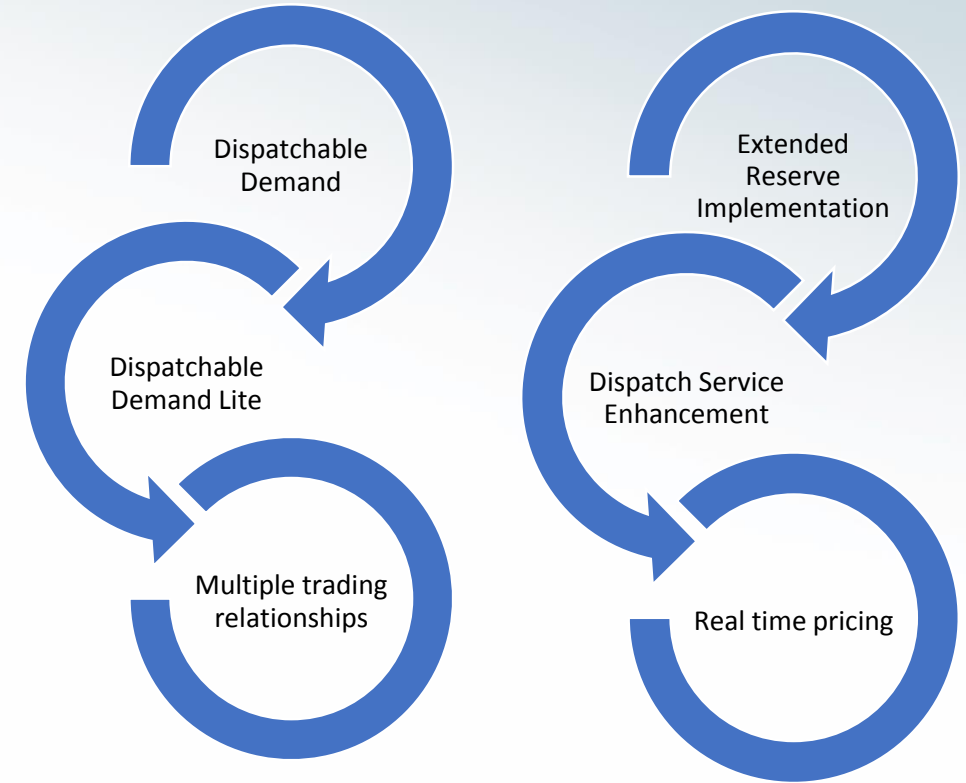
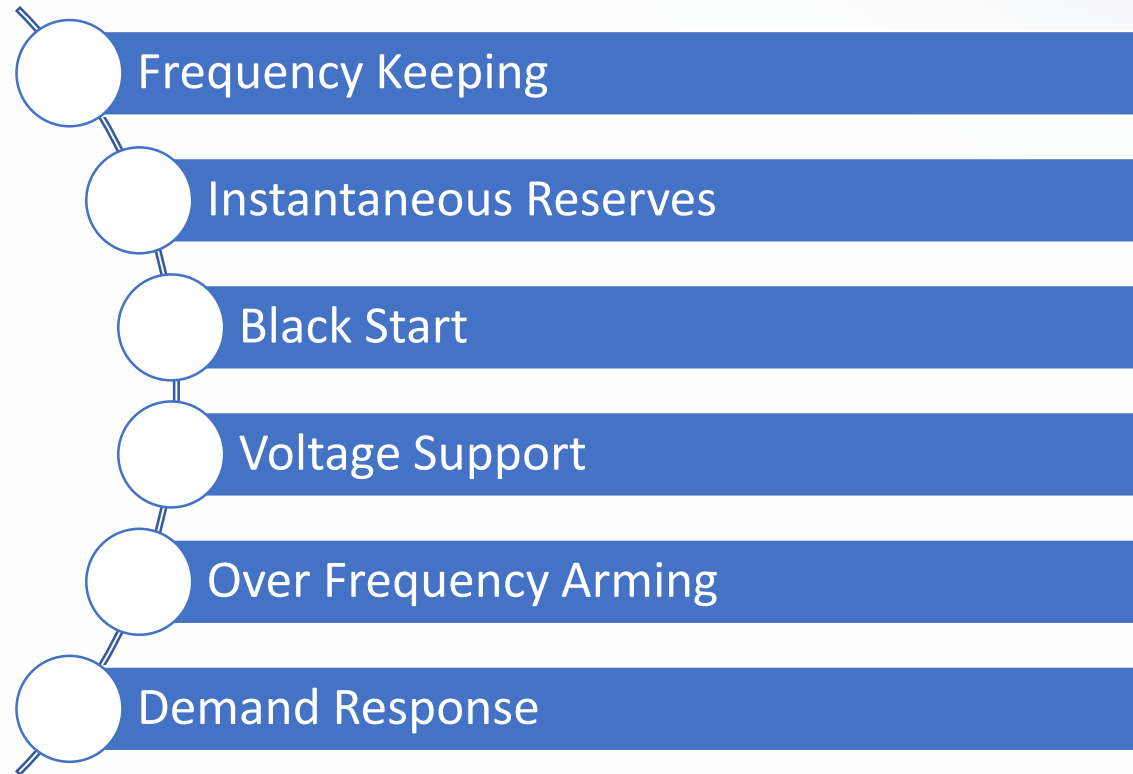


* Represents the difference between estimated electricity demand growth, grossed up to ensure redundancy, and the net of currently generation assets less currently expected closures. Source: Transpower



It is expected new generation will arise from a range of new and existing technologies with a focus on low and no carbon options

Changes in both generation and demand technology highlight the need for efficient demand response and ancillary services to meet consumers need for secure and reliable electricity supply



In developing demand response and ancillary services our preference is to achieve competitive market outcomes however this can have its challenges

New Zealand's retail market has evolved considerably since 1990s

1994 Limited Retail Competition

1999 Full Retail Competition

2007 Smart meters roll out starts

2009 ASX lists NZ Electricity Futures

2011 *What's My Number?* consumer switching campaign begins

2011 Asset Swap Agreement: Meridian to Genesis

2013 Open Interest target 3000 GWh achieved

1998 Split in ownership of Retailers / Distribution

2001 Founding of Ombudsman

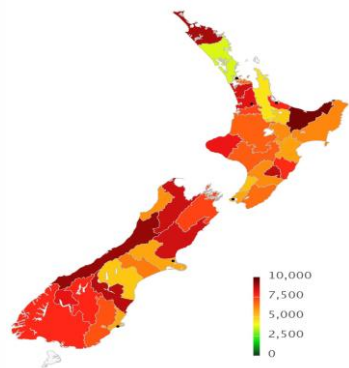
2006 Hedge Disclosure website

2010 Market Making arrangements

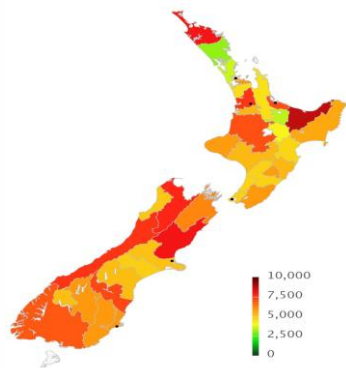
2011 Official Conservation Campaigns, Customer Compensation Scheme and Stress Testing

2013 Financial Transmission Rights market starts

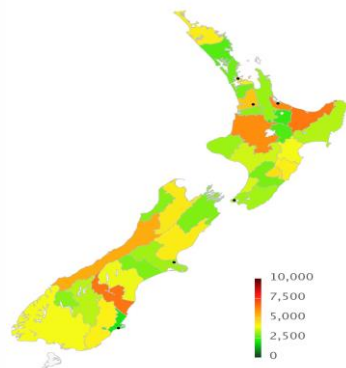
2015 domestic scale battery storage begins



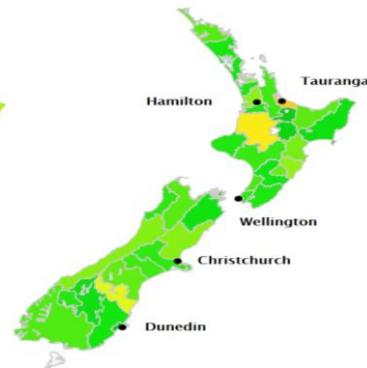
2004
6 retailers



2008
9 retailers



2012
16 retailers



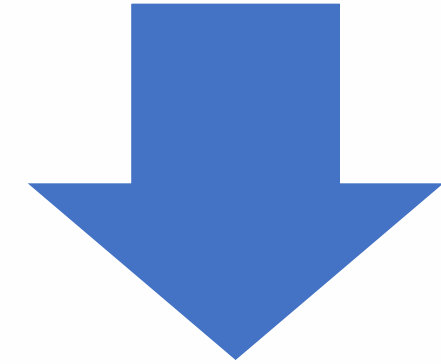
2018
37 entities

And it has required substantial oversight and engagement by the regulator

Our retail market is exciting but also presents dynamic challenges moving forward

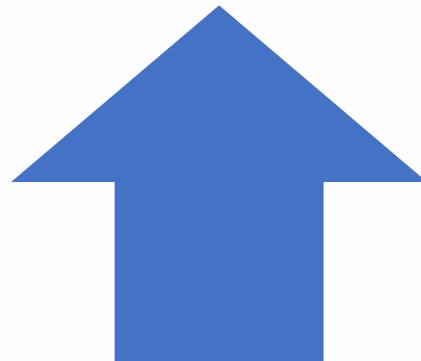
Strengths

- Wide consumer choice for retailer
- Innovative service and product offerings
- Fast switching
- Wide roll out of smart meters



Future Challenges

- Disengaged consumers missing out on benefits
- Affordability
- Integration of new technology and services
- **Increased expectations from consumers for reliability, security and efficiency**



RANGE OF PRODUCTS

- ✓ Spot pass through
- ✓ Free hour of power
- ✓ Choice of payment options
- ✓ Electric Vehicle charging rates
- ✓ Loyalty Schemes
- ✓ E-billing
- ✓ Pre-pay plans
- ✓ Peer to peer retailing
- ✓ Bundled with other bills

Which leads back to the need to also get the investment signals for wholesale and ancillary service markets functioning

Appendix

COMPETITION • RELIABILITY • EFFICIENCY