



2015 NZ Gas Industry Forum

NZ Gas - some things change, some things stay the same

Steve Bielby Chief Executive 5 November 2015

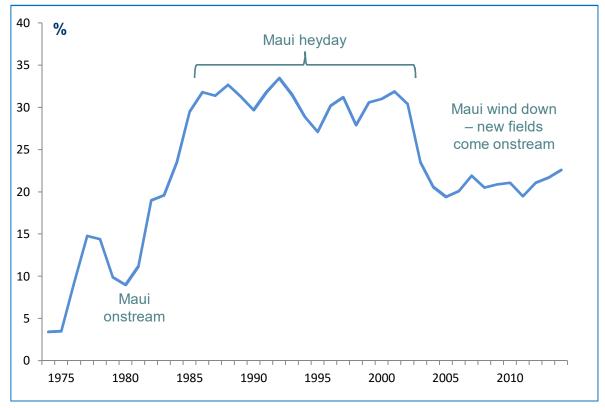
What I'll cover...

Change continues to characterise NZ gas market What the NZ gas consumer market looks like Where's the NZ gas market heading What's occupying GIC's attention Overall gas industry health check



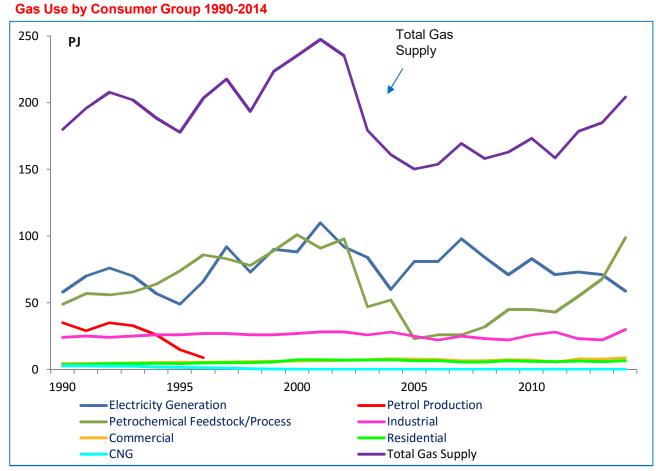
Contribution of gas to primary energy supply has changed...

Gas Contribution to Primary Energy Supply



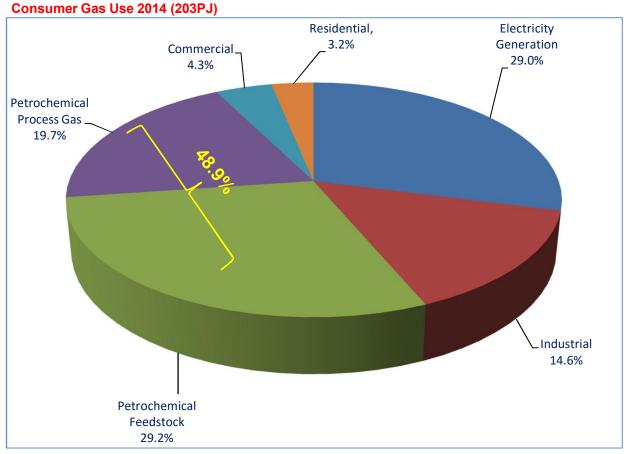
Source: 2015 Energy in New Zealand Total primary energy supply 2014 =905PJ; gas contribution 204PJ

Use of gas and size of market have also changed...



Source: 2015 Energy in New Zealand

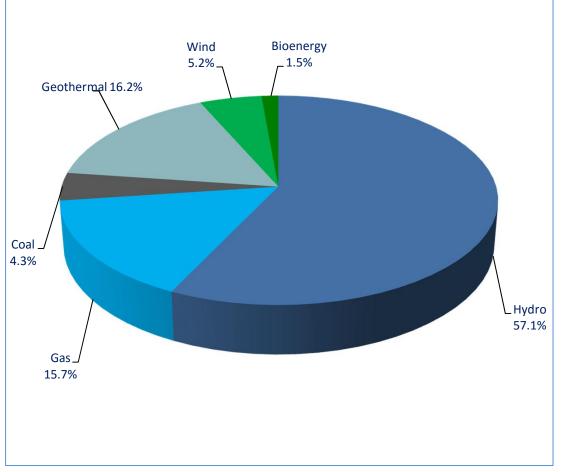
Current gas use looks like ...



Source: 2015 Energy in New Zealand

Gas falls to third biggest electricity generation fuel

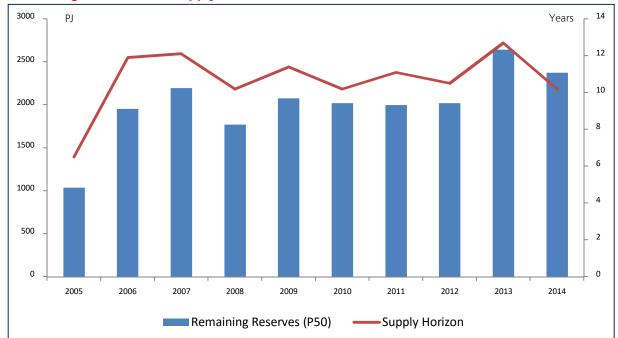
Electricity Generation by Energy Type 2014 (42,231 GWh -152PJ)



Source: 2015 Energy in New Zealand

Gas supply horizon has been reasonably stable

- Reserves/production ratio consistently in 10-12 year horizon, recovering from a low of around 6 years in 2005
- Current gas reserves: 2,373PJ
- Current supply horizon: 10 years
- Future?

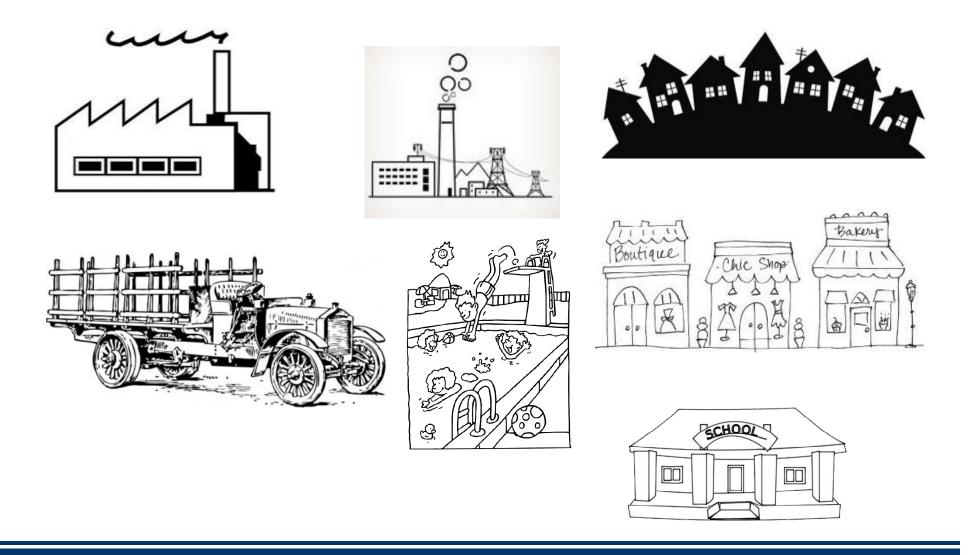


Remaining P50 Reserves/Supply Horizon 2005-2014

Supply Horizon = annual reserves/gross production ratio. Gross production (233PJ) includes gas flared, gas injected, gas used for operational purposes, losses, and LPG extraction

Source: 2015 Energy in New Zealand

Are we using gas for its highest and best use?



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What the NZ gas consumer market looks like

Large gas consumers remain important to market and economy

Large users:

- Strong dependence on gas
- Less than 1% of gas consumers
- More than 90% market gas volumes



Gas consumer connections are increasing

270,000 consumers on the Gas Registry

6,000 new consumers in the past 5 years

LPG is also enjoying market growth

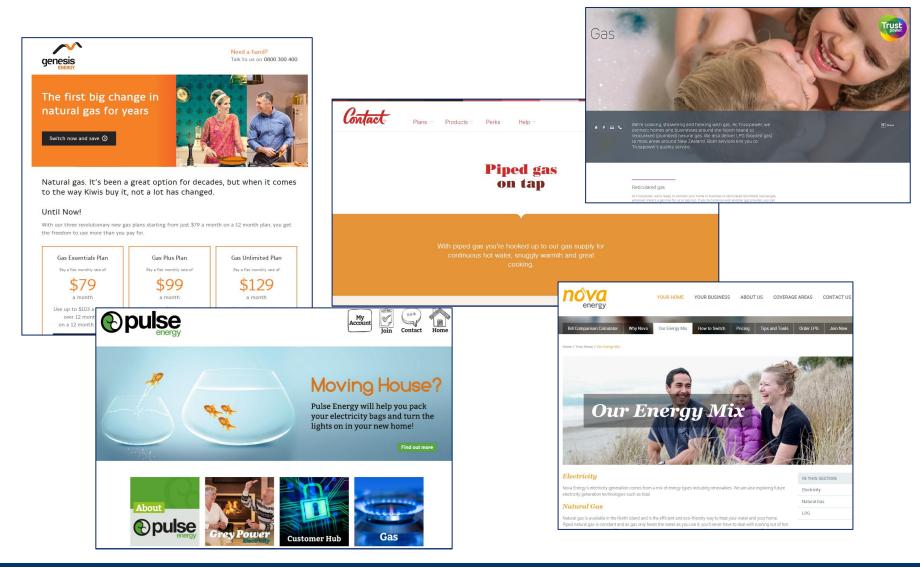
118,000 45kg customers (up 8%)

166,000 tonne market (up 6%)

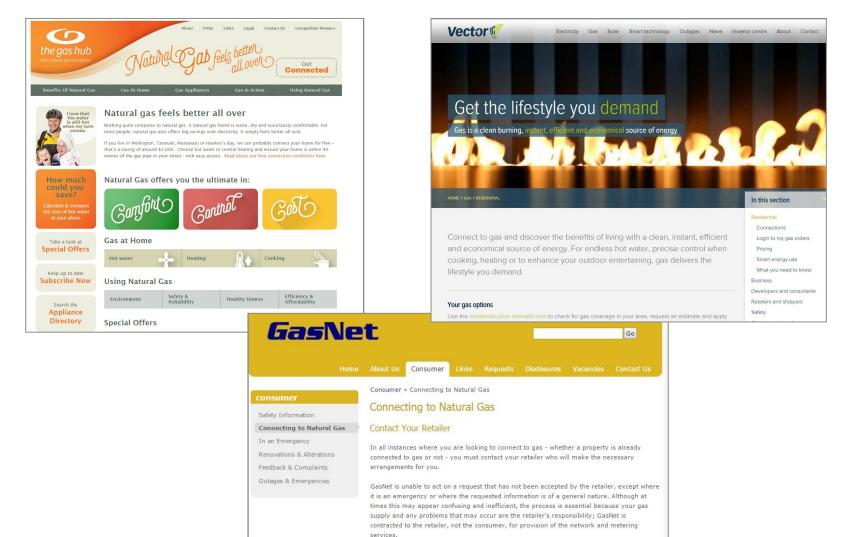
Gas consumers have a broad choice of retailer



Gas is returning to forefront of retail offerings

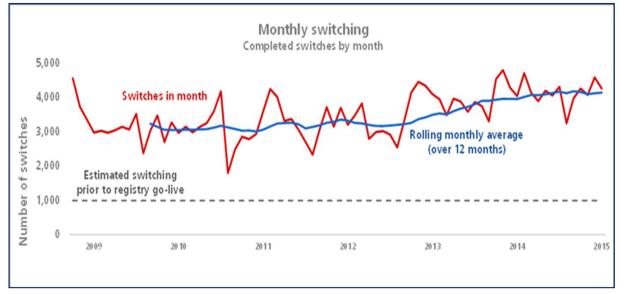


Gas distributors are also playing their part



Consumers can easily switch retail supplier

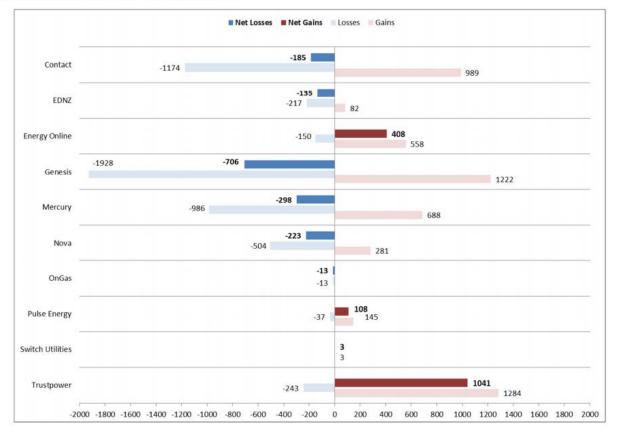
Gas Consumer Switching



- Monthly switches exceeded 5,000 for the first time in September 2015
- Annual churn 18.6%

There's a high level of customer market data transparency

Switching gains and losses – September 2015

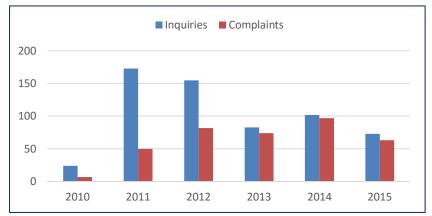


Extract from Gas Industry Co's Monthly Switching Report (September 2015)

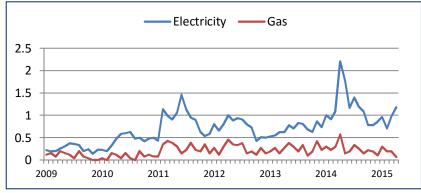
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and a free and independent complaints process

Gas-related Inquiries & Complaints



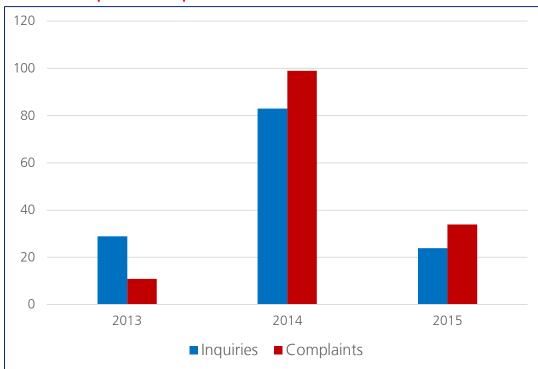
Electricity & Gas Complaints per 10,000 ICPs



Year ended 30 June

- Gas complaints/inquiries 136 (2014: 199)
- Dual fuel (electricity and gas) inquiries/complaints 139 (2014: 104)
- Most common complaints are billing (almost half), customer service, metering, supply and lines issues
- Complaints per 10,000 ICPs: Gas is doing better than electricity (average 0.2/month vs 1.07/month)

EGCC also considers LPG cases



LPG-related Inquiries & Complaints

Year ended 30 June Of the total 280 inquiries and complaints, 170 related to reticulated LPG; 110 to bottles/cylinders

Where's the NZ gas market heading...

Important 2015 developments shaping the market's future

- Tiwai Contact/Genesis/Trustpower support for Meridian Tiwai supply firms future role for gas-fired plant
- MRP closing Southdown December 2015
- Genesis proposed closing 2 coal/gas units 2018; stopped Solid Energy contract
- Contact closed Otahuhu B in September 2015
- Potential sale of transmission and some distribution assets







Huntly Genesis

What the power station developments mean

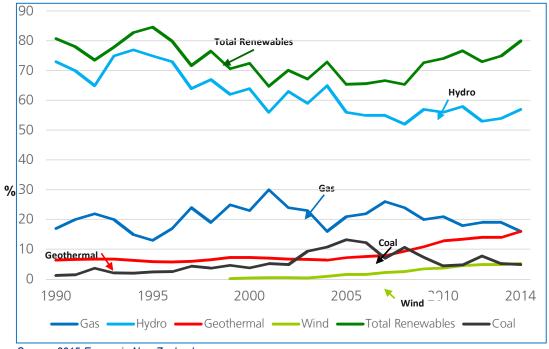
- Southdown/Otahuhu closures:
 - no surprise
 - gas-fired plant now centred towards Taranaki
 - frees up 60% of Auckland transmission capacity
 - gas transmission congestion risks (and need for investment) retreat further
 - but issues for remaining users from reduced transmission utilisation



There will be more electricity generation change

- NZ at 80% renewable generation, aiming for 90%
- Electricity market delivering that without subsidies/ compulsion
- · Coal dropping down
- Gas-fired generation dropping below 15% in 2016
- Next generation plant otherwise needed 2019?
- Current
 - Nova tender for new peaker plant (NZ's third)
 - Contact TCC refurbishment; 'if required, a pipeline of thermal peaking developments'



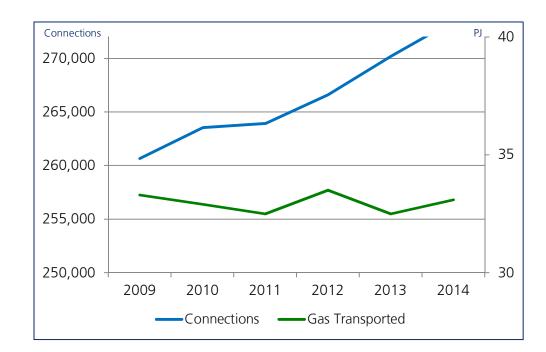


Source: 2015 Energy in New Zealand

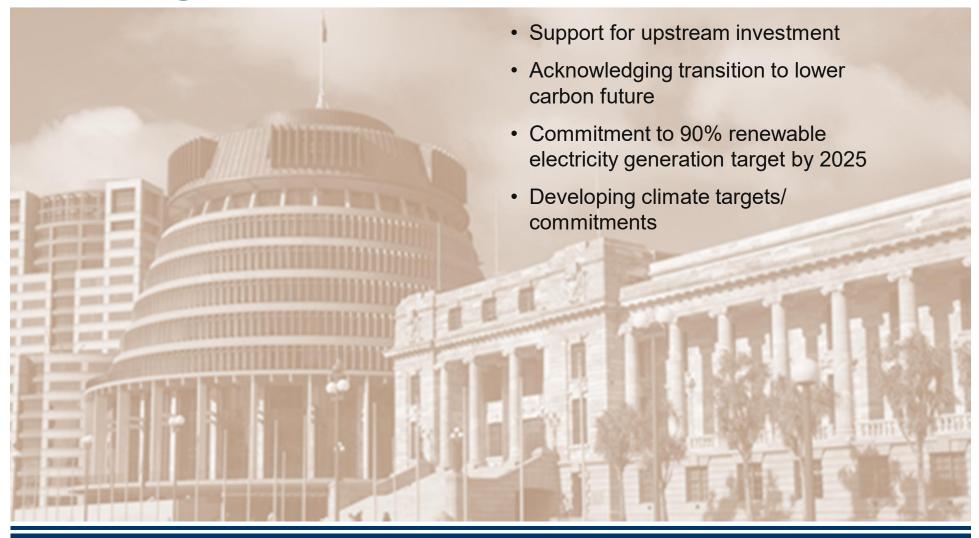
Distribution connections are growing, but throughput is static

- In the past five years:
 - total distribution network length has grown 850km to 17,559km primarily on Vector and Powerco networks
 - consumer connections up almost 10,000 to 273,500
- 33PJ sent through distribution networks in 2014
- Throughput has been flat/dropping, but there are signs of an upturn:

Vector reports 1.8% lift in gas distribution customers and 4.5% rise in distribution volumes in the September quarter.



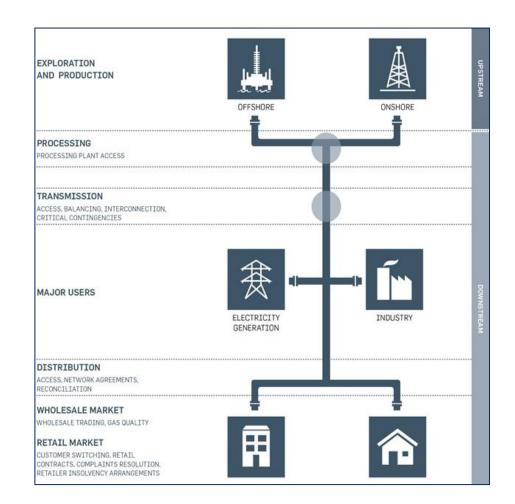
Government policy will also influence the future role of gas...



What's occupying GIC's attention

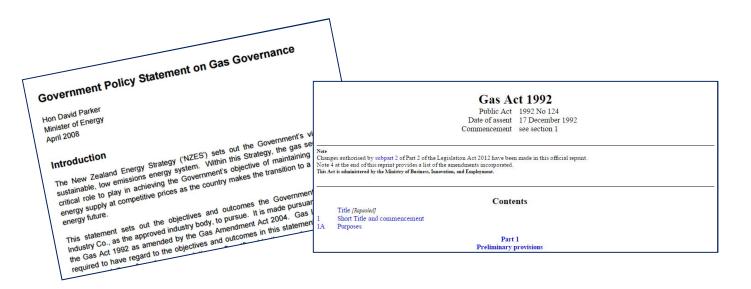
A quick reminder of who we are

- Formed in 2004 as the industry body under the Gas Act 1992
- The co-regulator providing link between industry and Government under the unique co-regulatory governance of downstream gas sector
- Owned by the industry with 11 shareholders Contact, Genesis, Greymouth, Methanex, MRP, NZOG, Nova, OMV, Powerco, Shell, Vector
- Board of 7 Directors four independent; industry-associated (CEOs of Contact, NZOG, Powerco)



Our principal objective is to develop governance arrangements that...

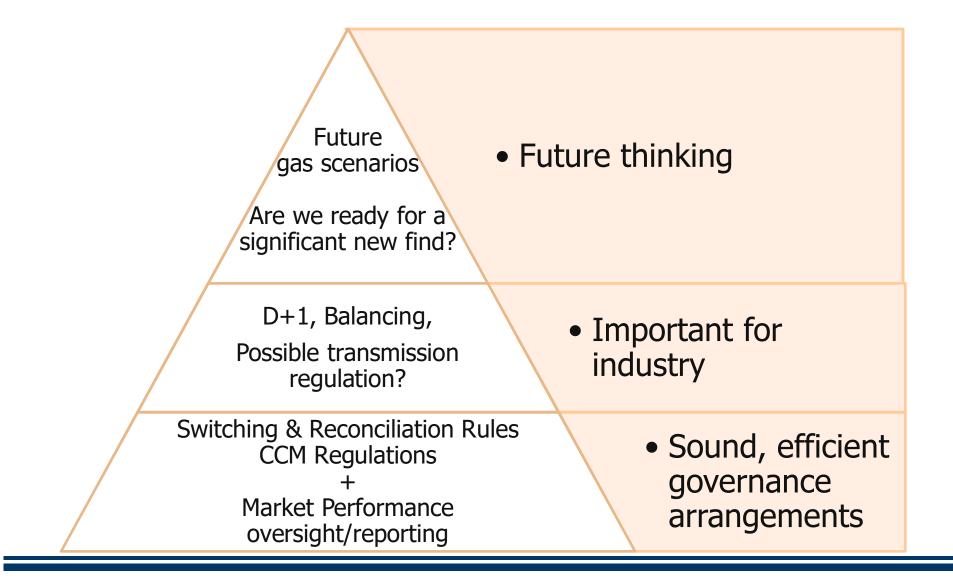
'Ensure that gas is delivered to existing and new customers in a safe, efficient, reliable, fair and environmentally sustainable manner...'



Key GPS outcomes are now well advanced

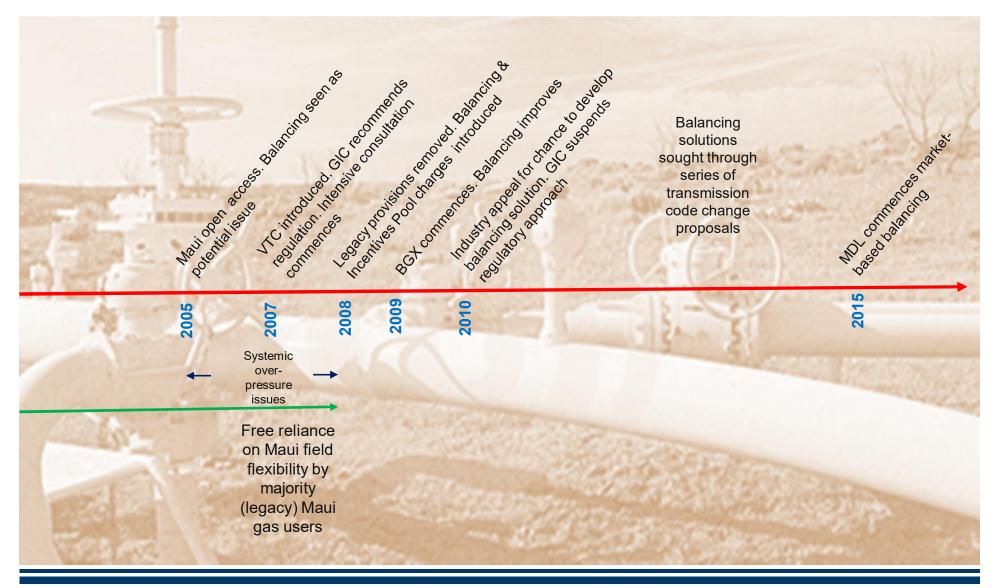
GPS Outcome	Status
Contractual arrangements between gas retailers and small consumers adequately protect the long-term interests of small consumers.	Retail Gas Contracts Benchmarks Oversight Scheme
Effective and efficient customer switching arrangements that minimise barriers to customer switching.	Gas (Switching Arrangements) Rules 2008
Accurate, efficient and timely arrangements for the allocation and reconciliation of downstream gas quantities.	Downstream Reconciliation Rules 2008:D + 1 trial underway
Gas industry participants and new entrants are able to access transmission pipelines on reasonable terms and conditions.	Active workstreams: • Transmission Access & Pricing • Balancing
Sound arrangements for critical gas contingency management	Gas Governance (Critical Contingency Management) Regulations 2008
Efficient arrangements for the short-term trading of gas .	emsTradepoint wholesale market platform developing
All small gas consumers have effective access to a complaints resolution system	Electricity and Gas Complaints Commissioner – no significant gas consumer issues

Our focus for 2015 and beyond



A closer look at two of our priorities...

1. Efficient transmission system balancing...

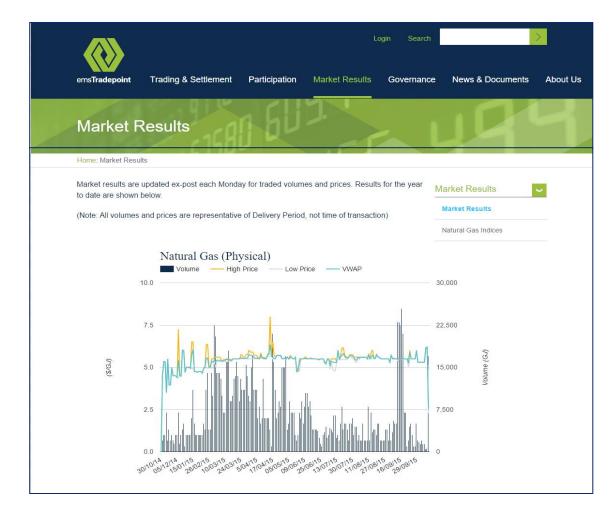


Market-based balancing is in motion

- Supported by GIC as MPOC change reviewer:
 - improve balancing incentives
 - positive cost/benefit
- Based on European
 Union arrangements
- Daily cash-outs
- Effective 1 October 2015
- Working through implementation issues



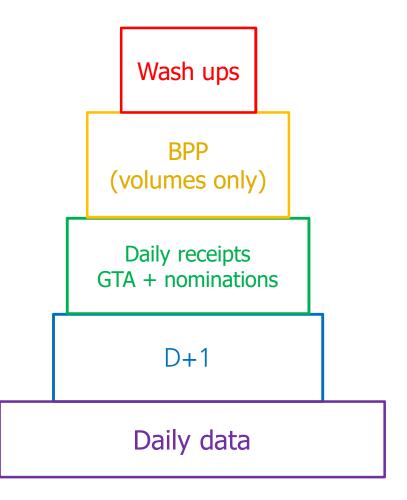
Balancing gas trading on emsTradepoint wholesale market for the first time



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Parallel programme to improve information to shippers

- Day-after delivery (D+1) allocation trial
- Led by Gas Industry Co through Daily Allocation Working Group (DAWG)
- 2016 implementation through Downstream Reconciliation Rules amendments?



2. Critical contingency management fine-tuned since 2011 Maui pipeline outage

- Gas Industry Co review leads to amended CCM Regulations
- Nothing wrong with the regime, but aspects clarified and tightened
- Since then, 1 critical contingency event and two potential CC events
- Gas transmission extremely reliable, but..
- We are well prepared for another major incident



Critical contingency management fine-tuned since 2011 Maui pipeline outage

Curtailment Band	Consumption	Description
0		Gas storage.
1	>15 TJ/day	Consumers with alternative fuel capability
2	>15 TJ/day	Consumers without an alternative fuel capability.
3	>10 TJ/annum	Industrial and commercial consumers
4	>250 GJ/annum	Medium-sized industrial and commercial consumers
5	>2 TJ/annum	Essential services designated consumers
6	< 250 GJ/annum	Small commercial customers
7	any	Critical care designated consumers

Special designations approved

- 193 critical care hospitals, residential care etc..
- 4 essential services public health and safety
- 4 critical processing mitigate risks of immediate shutdown
- 1 electricity supply











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Overall gas industry health check

The Gas Story remains positive

- Gas is still a good option for homes and businesses
- Retail demand has been flat (as for electricity demand), but showing signs of improvement
- Reserves/supply good esp from rework of established fields
- Mature, well-functioning infrastructure
- NZ domestic market still a good support/backstop for upstream investors



There are some head winds...

- Gas in strong competition with electricity and other fuels
- Energy networks affected by distributed generation technologies
- Dealing with the carbon challenge
- Big new gas find is proving elusive
- Oil price downturn affecting investment



All up, the gas sector is in good health...

- The role of gas is changing, as it has over 40+ years...
- It continues to make a major contribution to the New Zealand economy and energy mix
- It is providing consumers with a competitive energy choice
- Existing infrastructure is sufficient until next step change (big jump in demand, major new find)
- New Zealand remains an attractive exploration destination
- Uses will be found for new gas



