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Emerging Investment Themes in the New Zealand Gas Market

John Kidd – Head of Research



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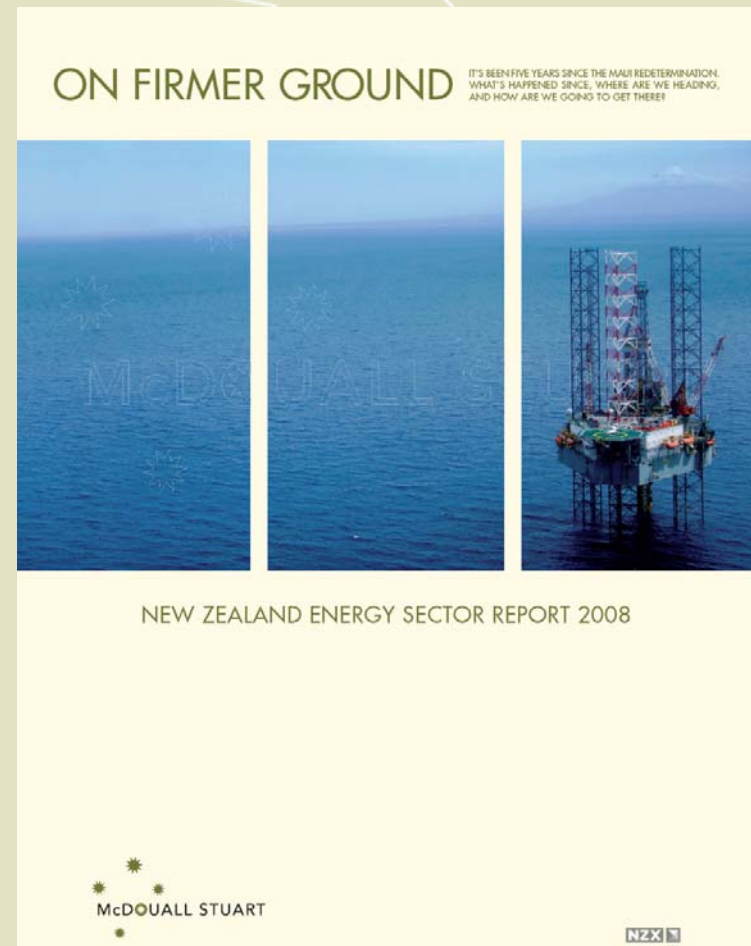
Outline

The NZ gas context

Maui redetermination+5: Upstream

Maui redetermination+5: Downstream

Outlook



Outline



The NZ gas context

Maui redetermination+5: Upstream



Maui redetermination+5: Downstream



Outlook



The NZ macro context

NZ an isolated, captive & shallow market

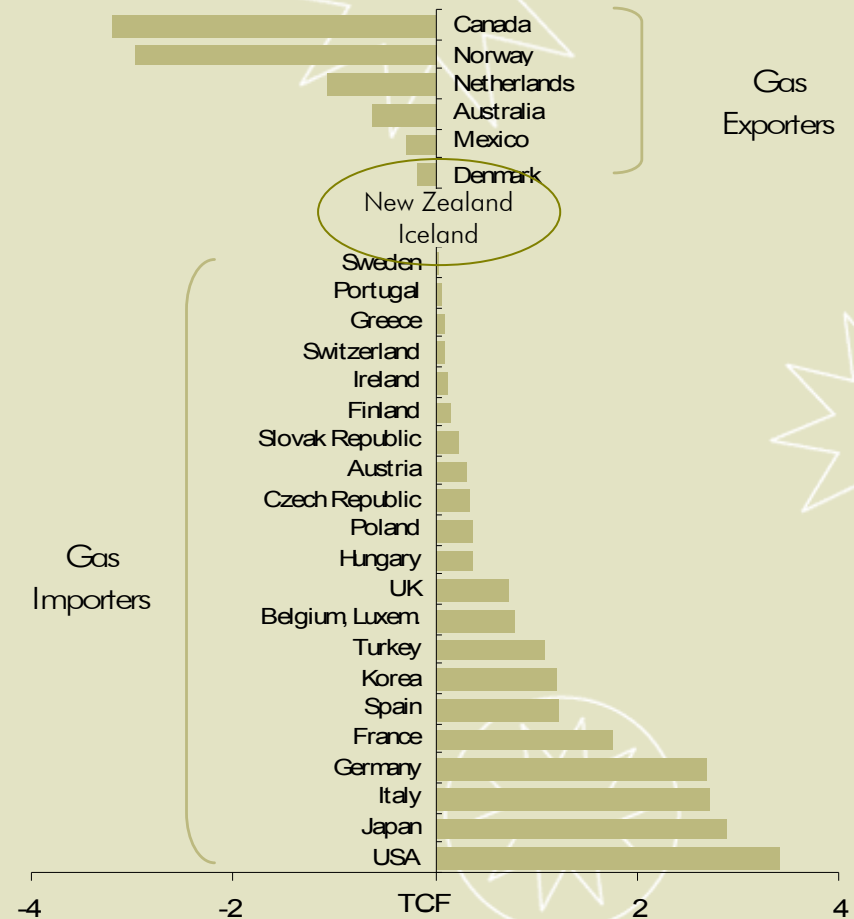
Proven hydrocarbon province, but with lumpy supply history

Substitutes achievable, but expensive

Regulatory environment has been fluid, but is firming

Substantial load growth potential, much of which is 'easy'.

OECD Nation Net Gas Imports



Source: BP Statistical Review of World Energy, McDouall Stuart Research



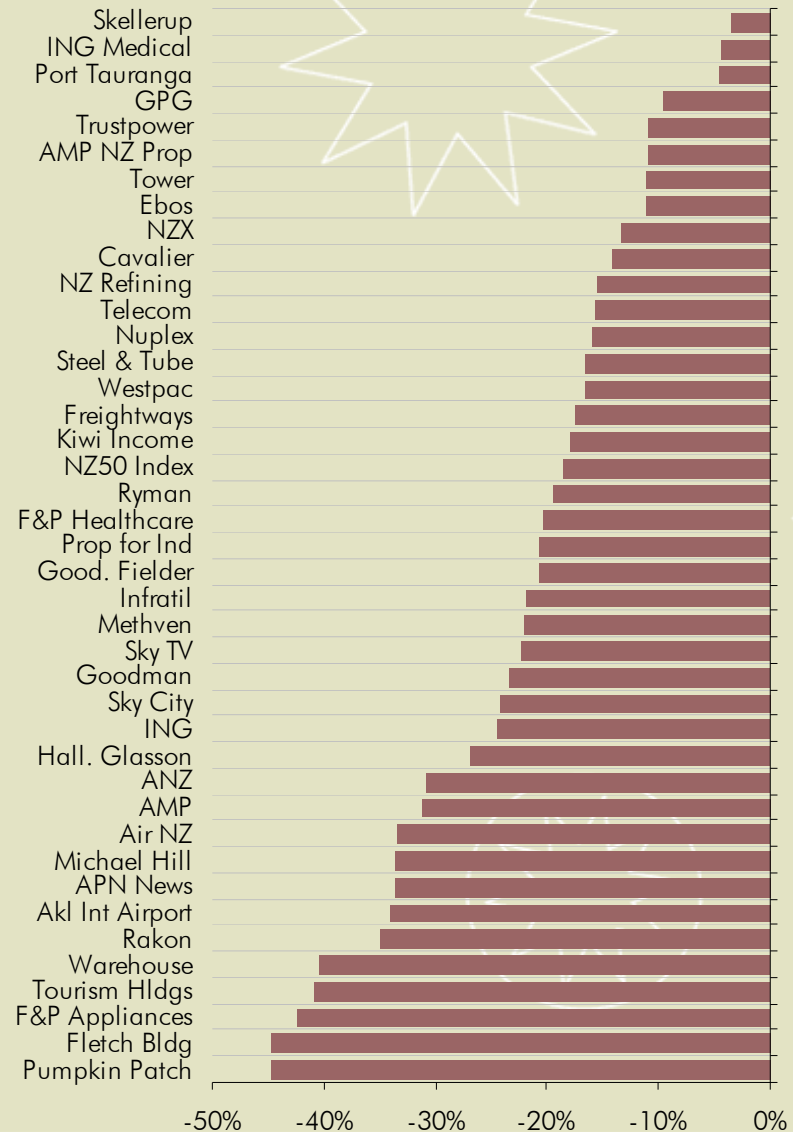
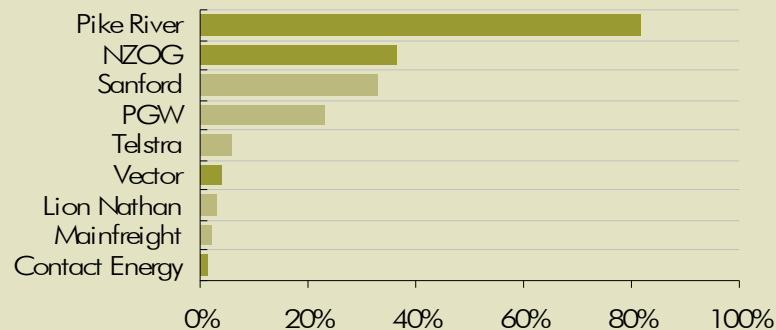
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The NZ micro context

NZ oil, gas & minerals sector relatively deep, but NZ-listed subset shallow ...

... yet the listed OG&M sector is the undisputed leader in an otherwise awful investment year 2008

NZX50 Top Performers, YTD 2008





The NZ gas context



Maui redetermination+5: Upstream



Maui redetermination+5: Downstream

Outlook



A lumpy supply history ... and future?

2003: Remaining contract Maui 367PJ

2004: New gas-to-market. Strong seller premiums, price and non-price

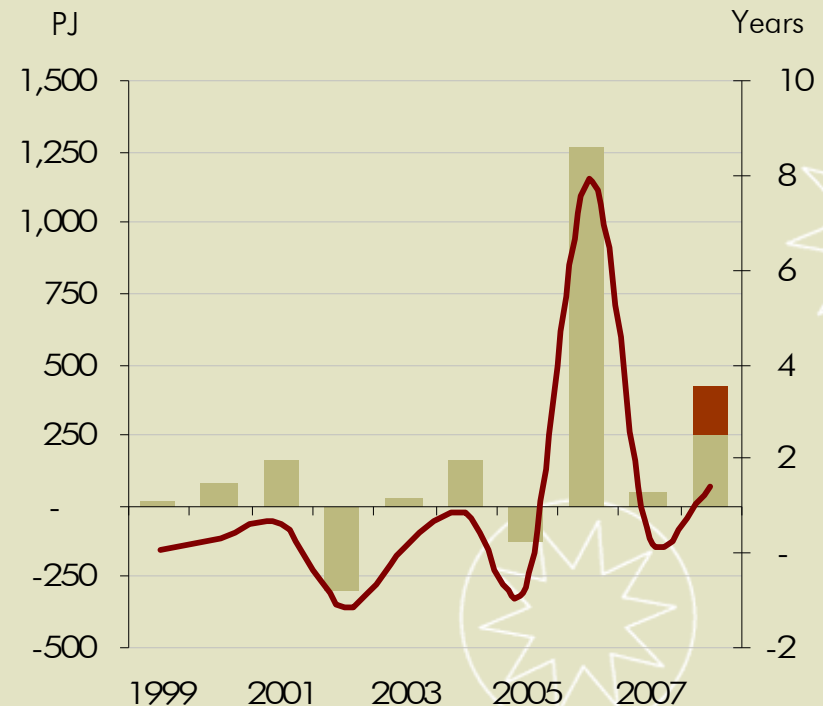
2006/07: liquidity rises with new gas

Focus shift from contract to commodity, and towards shorter-term gas book mgmt

More recent GSA terms may have eased?

Net-New Reserve Additions

10-Year Trend



Source: MED, McDouall Stuart Research



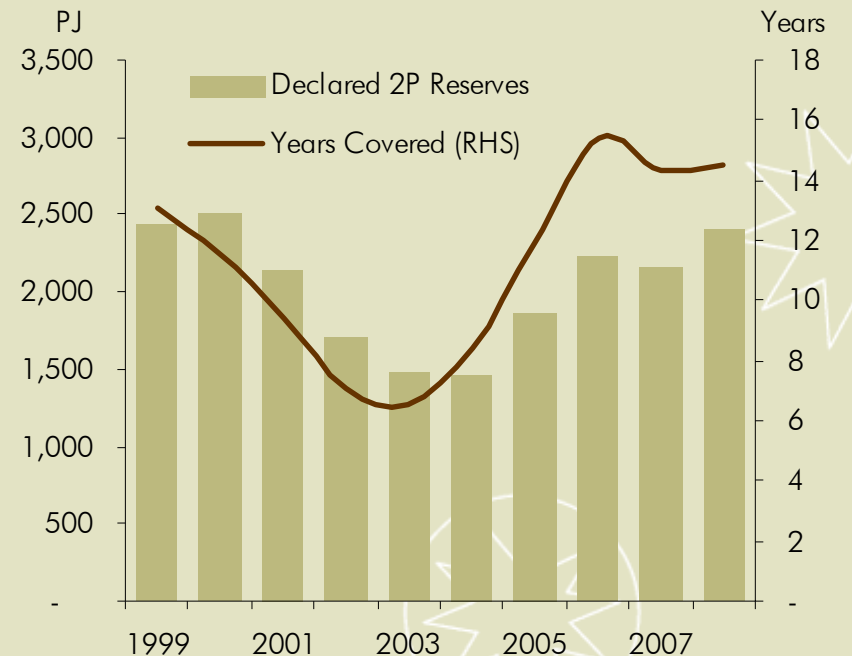
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Supply t+5: very positive

A clear maturing on the supply-side:

- ▮ Maui strawman settled, ROFR to market
- ▮ Pohokura to market
- ▮ Kupe sanction
- ▮ New entrant success
- ▮ Improved access to infrastructure
- ▮ Loosening of royalty regime
- ▮ Dilution of supply control
- ▮ Innovations in gas marketing

Reserve Coverage, 10 Year Trend



Source: MED Data Files, McDouall Stuart Research

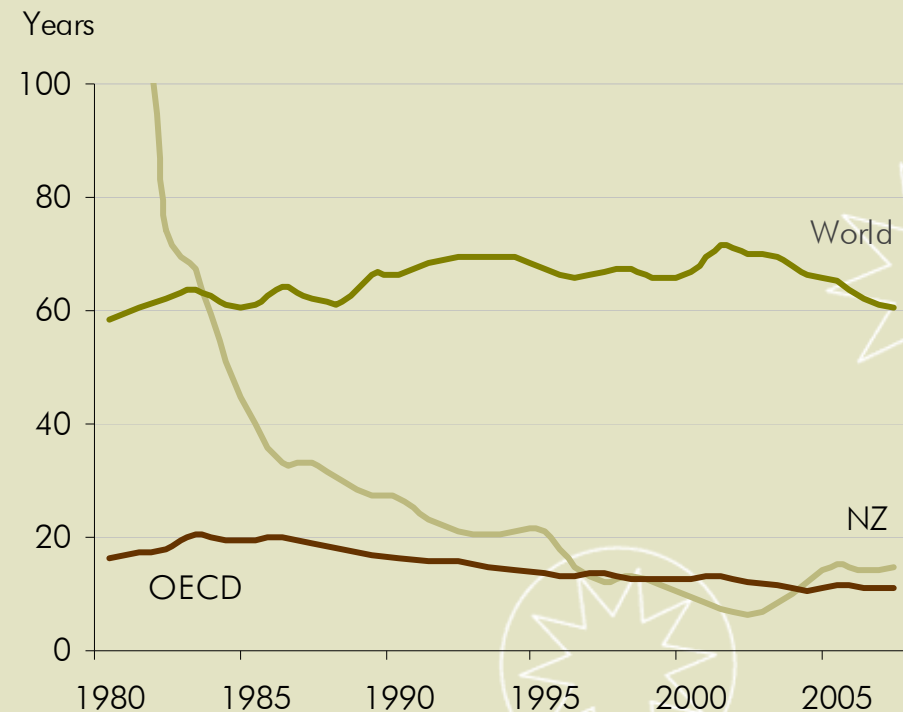


Supply coverage: Mid-range within OECD peers

Of 30 OECD nations:

- ▢ 2 countries swamp all others:
 - Norway 650 yrs
 - Australia 90 yrs
- ▢ average OECD coverage 11 years
- ▢ 12 nations with indigenous gas, of which, NZ ranks 5th
- ▢ 6 indigenous gas holders also import

2P Reserve Coverage

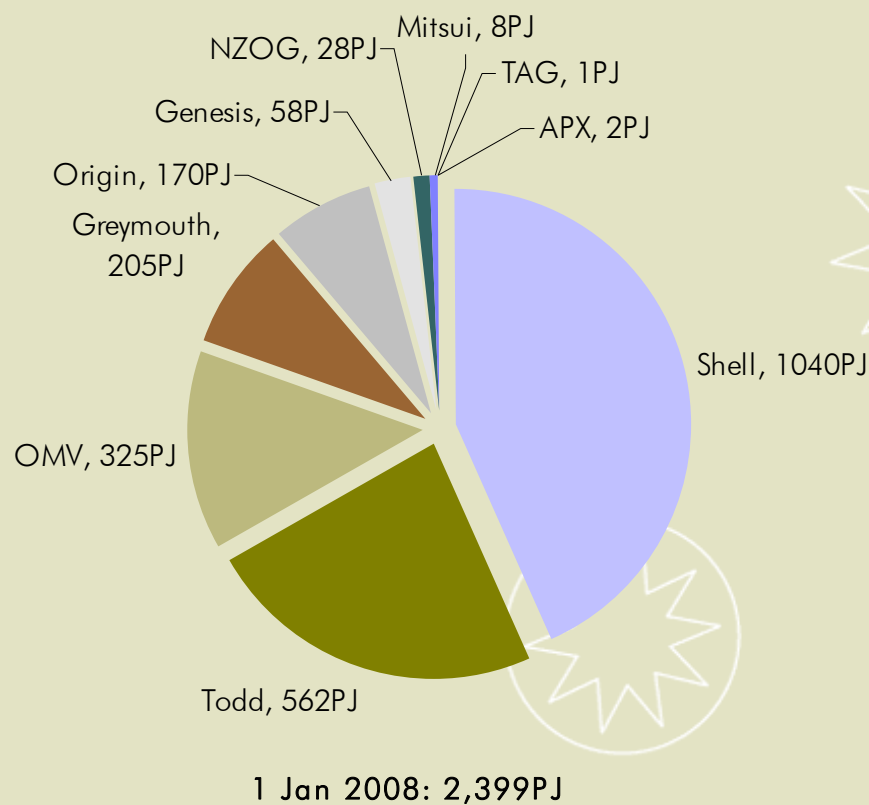
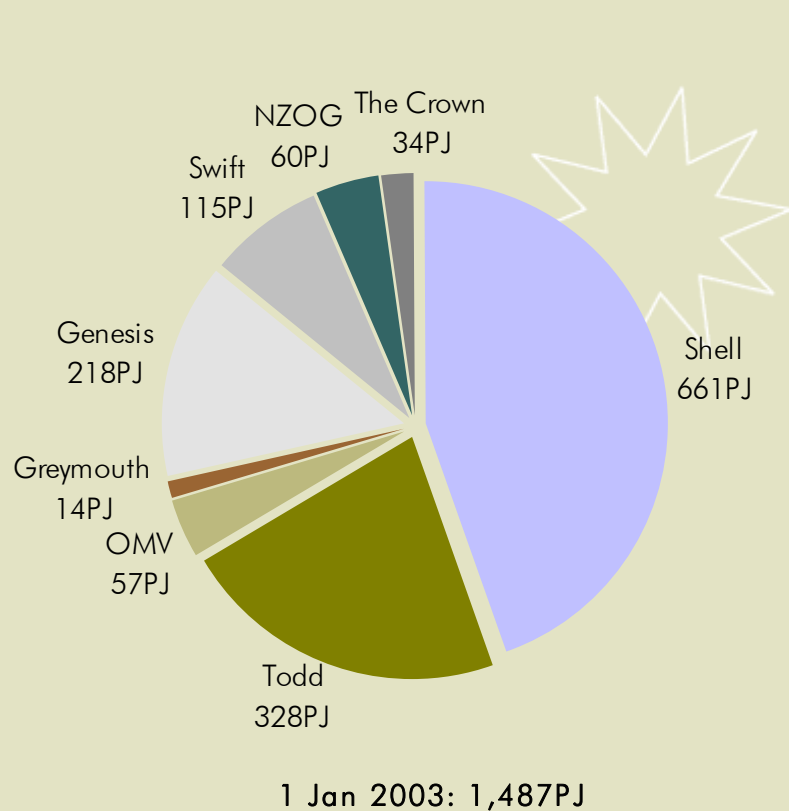


Source: Data from BP Statistical Review of World Energy, June 2007, MED



More product, more sellers

2003 vs 2008, Producing + Non-Producing Fields



Source: MED, McDouall Stuart Research



Non-traditional supply options emerging?

Coal Seam Gas



Huntly
300PJ Potential?



PMP50100
ERR 170BCF



PEPs38266, 38238
300PJ Potential?

Underground Coal Gasification



Huntly pilot?





The NZ gas context



Maui redetermination+5: Upstream



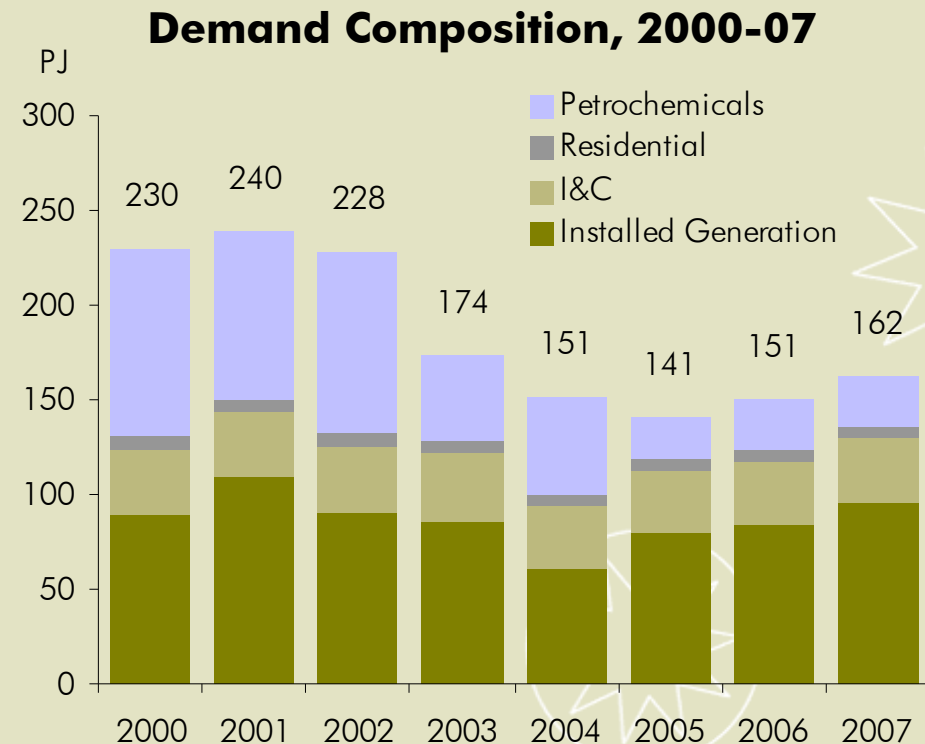
Maui redetermination+5: Downstream

Outlook



Downstream: Demand: firming-up, with risk to upside

- e3p commissioned, +20PJ pa
- Huntly-to-coal transition complete
- Few further at-scale load shedding options left, Methanex excepted
- Liquid secondary market, providing sink for fully-laden gas books
- Methanex a willing buyer, and an important swing user.



Source: MED



Demand-side: also maturing

Options: risk management + leverage

Substitute fuels



Downstream-to-upstream



Non-indigenous gas



Gas storage



Options

Option value (not cost) the key measure of success

Is the option value in the creation, or the exercise?

- Contact Energy gas storage option: Cost of option \$54m.
To exercise the option: +\$150m capex
- At \$7/GJ marginal gas price, every \$0.50/GJ leveraged ~ \$30m pa
- At 60PJ pa, payback <2 years, with no exercise cost.

Same logic for non-price terms

Investment decisions stand alone.

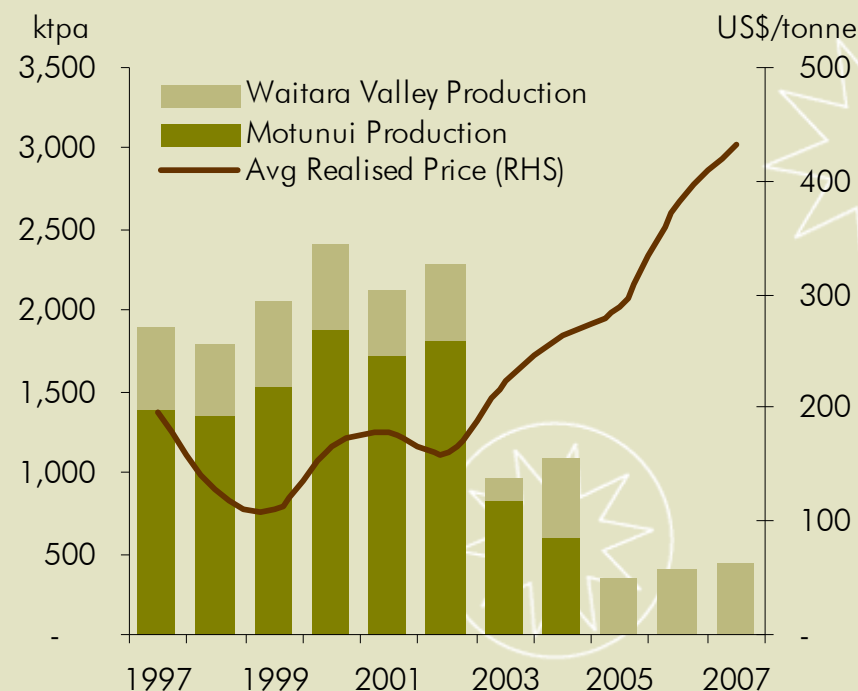


Methanex: sunk-cost kit & market sweet-spot left fuel as the key decision variable

NZ's biggest and most important non-generation gas user:

- Waitara Valley: 5 year life extension completed Nov-07, 530ktpa cap.
- Motunui: 1 x 900ktpa train, 5 year life, to be recommissioned 3Q08

Methanex NZ Production & Pricing



Source: Methanex, McDouall Stuart estimates

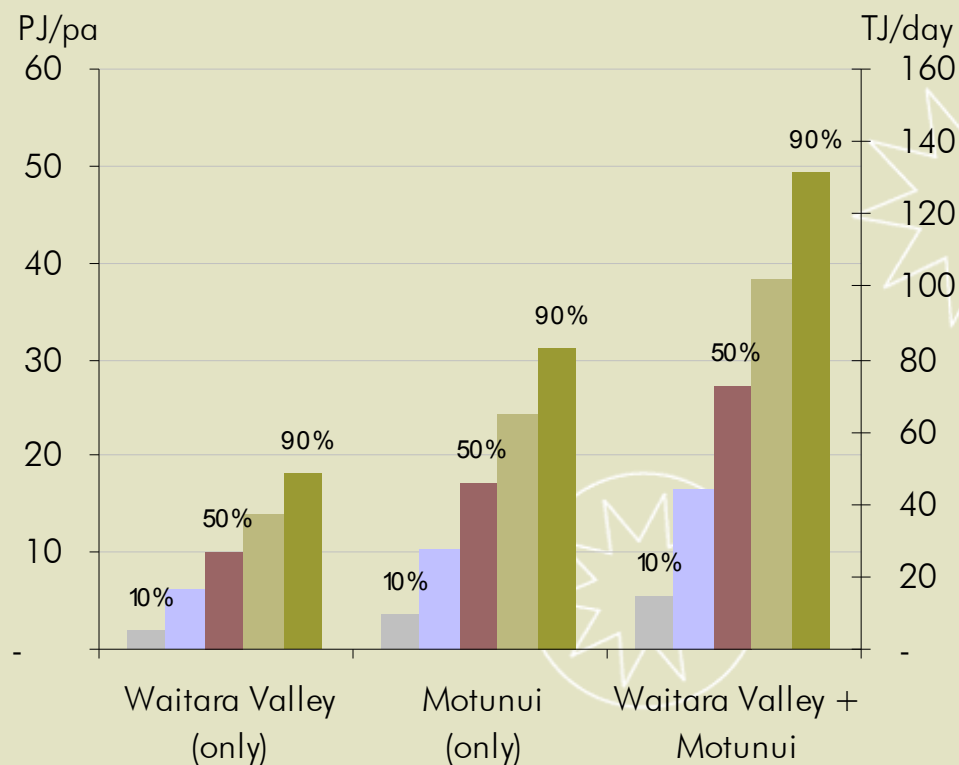


Methanex: 50+ PJ pa of load potential

Significant supply & demand balance implications:

- Waitara Valley: 530ktpa, 5 yrs @ 20PJ pa (cap) = 100PJ potential
- Motunui: 900ktpa, 5 yrs @ 34PJ pa (cap) = 170PJ potential
- Motunui + WV: 1.43mtpa, 5 yrs @ 50+PJ pa = 250+PJ potential

Methanex's Gas Demand Spectrum



Source: McDouall Stuart estimates





The NZ gas context



Maui redetermination+5: Upstream

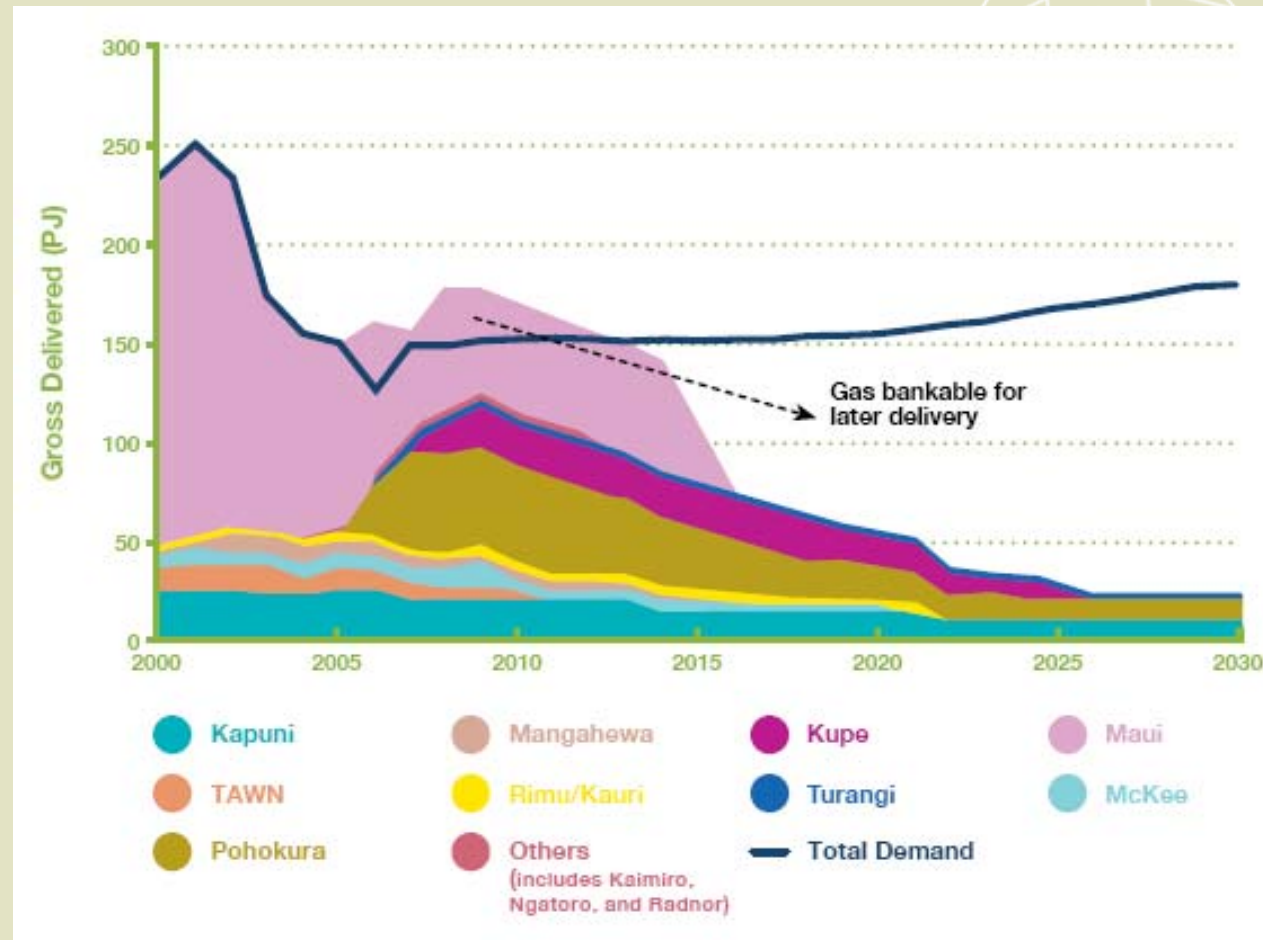


Maui redetermination+5: Downstream

Outlook



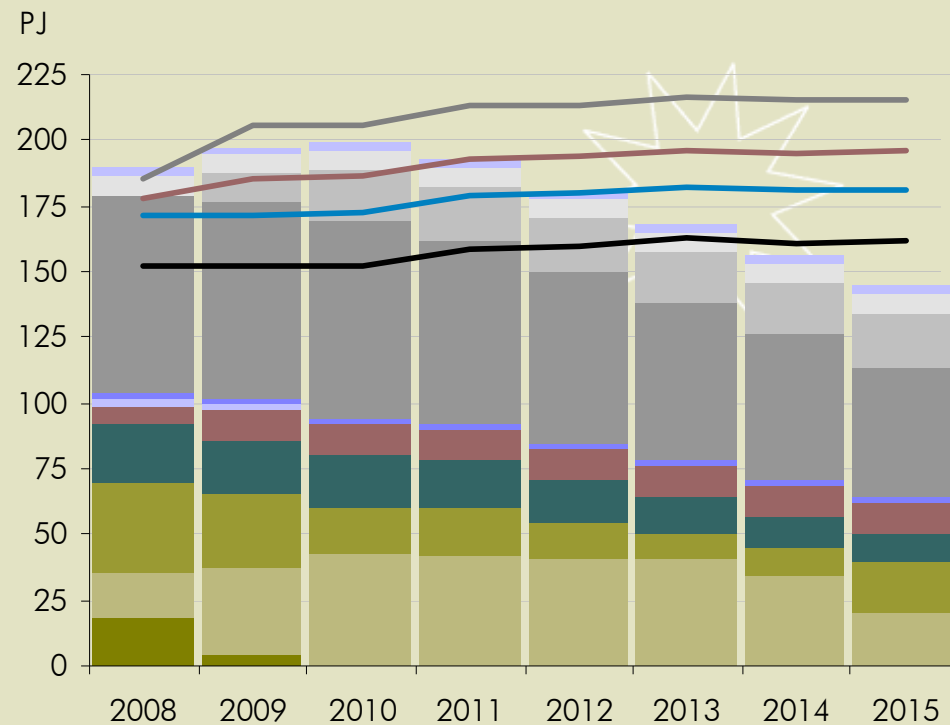
Supply & demand balances: Then ...



Source: MED Energy Outlook to 2030

... and (maybe!) now

2008-13 'Bankable' gas methanol-bound



Source: McDouall Stuart Research

Supply

- Other small fields
- Turangi
- Kupe
- Pohokura
- Rimu/Kauri
- TAWN/Piakau
- McKee/Mangahewa
- Kapuni
- Other Maui
- Maui ROFR
- Maui 367

Demand

- + Motunui + WV @ cap.
- + Motunui @ cap.
- + Waitara Valley @ cap.
- Base Demand: No PChems

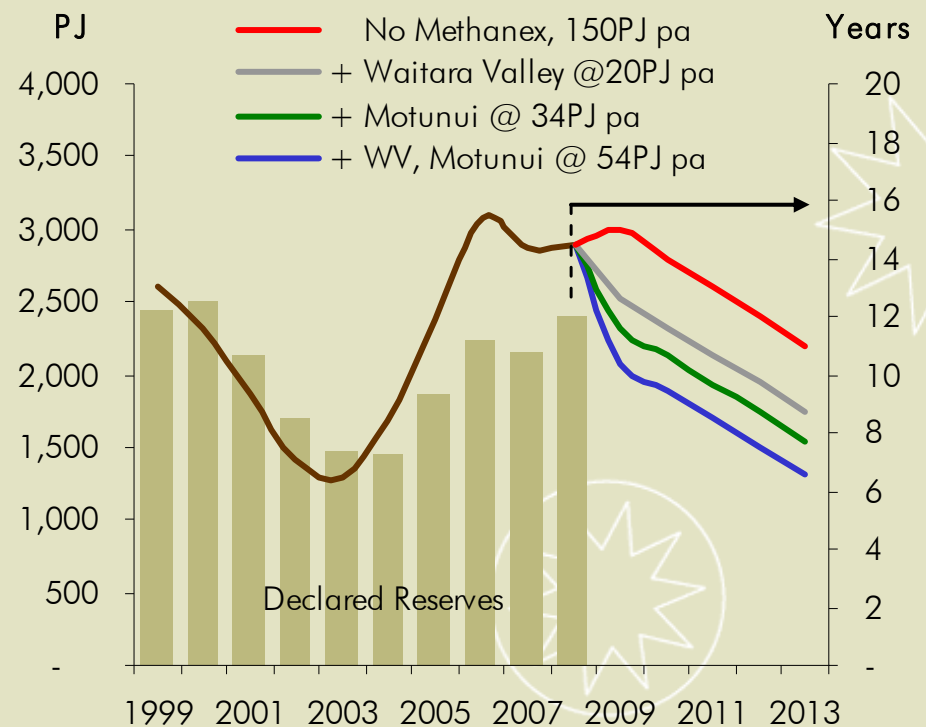


Supply t+5: no grounds for complacency

A major challenge ahead. From a 'what we know now' 2P reserve base:

- ▮ 2014/15 gas gap advanced to 2011/12 under Motunui (only)
- ▮ sooner under a Motunui + Waitara Valley scenario
- ▮ forward load of Huntly units 1-4?
- ▮ ability to meet needs of slated new generation anything but certain

2P Reserve Coverage Scenarios, t+5



Source: MED, McDouall Stuart Research



New reserve wins vital to maintain supply-side margins

To be standing still in 5 years:

- ▶ No Methanex
 - 150PJ pa wins needed
- ▶ Waitara Valley
 - 200-250PJ pa wins needed
- ▶ Motunui
 - 250-300PJ pa wins needed
- ▶ Motunui + WV
 - 300-350PJ pa wins needed

Reserve Coverage Scenarios

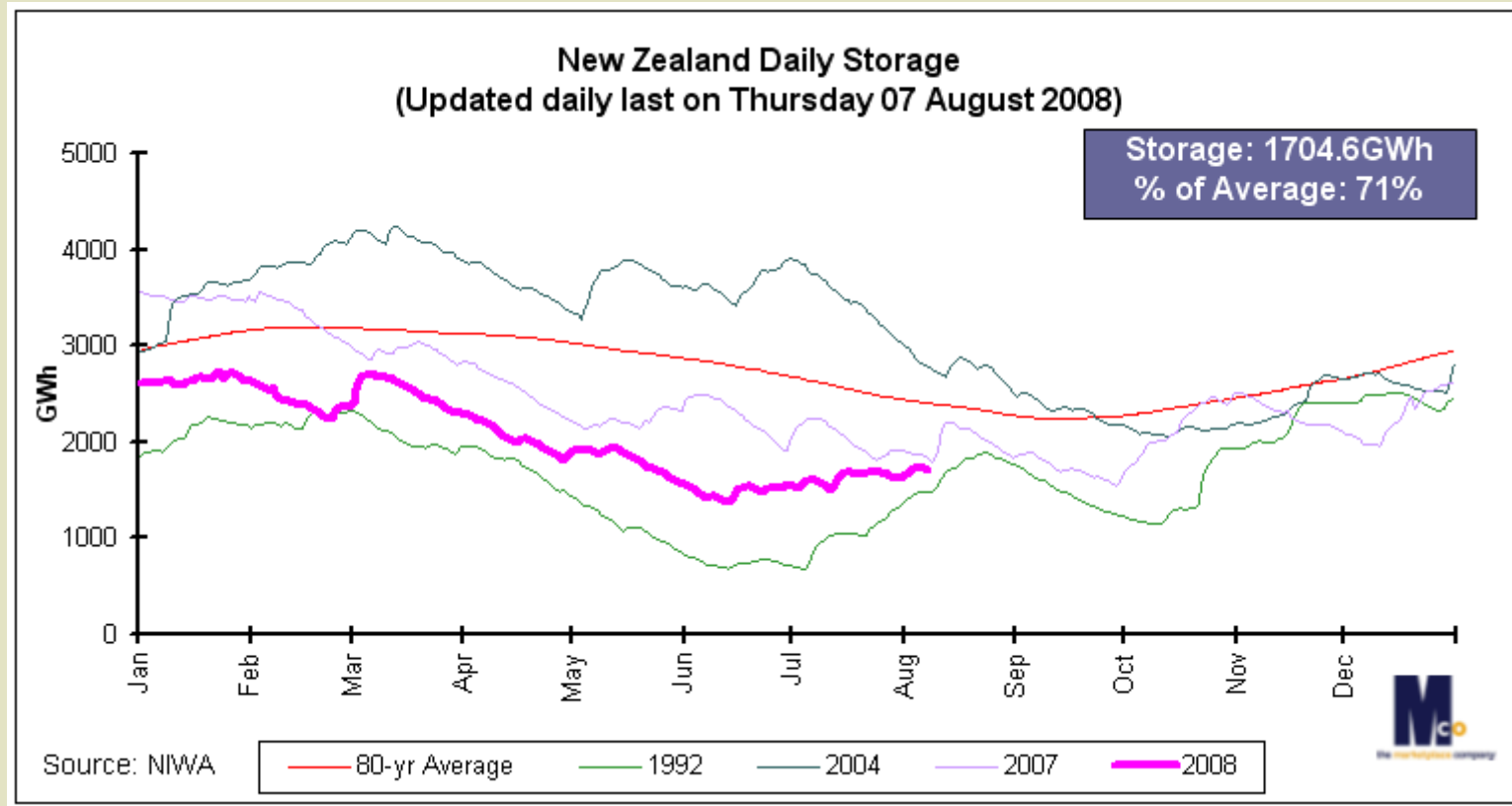
Years Covered, t+5 (CY13)

Gross Reserve Growth pa	No Methanex 150PJ	----- Methanex ----- Waitara V. 20PJ	Motunui 34PJ	WV+Mot. 54PJ
Nil	11.0	8.8	7.7	6.5
5%	14.9	12.0	10.7	9.2
10%	19.7	16.0	14.3	12.4
15%	25.4	20.8	18.8	16.3
20%	32.4	26.6	24.1	21.1
25%	40.6	33.5	30.4	26.8

Source: McDouall Stuart estimates



Winter: 2001, 2003, 2006, 2008 ...



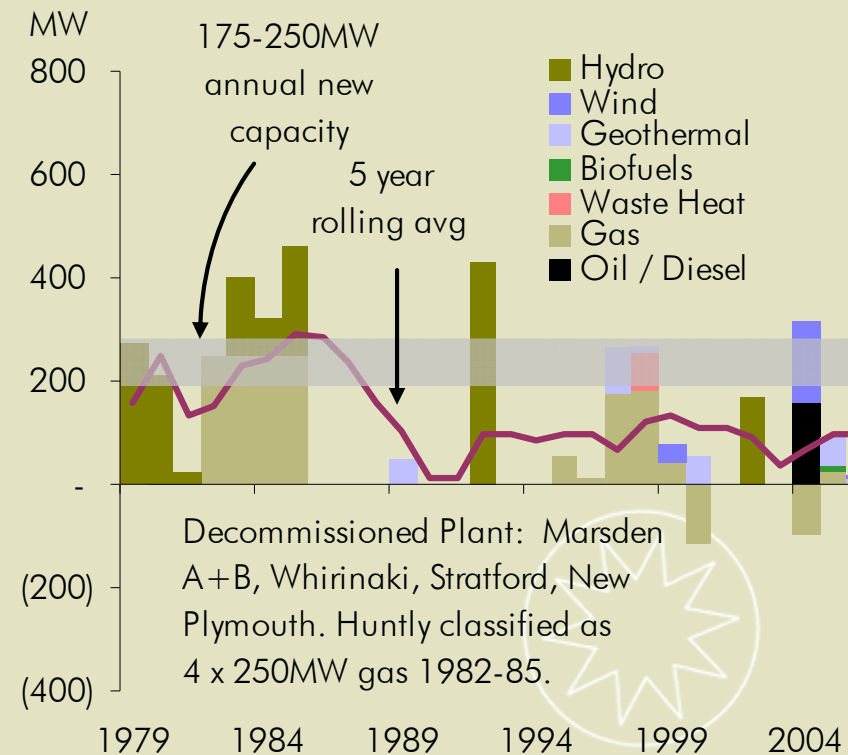
Are new generation build decisions getting any easier?

Is target net new build achievable?

1989-2008: ~100MW pa

2008-2025: ~175-250MW pa?

Net New Generation Build, 30 Years



Source: McDouall Stuart Research



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Key outlook themes, posers

Upstream supply outlook the firmest it's been in a decade, but access to long-term gas still a major issue

Medium-term focus shift towards shorter term gas management

Methanex a key medium-term player.

In an isolated, disconnected energy market, is sector transparency sufficient to enable informed investment decisions?

Maturity, option-making indicative of a healthier forward market

Demand stable, with considerable scope for relatively easy upside

Gas has a clear role in supporting security of economic electricity supply.





john.kidd@mcdouallstuart.co.nz




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