

# 2009 Gas for electricity generation

## Availability and price forecasts

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# Introduction

- In April 2009, the Commission published a gas availability and price forecast. The analysis used the 2008 gas reserve data published by the Ministry of Economic Development (MED).  
<http://www.electricitycommission.govt.nz/pdfs/opdev/modelling/pdfsmodelling/gas-generation.pdf>
- The Commission has now updated its forecast using MED's latest figures (January 2009).
- The updated forecast is presented in the next slides.
- The Commission's forecast will feed into the 2009 draft generation scenarios which are going to be consulted on in 2009.

# 08/09 gas reserve (Energy Data File)

2008 gas reserve P50: 2460 PJ

2008 gas net production: 155 PJ

2009 gas reserve P50: 1975 PJ

Reserve re-estimation: -330 PJ →

Short term production i.e.  
over 10 years

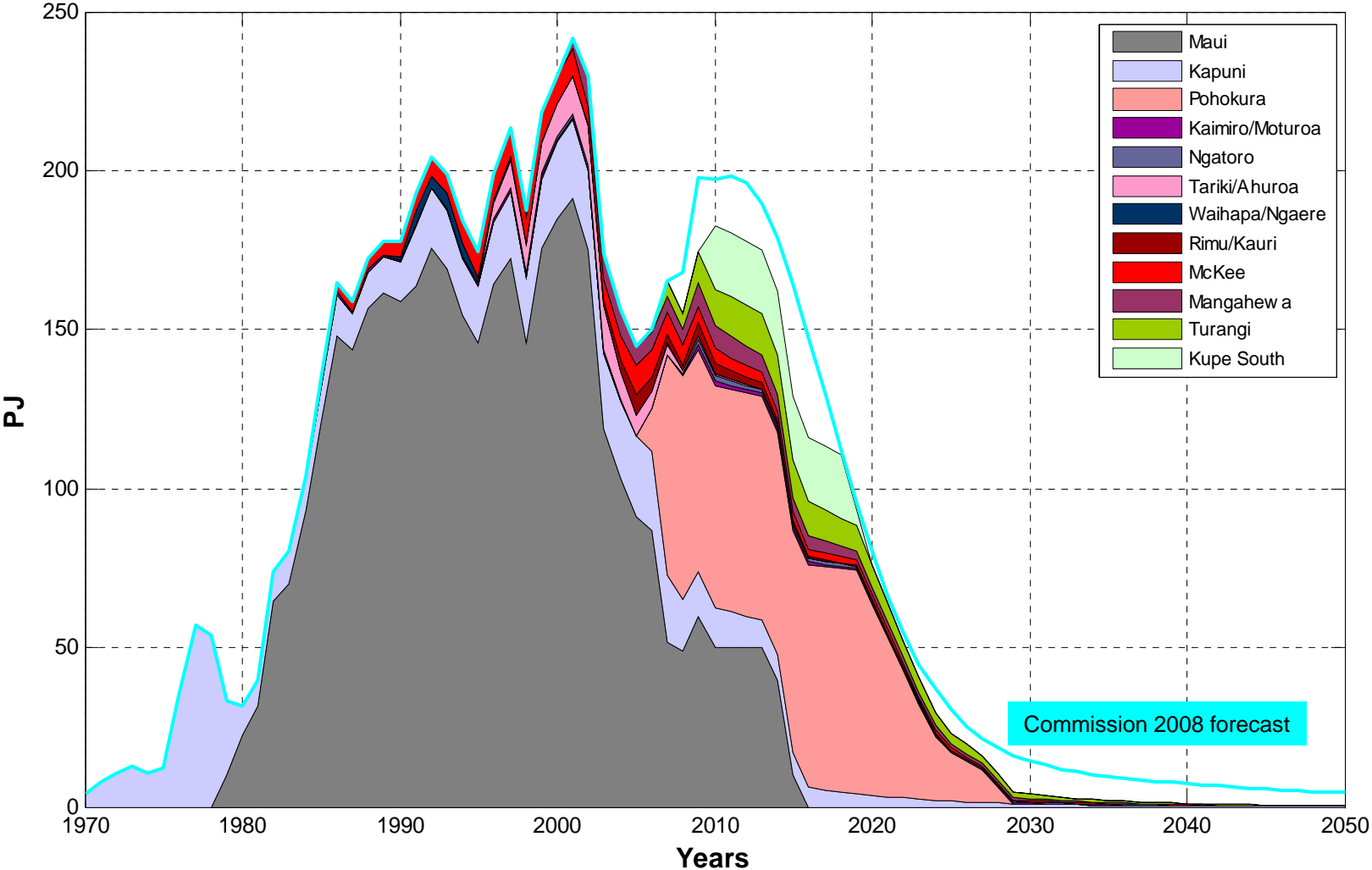
$$-330/10 = -33 \text{ PJ/y}$$

For electricity generation it  
means  $-33 * 0.6 = -20 \text{ PJ/y}$

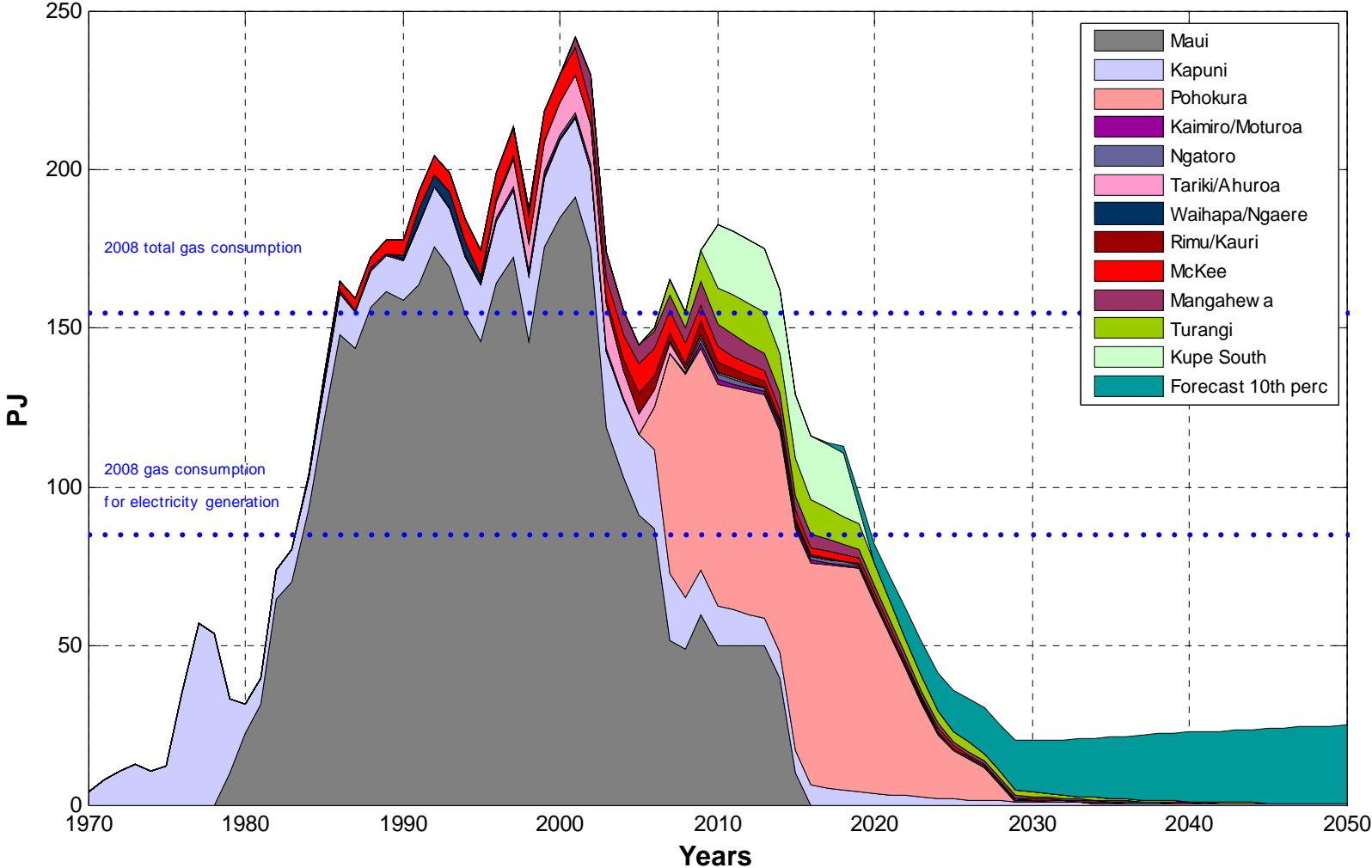
## Major changes

Field	2008 remaining reserve (PJ)	2009 remaining reserve (PJ)	2008 net production (PJ)	~ Difference (PJ)
Maui	489.6	306.6	48.85	-134
Kapuni	239.4	118	16.48	-104
Kupe	266.5	188.1	0	-78

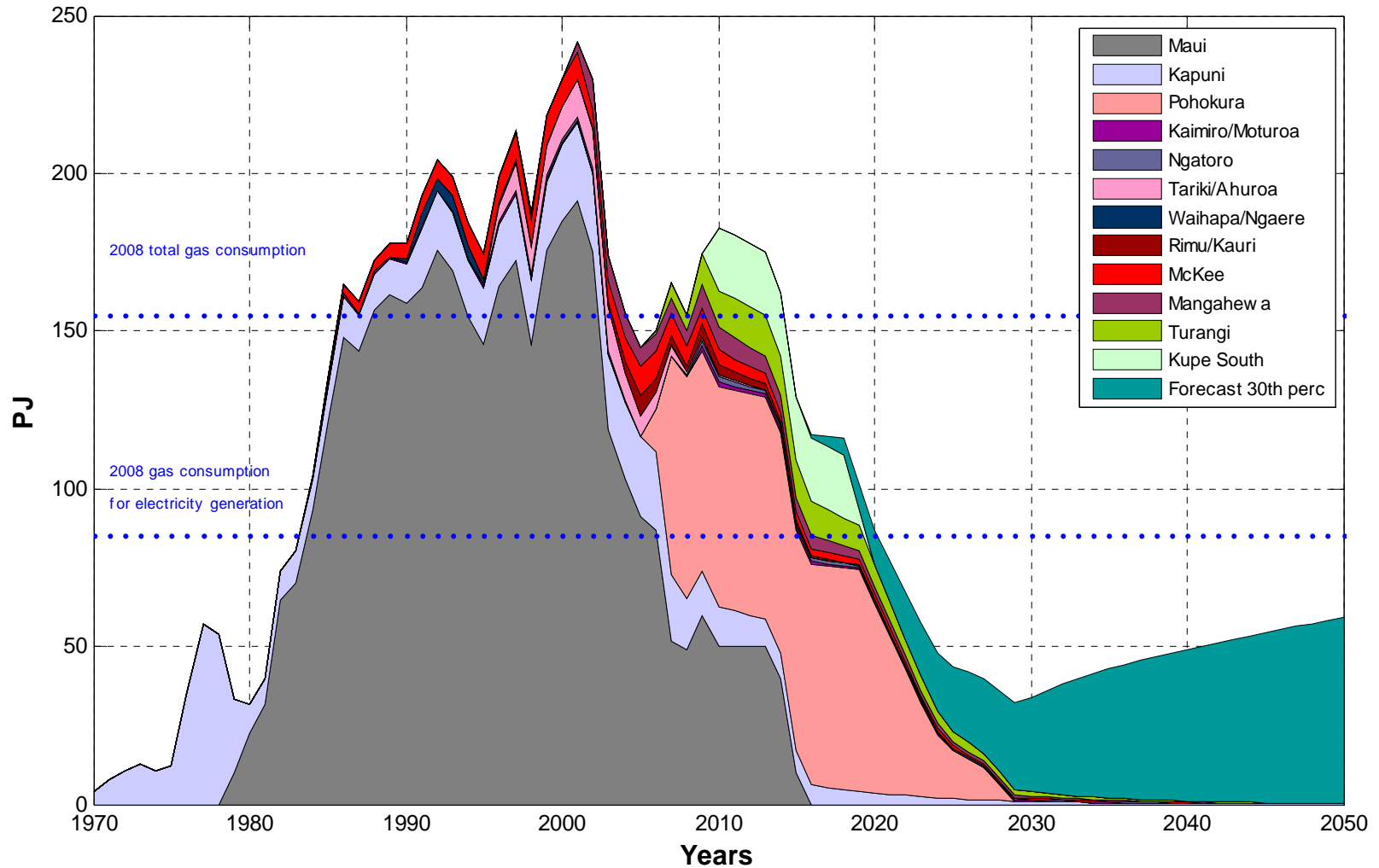
# 2009 production of existing fields forecast



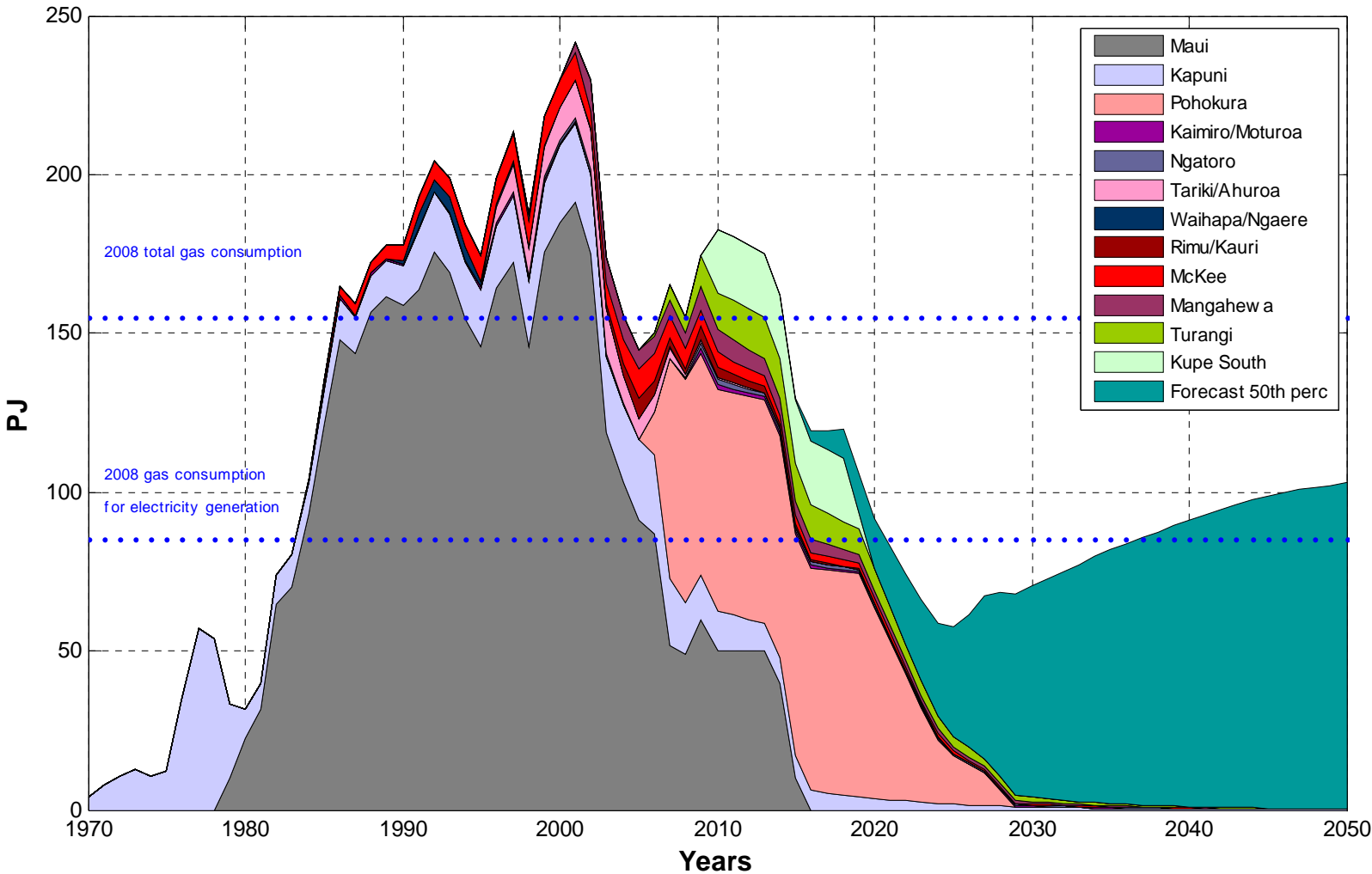
# Monte Carlo simulation outputs – 10th percentile



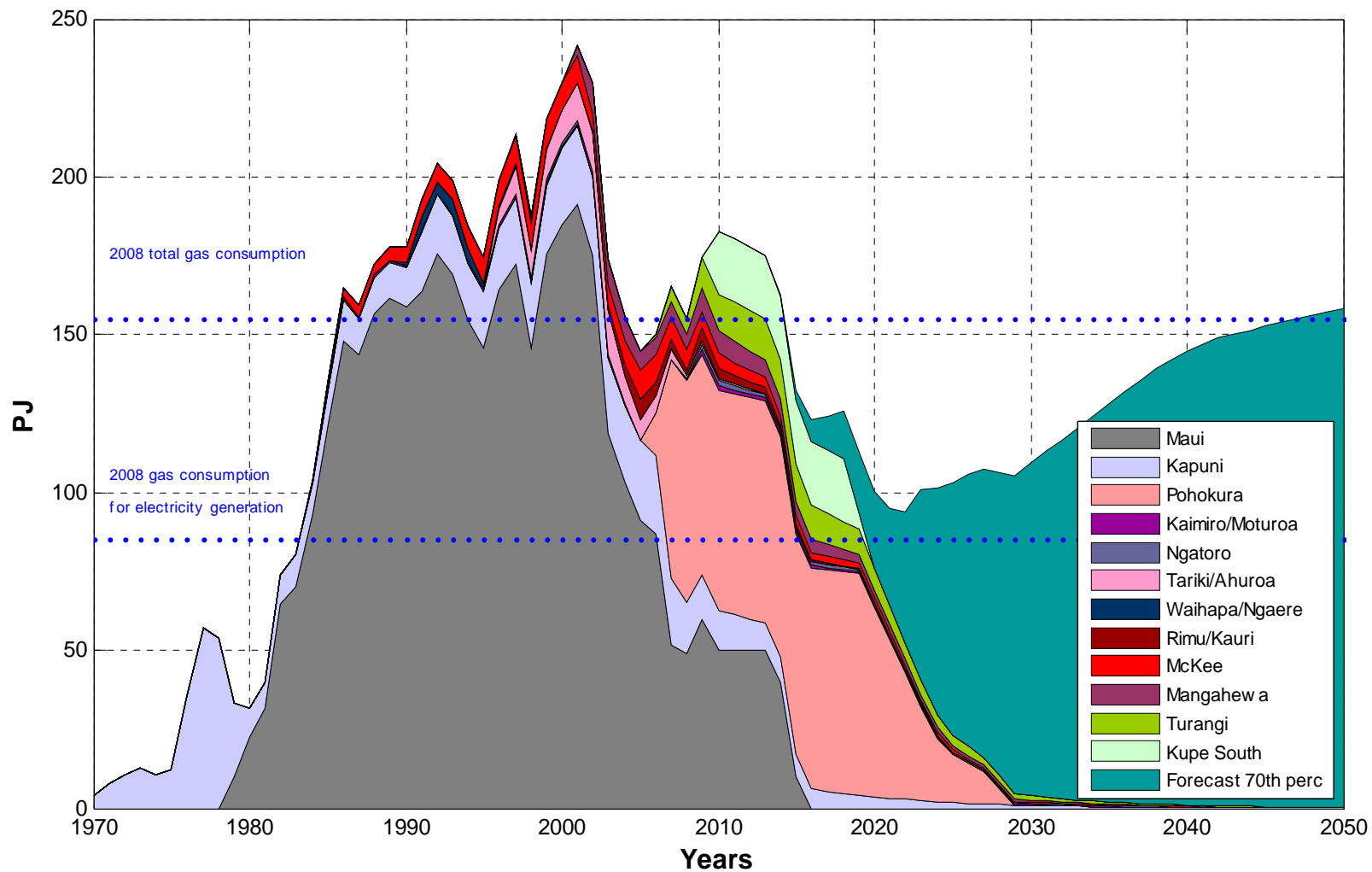
# Monte Carlo simulation outputs – 30th percentile



# Monte Carlo simulation outputs – 50th percentile

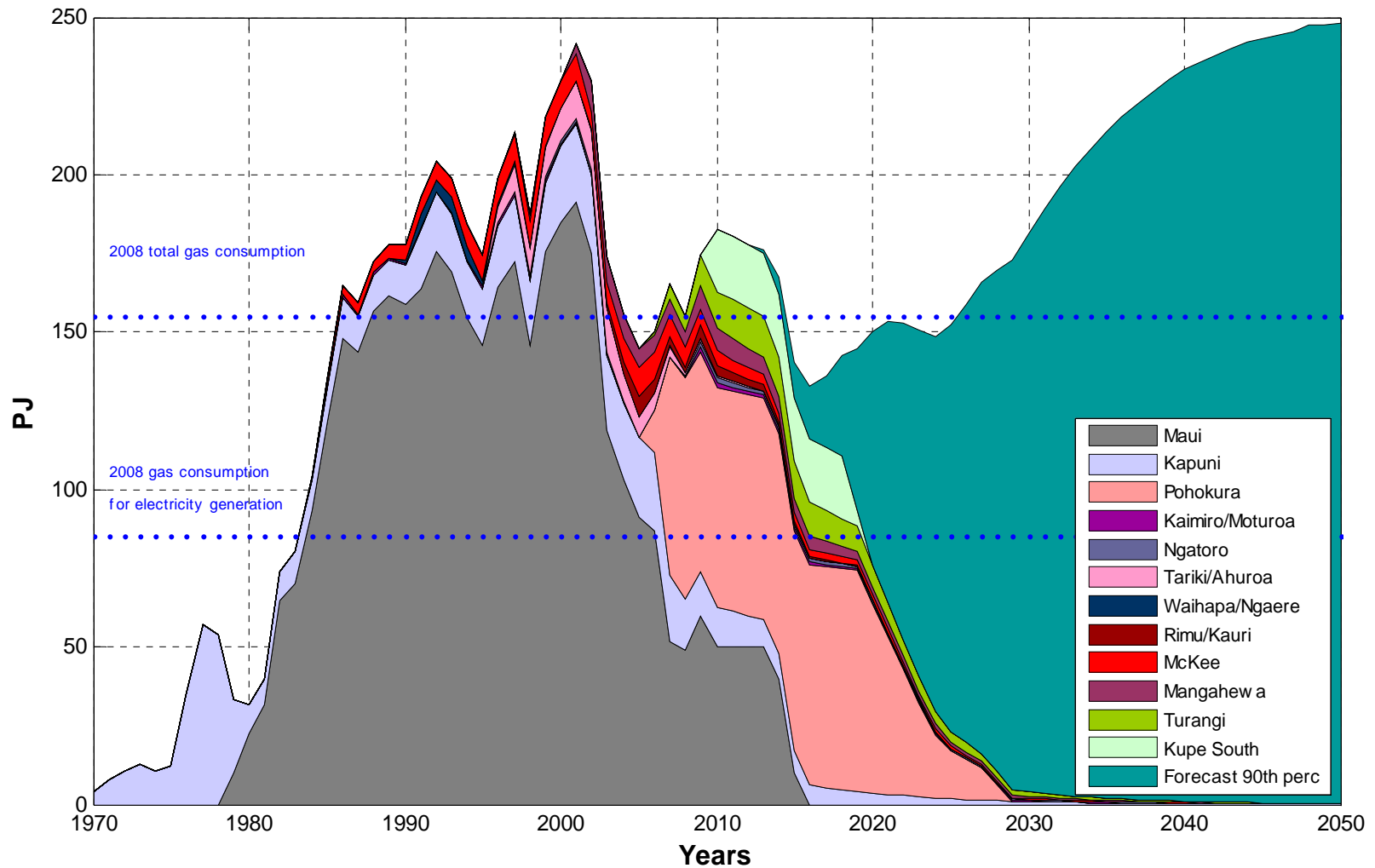


# Monte Carlo simulation outputs – 70th percentile

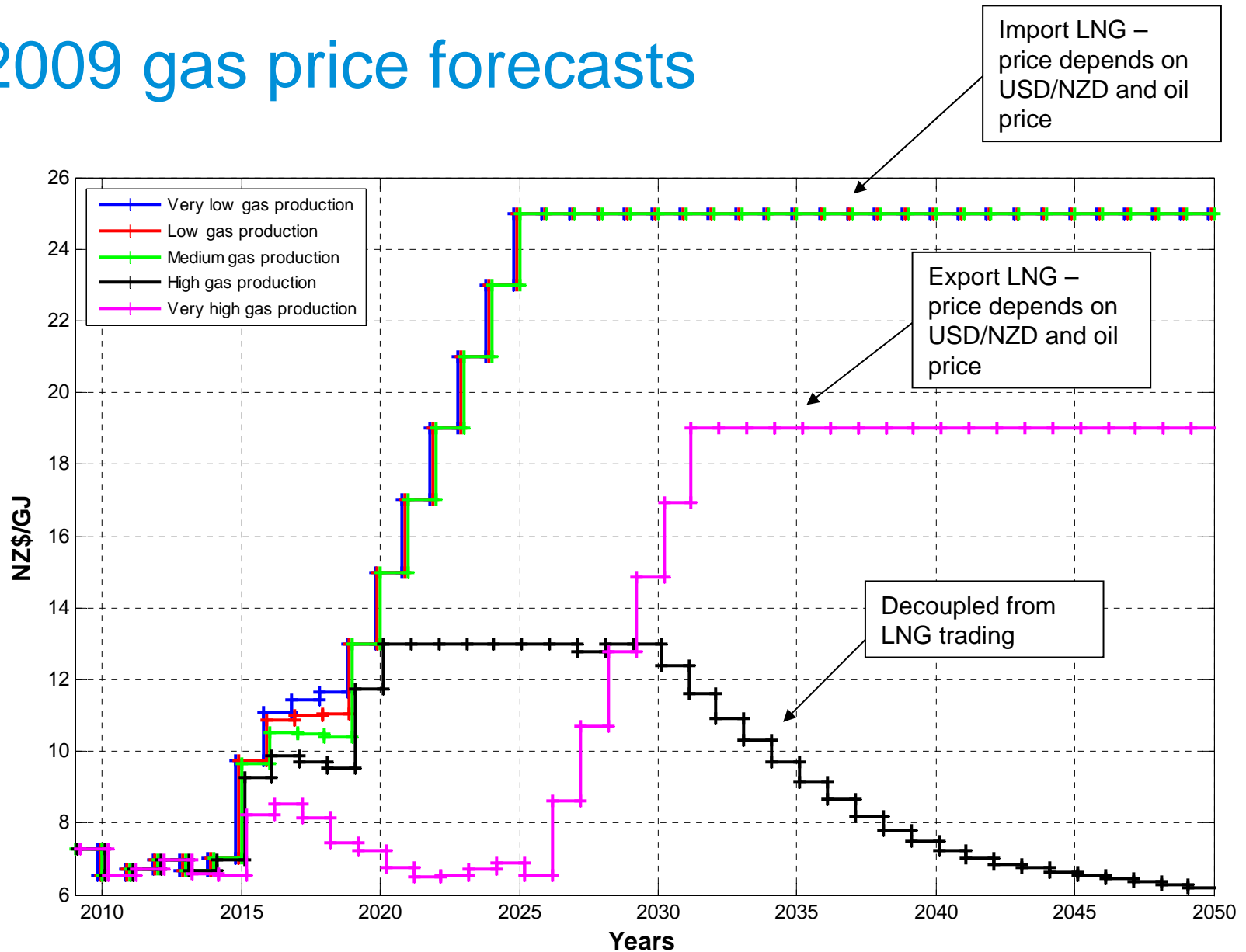




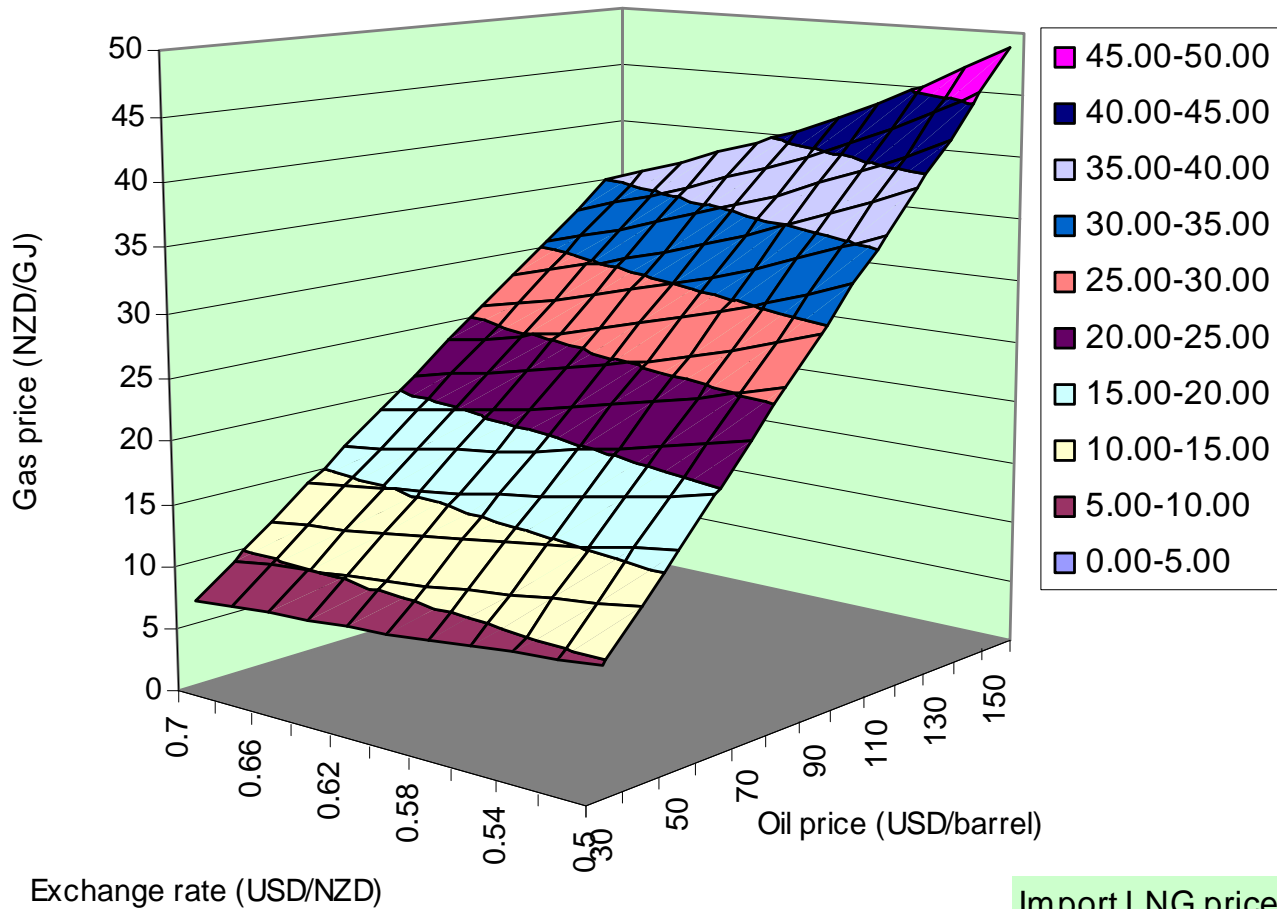
# Monte Carlo simulation outputs – 90th percentile



# 2009 gas price forecasts



# Import LNG price variation



Import LNG price

# Summary

- 2009 gas reserve estimate has dropped by 330 PJ compare to last year which could mean, over the short term, 20 PJ/year less for electricity generation.
- The Commission's updated forecast shows that between 2015 and 2020 the gas price rises faster than in the 2008 forecast.
- Updated gas price and availability forecasts will feed into the draft 2009 GPAs.