

FY19 Q2 Performance Report

22 January 2019

GENESIS ENERGY LIMITED



FY19 Q2 Performance Summary

Customer

Genesis continued to invest in loyalty, customer service and product innovation in the quarter with Brand NPS up 6 ppts to 8% versus the same time last year, churn down to 17% and dual fuel customer numbers steadily increasing. Netback margins were up for Electricity and LPG but down for Gas due to timing of price increases. Notable product campaigns include Bottle Gas Monitoring focused on the Christchurch area and the Dual Fuel "Get it all when you go all in" campaign. Energy IQ also incorporated Gas into the Energy Mix and Home Comparison tools for the first time last quarter.

Wholesale

The unprecedented gas and hydro shortage in the quarter resulted in Genesis running two dual fuel Rankine units at Huntly on coal for long periods. The 5-week planned 400 MW CCGT outage at Huntly also contributed to a tight market, with Genesis managing risk to its own portfolio through advanced hedging strategies. Consequently, other market participants called on Genesis for energy and coal had to be imported to supplement local supplies. Genesis has successfully demonstrated the importance and value of its fuel diversity as well as a flexible supply chain throughout a volatile market period.

Kupe

Scheduled statutory maintenance, coinciding with Huntly U5 outage, reduced production at Kupe for the quarter with gas production down 12% versus the same time last year, and corresponding impacts on LPG and oil production. LPG yields were up 2.5% whilst oil yield was down due to the natural decline in the field. Oil sales were down 47% versus the prior comparable period due to the timing of shipments and reduced field production.

Note: The prior comparable period (PCP) is defined as Q2 FY18, unless an alternative comparison is stated.

Genesis' generation portfolio responded well to a fuel constrained wholesale market demonstrating the importance and value of fuel diversity coupled with a flexible supply chain during volatile market conditions.

Tracey Hickman, Executive General Manager – Generation & Wholesale



Customer Segment Performance

Highs

Genesis Churn¹
17.2%
↓ 2.5 ppt

Total Electricity Sales
1,415 GWh
↑ 4.7%

Gas Sales
1.8 PJ
↑ 22.7%

LPG Sales
Up to 8.9 kt due to an increase in customers
↑ 11.8%

Electricity Netback
Up to \$99.80/MWh due to timing of operating costs
↑ 10.5%

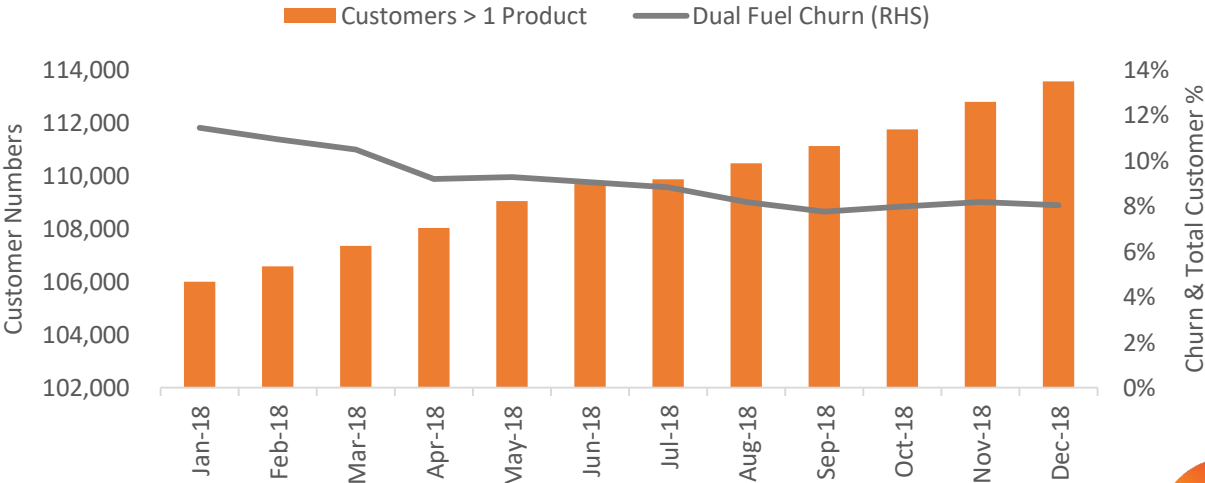
Customers > 1 product
113.5k
↑ 7.4 %

Lows

SME Electricity Sales
266 GWh
↓ 0.9%

Gas Netback
Down to \$8.82/GJ due to timing of price increases
↓ 8.4%

DUAL FUEL CUSTOMER NUMBERS & CHURN (3 MONTH ROLLING AVERAGE)



1. Genesis residential 3 month rolling average churn (excluding EOL)



Wholesale Segment Performance

Highs

Rankine Output

Up 601 GWh to cover market gas shortages and U5 outage

↑ 80.7%

Huntly U5

Returned to service, on time and on budget, following major planned outage

Average Price Received for Generation¹

\$213/MWh

↑ 124.6%

High Plant Reliability

Forced Outage Factor down to 0.2%

↓ 95.6%

LWAP / GWAP ratio

99%

↓ 2 ppt

Lows

Gas Availability

Purchases down to 8.7 PJ due to market gas shortages

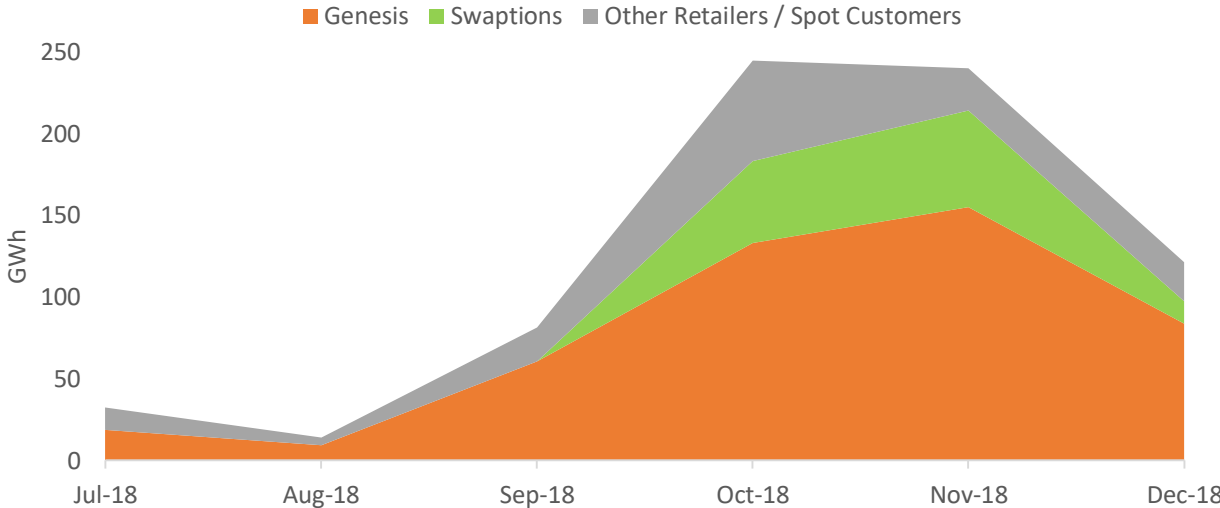
↓ 26.8%

Total Generation

Down to 1,622 GWh due to gas shortages and planned outages, offset by market hedging

↓ 8.4%

HUNTLY RANKINE UTILISATION (GWH)



1. GWAP represents the average price received for generation prior to the outcome or settlement of any financial contracts.



Kupe Segment Performance

Highs

Planned LPG Amine Plant Maintenance

Completed ahead of time and below budget

LPG Yield

3.9 t/TJ

↑ 2.5%

Realised Oil Price

NZ\$100/bbl

↑ 31.9%

Lows

Gas Production

Down to 2.6 PJ due to planned outages

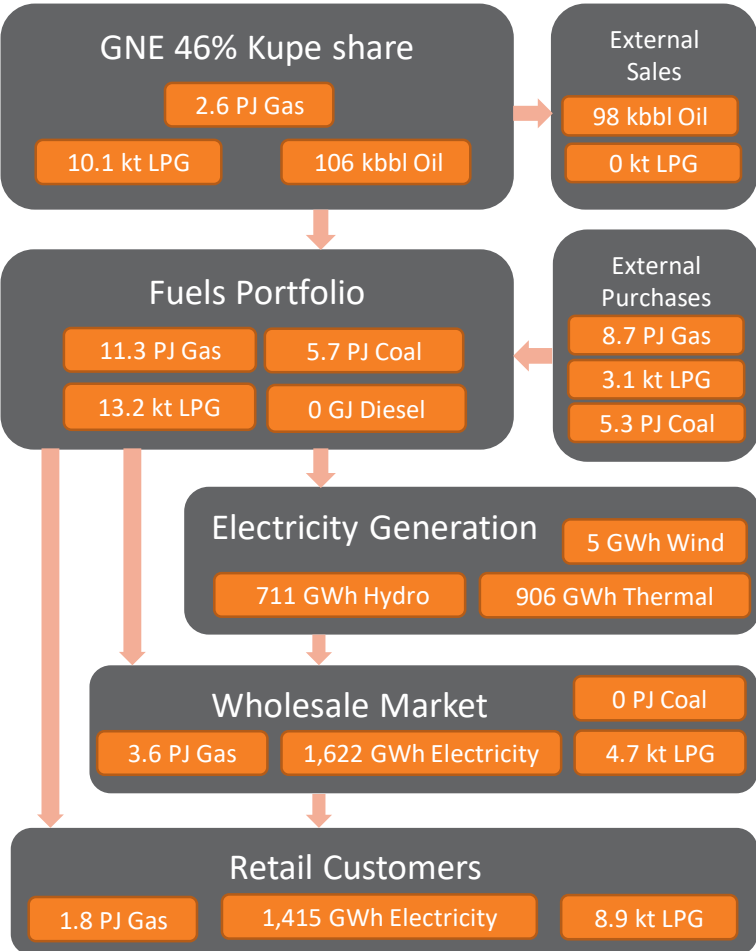
↓ 12.2%

Oil Production

Down to 106 kbbl due to natural decline in field and reduced gas production

↓ 21.8%

Q2 FY19 INTEGRATED PHYSICAL ENERGY FLOWS¹



1. LPG difference represents movement in storage



Glossary

CUSTOMER	
Brand Net Promoter Score	Based on survey question "How likely would you be to recommend Genesis Energy/Energy Online to your friends or family?"
Electricity Market Share	Market share based on Electricity Authority data for the end of quarter
Gas Market Share	Market share based on Gas Industry Company data for the end of quarter
Customers	Electricity and gas customers are defined by single customer view, regardless of number of connections (ICP's)
Single Customer View	Represents unique customers which may have multiple ICP's
ICP	Installation Connection Point, a connection point that is both occupied and has not been disconnected (Active-Occupied)
Customer Churn	Based on losing and gaining accounts under a Single Customer View
MVP	Minimal Viable Product
Resi, SME, C&I	Residential, small and medium enterprises and commercial & industrial customers
B2B	Business to Business, including both SME and C&I
Volume Weighted Average Electricity Selling Price - \$/MWh	Average selling price for customers including lines/transmission and distribution and after prompt payment discount
Volume Weighted Average Gas Selling Price - \$/MWh	Average selling price for customers including lines/transmission and distribution and after prompt payment discount
Average Retail Electricity Purchase Price - LWAP (\$/MWh)	Excludes settlements from electricity derivatives.
LPG Customer Connections	Defined as number of customers
Bottled LPG Sales (tonnes)	Represents 45kg LPG bottle sales
Other Bulk and SME LPG Sales (tonnes)	Represents bulk, 3rd party distributors and SME sales
Wholesale LPG Sales (tonnes)	Represents wholesale, export sales and transfers to Huntly power station
Electricity Sales - Wholesale (GWh)	Includes contracts for difference and options (excluding futures)
Electricity Purchases - Wholesale (GWh)	Includes contracts for difference and options (excluding futures)
Netback (\$/MWh, \$/GJ, \$/tonne)	Customer EBITDAF by fuel type plus respective fuel purchase cost divided by total fuel sales volumes, stated in native fuel units and excluding corporate allocation costs
GENERATION	
Coal (GWh)	Coal generation is calculated by applying coal burn to monthly average heat rates
Average Price Received for Generation - GWAP (\$/MWh)	Excludes settlements from electricity derivatives.
Coal Used In Internal Generation (PJ)	Results have been revised to reflect changes in coal kilo tonnes to PJ conversion rate and volume methodology
Rankine's Fuelled by Coal (%)	The proportion of coal used in the Rankine units
Equipment Availability Factor (EAF)	The percentage of time a power station is available to generate electricity
Forced Outage Factor (FOF)	The percentage of time a power station is unavailable to generate electricity due to unplanned failure or defect.
WHOLESALE	
Weighted Average Fuel Cost (\$/MWh)	Total cost of fuel burnt plus emissions on fuel burnt divided by total generation (thermal, hydro and wind)
CORPORATE	
Total Recordable Injury Frequency Rate	Rolling 12 month TRIFR per 200,000 hours worked for employees and contractors
Headcount	Based on full time equivalents, excluding contractors
KUPE	
Oil Price realised (NZD/bbl.)	Oil price received including hedges
Oil Hedge Levels (%)	% hedged for remainder of FY as % of forecast sales

Customer Metrics

CUSTOMER SEGMENT	Q2 FY19	Q2 FY18	% Change	Var.	YTD FY19	YTD FY18	% Change	Var.
CUSTOMER								
Brand Net Promoter Score - Genesis Energy (%)	8.0%	2.0%	300.0%	6.0%				
Customer Churn (3 month rolling average, %)	17.2%	19.7%	(12.5%)	(2.5%)				
Electricity Netback (\$/MWh)	\$99.80	\$90.34	10.5%	\$9.46	\$103.98	\$99.75	4.2%	\$4.23
Gas Netback (\$/GJ)	\$8.82	\$9.63	(8.4%)	(\$0.81)	\$8.73	\$8.91	(2.0%)	(\$0.18)
LPG Netback (\$/t)	\$747.80	\$728.20	2.7%	\$19.60	\$810.26	\$781.86	3.6%	\$28.40
CUSTOMER NUMBERS¹								
Customers > 1 Product	113,549	105,758	7.4%	7,791				
Electricity Only Customers	335,332	345,832	(3.0%)	(10,500)				
Gas Only Customers	17,440	18,509	(5.8%)	(1,069)				
LPG Only Customers	34,770	34,534	0.7%	236				
Total Customers	501,091	504,633	(0.7%)	(3,542)				
Electricity ICPs Active-Occupied	501,684	502,949	(0.3%)	(1,265)				
Gas ICPs Active-Occupied	106,854	105,452	1.3%	1,402				
LPG Customer Connections	65,849	58,872	11.9%	6,977				
Total ICPs	674,387	667,273	1.1%	7,114				
VOLUMES AND PRICE								
Volume Weighted Average Electricity Selling Price - Resi (\$/MWh)	\$257.26	\$253.48	1.5%	\$3.77	\$251.62	\$248.52	1.2%	\$3.09
Volume Weighted Average Electricity Selling Price - SME (\$/MWh)	\$225.13	\$217.59	3.5%	\$7.54	\$220.02	\$216.03	1.8%	\$3.98
Volume Weighted Average Electricity Selling Price - C&I (\$/MWh)	\$119.78	\$108.53	10.4%	\$11.25	\$126.20	\$120.45	4.8%	\$5.75
Residential Electricity Sales (GWh)	659	656	0.5%	3	1,619	1,644	(1.5%)	(25)
SME Electricity Sales (GWh)	266	269	(0.9%)	(2)	540	554	(2.4%)	(13)
C&I Electricity Sales (GWh)	489	426	14.8%	63	980	811	20.8%	169
Total Electricity Sales (GWh)	1,415	1,351	4.7%	64	3,139	3,008	4.4%	131
Electricity Purchases - Retail (GWh)	1,471	1,404	4.7%	66	3,302	3,160	4.5%	142
Average Retail Electricity Purchase Price - LWAP (\$/MWh)	\$210.36	\$95.58	120.1%	\$114.78	\$142.56	\$99.18	43.7%	\$43.38
Volume Weighted Average Gas Selling Price (\$/GJ)	\$28.12	\$29.44	(4.5%)	(\$1.33)	\$24.25	\$25.59	(5.2%)	(\$1.34)
Residential Gas Sales (PJ)	0.6	0.5	14.1%	0.1	1.7	1.6	3.1%	0.1
SME Gas Sales (PJ)	0.4	0.3	9.9%	0.0	0.9	0.8	16.3%	0.1
C&I Gas Sales (PJ)	0.9	0.6	36.8%	0.2	1.9	1.5	23.4%	0.4
Total Gas Sales (PJ)	1.8	1.5	22.7%	0.3	4.5	4.0	13.6%	0.5
Volume Weighted Average LPG Selling Price (\$/tonne)	\$1,760.25	\$1,811.96	(2.9%)	(\$51.71)	\$1,764.42	\$1,828.90	(3.5%)	(\$64.49)
Bottled LPG Sales (tonnes)	3,656	2,987	22.4%	669	8,473	7,501	13.0%	972
Other Bulk & SME LPG sales (tonnes)	5,202	4,934	5.4%	268	10,907	10,780	1.2%	127
Total LPG Sales (tonnes)	8,858	7,921	11.8%	937	19,380	18,281	6.0%	1,099

1. Historical customer numbers restated post LPG integration

Wholesale Metrics

WHOLESALE SEGMENT	Q2 FY19	Q2 FY18	% Change	Var.	YTD FY19	YTD FY18	% Change	Var.
GENERATION								
Gas (GWh)	394	874	(54.9%)	(480)	1,082	1,795	(39.7%)	(712)
Coal (GWh)	512	201	154.8%	311	608	378	60.7%	230
Total Thermal (GWh)	906	1,075	(15.7%)	(169)	1,690	2,173	(22.2%)	(483)
Hydro (GWh)	711	691	2.9%	20	1,702	1,687	0.9%	15
Wind (GWh)	5	5	(1.6%)	(0)	11	10	4.9%	1
Total Renewable (GWh)	716	696	2.9%	20	1,713	1,697	0.9%	16
Total Generation (GWh)	1,622	1,771	(8.4%)	(149)	3,403	3,870	(12.1%)	(467)
Average Price Received for Generation - GWAP (\$/MWh) ¹	\$212.93	\$94.79	124.6%	\$118.14	\$146.32	\$96.16	52.2%	\$50.16
Generation Emissions (ktCO ₂)	706	583	21.0%	123	1,097	1,161	(5.4%)	(63)
Generation Carbon Intensity (tCO ₂ /GWh)	435	329	32.1%	106	322	300	7.5%	23
Forced Outage Factor (FOF)	0.2%	3.4%	(95.6%)	(3.2%)	0.2%	1.8%	(89.8%)	(1.6%)
Equipment Availability Factor (EAF)	85.3%	89.5%	(4.7%)	(4.2%)	91.5%	93.4%	(2.1%)	(1.9%)
Rankine Output (GWh)	601	332	80.7%	268	724	613	18.1%	111
Rankines Fuelled by Coal (%)	85%	60%	41.0%	25%	85%	62%	37%	23%
WHOLESALE								
Gas Purchases (PJ)	8.7	11.8	(26.8%)	(3.2)	19.9	24.4	(18.6%)	(4.5)
Coal Purchases (PJ)	5.3	1.0	434.1%	4.3	6.6	2.0	236.5%	4.6
Wholesale LPG Purchases (tonnes)	3,077	6,543	(53.0%)	(3,466)	5,867	14,165	(58.6%)	(8,297)
Electricity Purchases - Wholesale (GWh)	419	302	39.0%	118	710	790	(10.1%)	(80)
Electricity Sales - Wholesale (GWh)	644	525	22.7%	119	1,189	1,231	(3.5%)	(43)
Wholesale Gas Sales (PJ)	3.6	3.5	1.3%	0.0	6.8	6.4	5.3%	0.3
Wholesale Coal Sales (PJ)	0.0	0.1	(79.5%)	(0.1)	0.1	0.2	(44.0%)	(0.1)
Wholesale LPG Sales (tonnes)	4,680	10,587	(55.8%)	(5,907)	11,037	19,654	(43.8%)	(8,617)
Gas Used In Internal Generation (PJ)	3.4	6.9	(51.5%)	(3.6)	8.6	14.2	(39.1%)	(5.5)
Coal Used In Internal Generation (PJ)	5.7	2.3	151.1%	3.4	6.9	4.3	59.9%	2.6
LWAP/GWAP Ratio (%)	99%	101%	(2.0%)	(2.0%)	97%	103%	(5.5%)	(5.7%)
Weighted Average Fuel Cost (\$/MWh)	\$38.23	\$37.80	1.2%	\$0.43	\$33.90	\$35.72	(5.1%)	(\$1.82)
Coal Stockpile - closing balance (kilotonnes)	276.8	233.6	18.5%	43.3				

1. GWAP represents the average price received for generation prior to the outcome or settlement of any financial contracts.

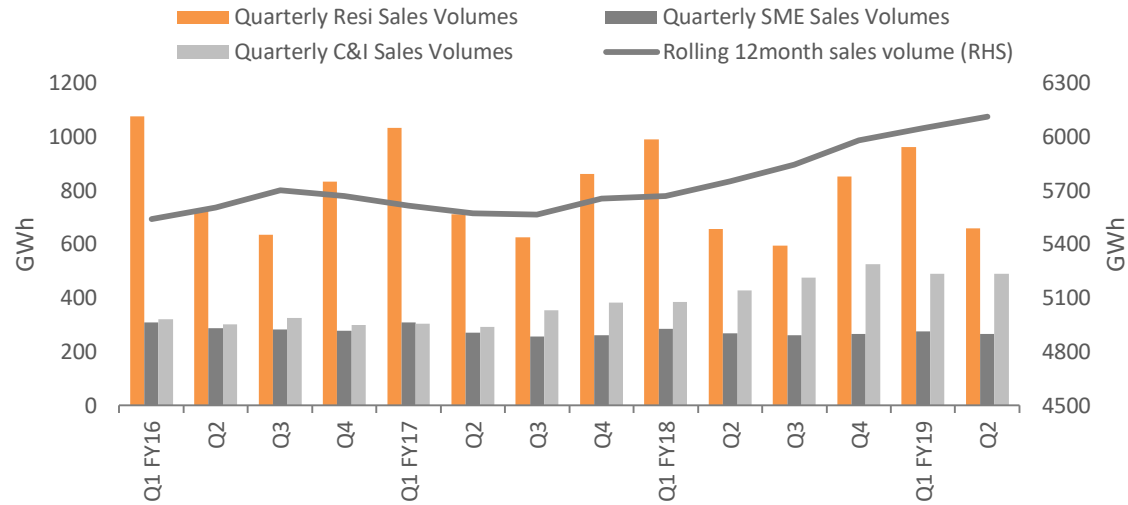
Kupe and Other Metrics

KUPE SEGMENT	Q2 FY19	Q2 FY18	% Change	Var.	YTD FY19	YTD FY18	% Change	Var.
KUPE								
Gas Production (PJ)	2.6	3.0	(12.2%)	(0.4)	5.7	6.1	(6.8%)	(0.4)
Gas Sales (PJ)	2.5	3.0	(15.8%)	(0.5)	5.5	6.1	(10.3%)	(0.6)
Oil Production (kbbbl)	106	135	(21.8%)	(29)	235	281	(16.1%)	(45)
Oil Production Yield (bbl/TJ)	40.4	45.3	(10.9%)	(4.9)	42	46.1	(10.0%)	(4.6)
Oil Sales (kbbbl)	98	183	(46.5%)	(85)	168	241	(30.4%)	(73)
Realised Oil Price (NZD/bbl)	\$100.38	\$76.10	31.9%	\$24.28	\$91.12	\$78.24	16.5%	\$12.88
Average Brent Crude Oil (USD/bbl)	\$67.76	\$61.39	10.4%	\$6.37	\$71.52	\$56.74	26.0%	\$14.78
LPG Production (kt)	10.1	11.2	(10.1%)	(1.1)	23.6	22.4	5.3%	1.2
LPG Production Yield (t/TJ)	3.9	3.8	2.5%	0.1	4.2	3.7	13.0%	0.5
LPG Sales (kt)	10.3	11.3	(8.6%)	(1.0)	23.7	22.7	4.6%	1.0
OTHER								
CORPORATE								
Headcount (FTE)	1,058	962	10.0%	96				
Total Recordable Injury Frequency Rate ¹	1.11	1.44	(22.9%)	(0.33)				

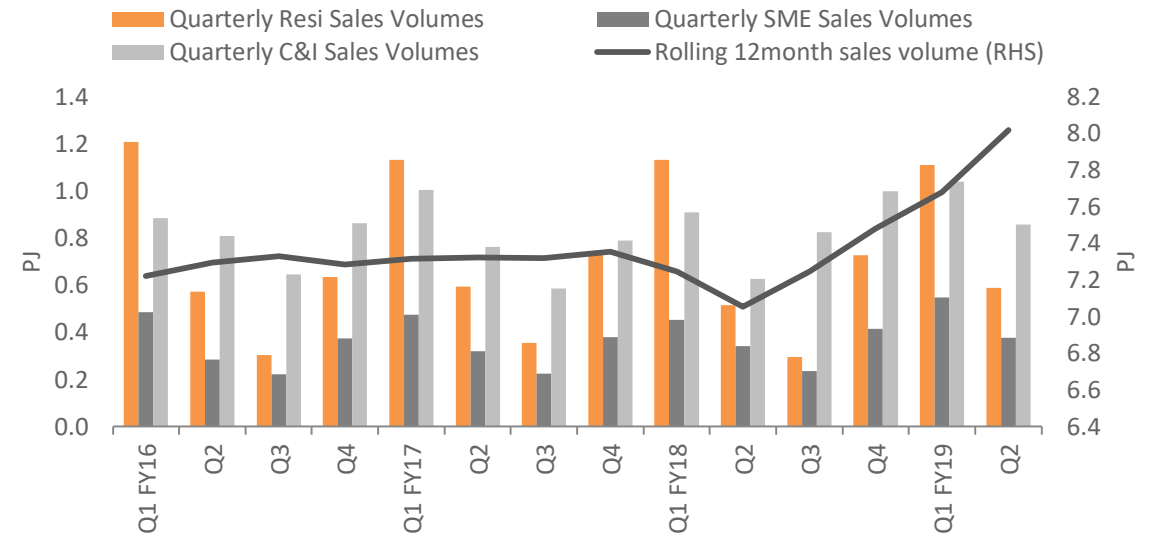
1. TRIFR now being reported to include contractors. Prior period has been restated on same basis.

Appendix: Customer Segment

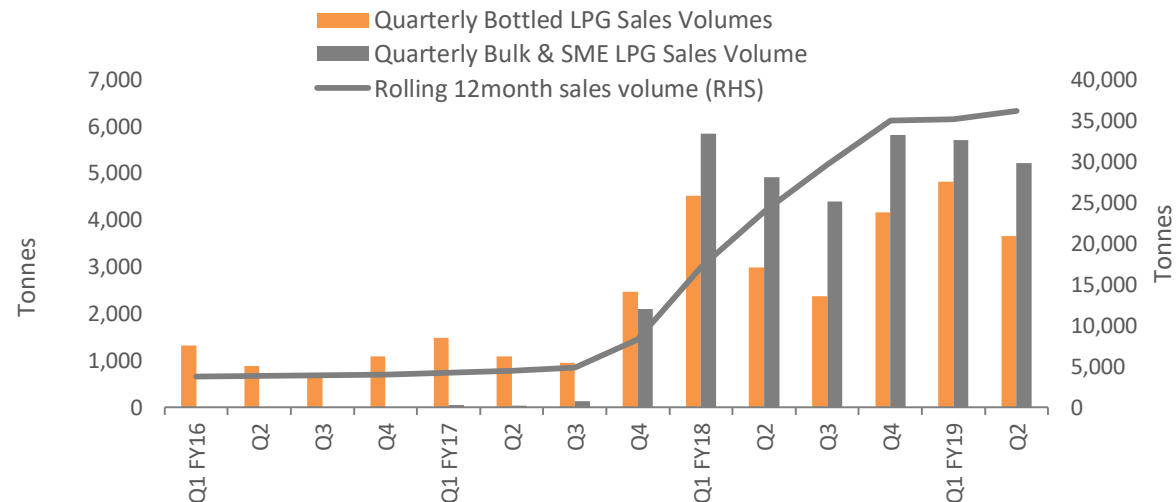
ELECTRICITY SALES VOLUMES (GWh)



GAS SALES VOLUMES (PJ)

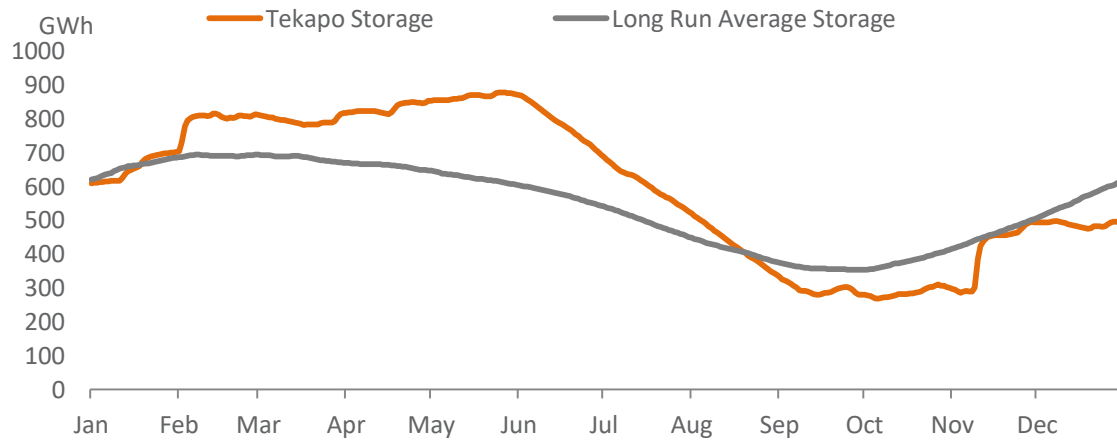


LPG SALES VOLUMES (tonnes)



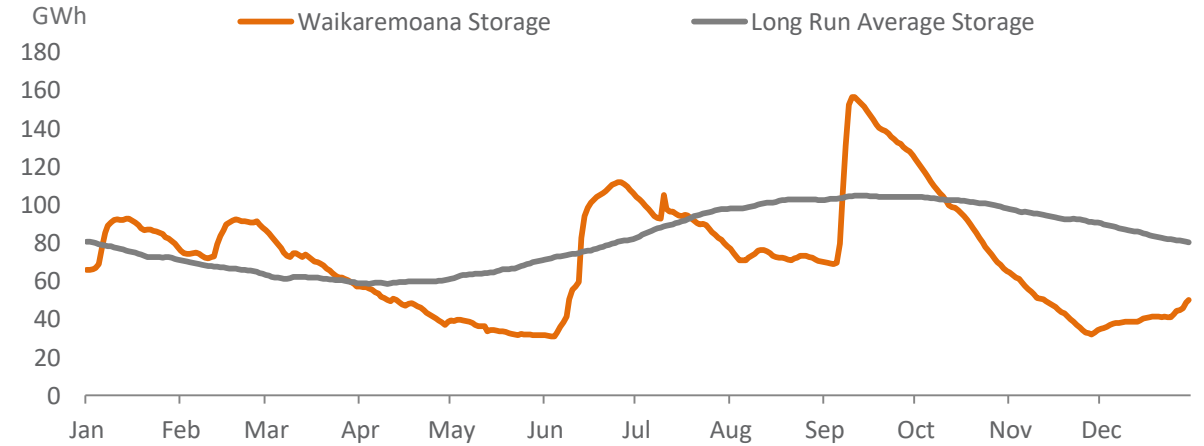
Appendix: Wholesale Segment

TEKAPO STORAGE vs LONG RUN AVERAGE



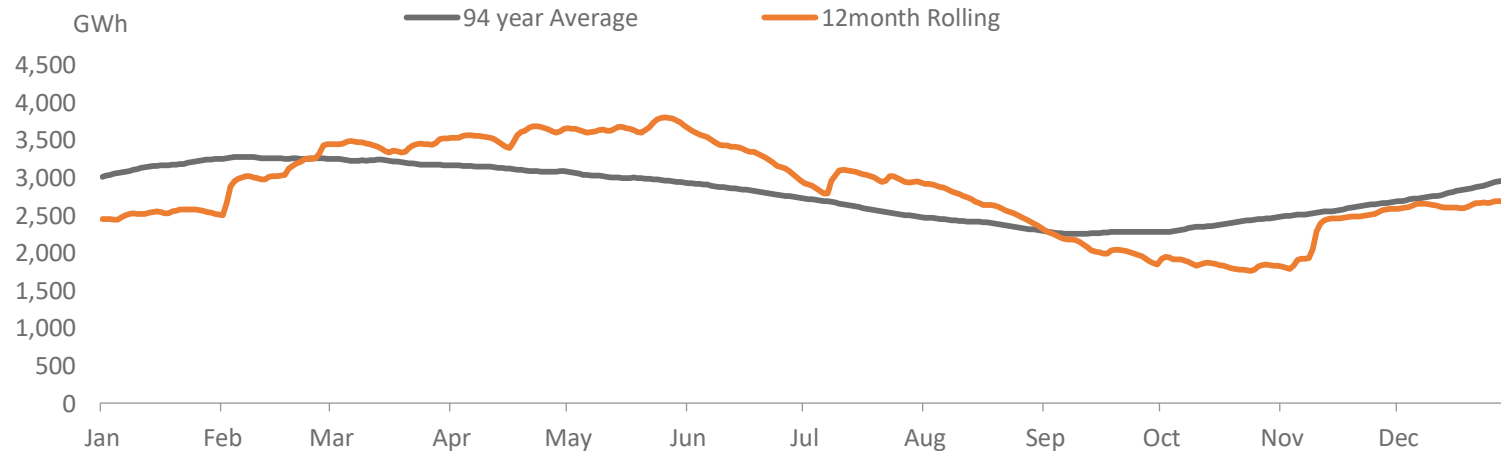
Source: COMIT

WAIKAREMOANA STORAGE vs LONG RUN AVERAGE



Source: COMIT

NEW ZEALAND DAILY STORAGE

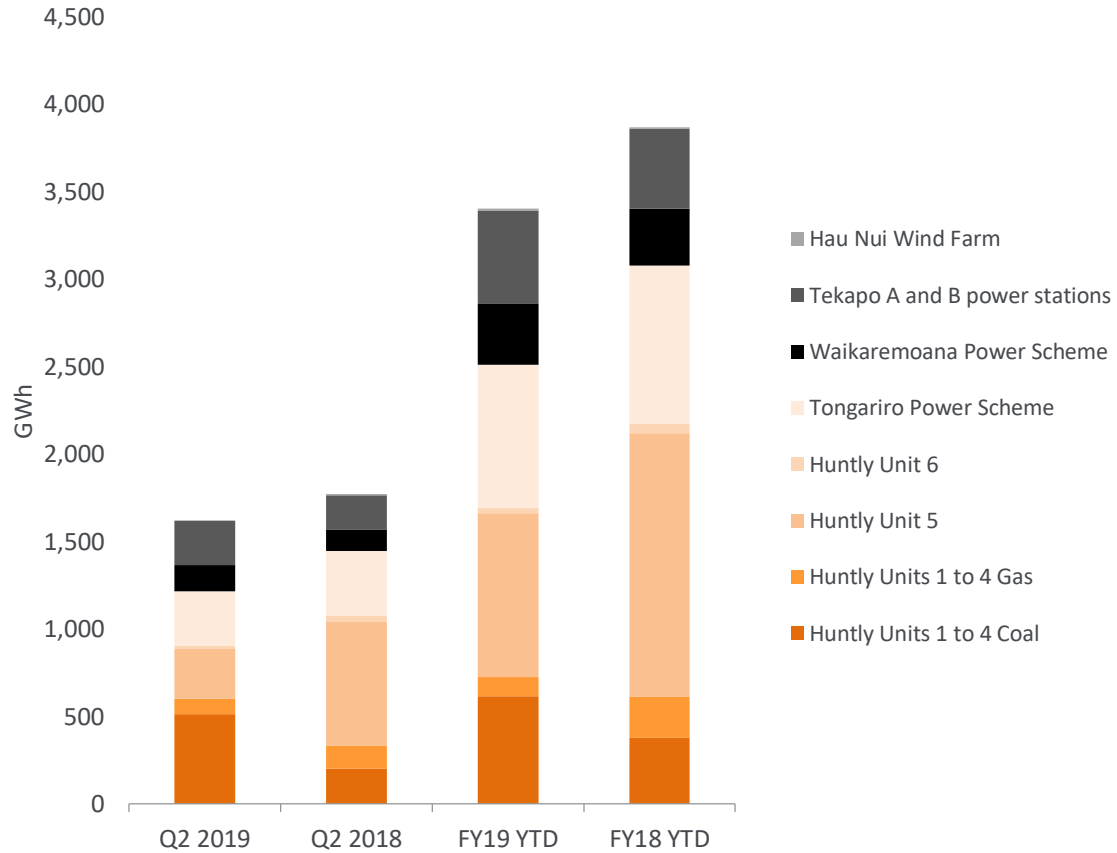


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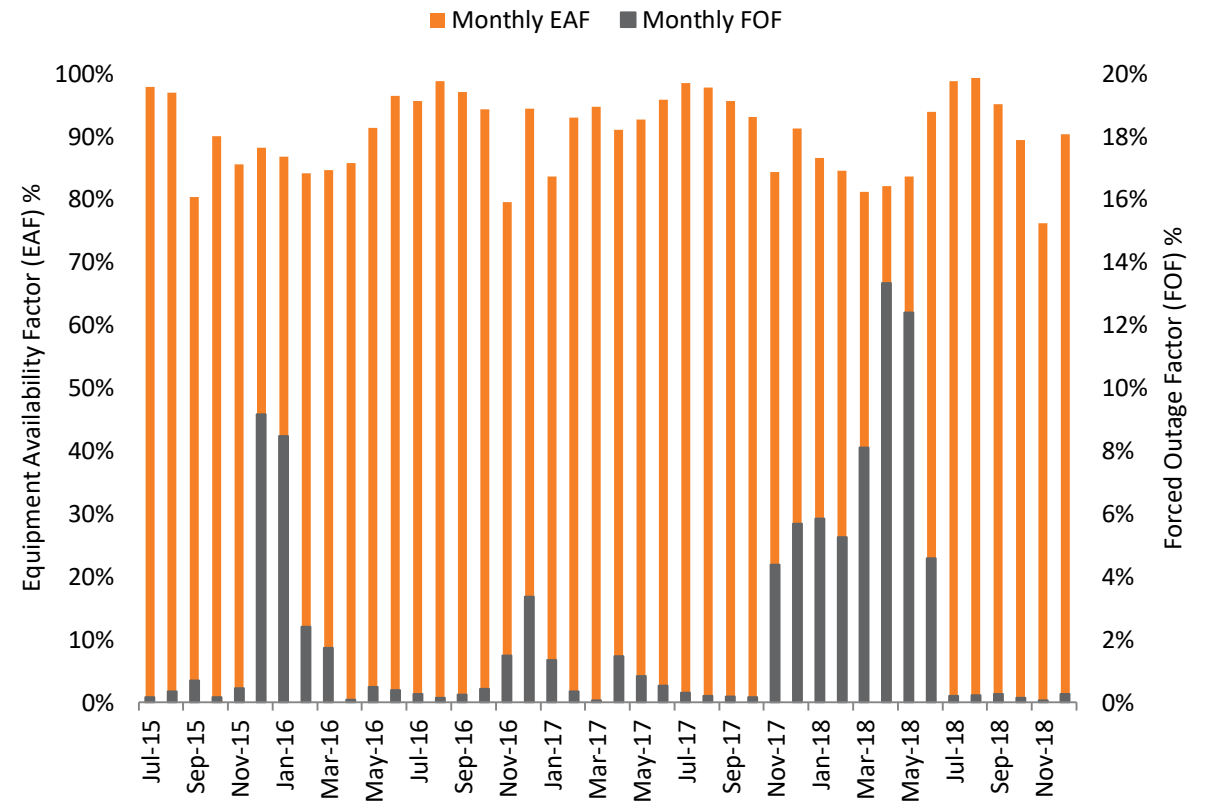


Appendix: Wholesale Segment

GENERATION BY POWER STATION

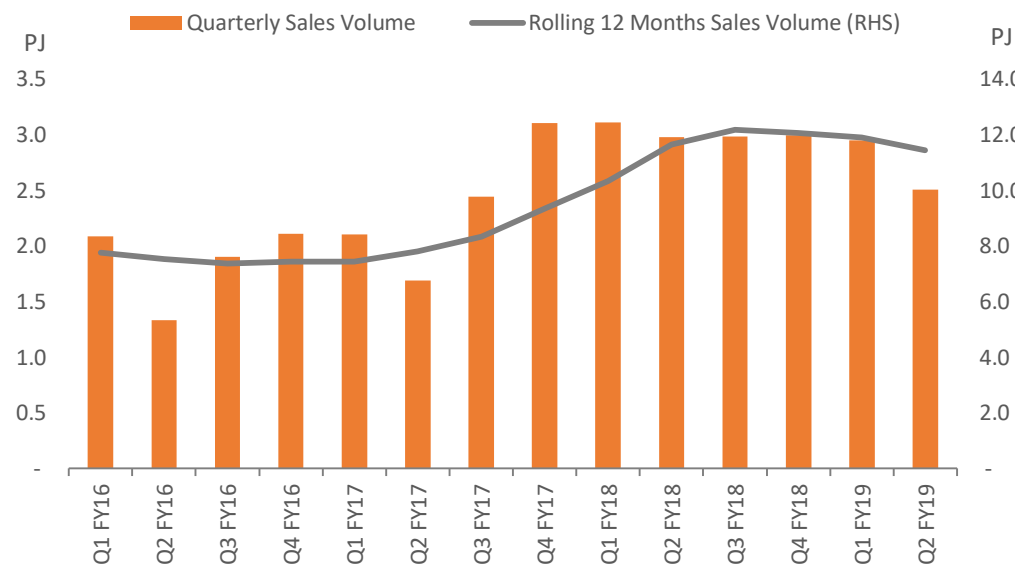


PLANT PERFORMANCE

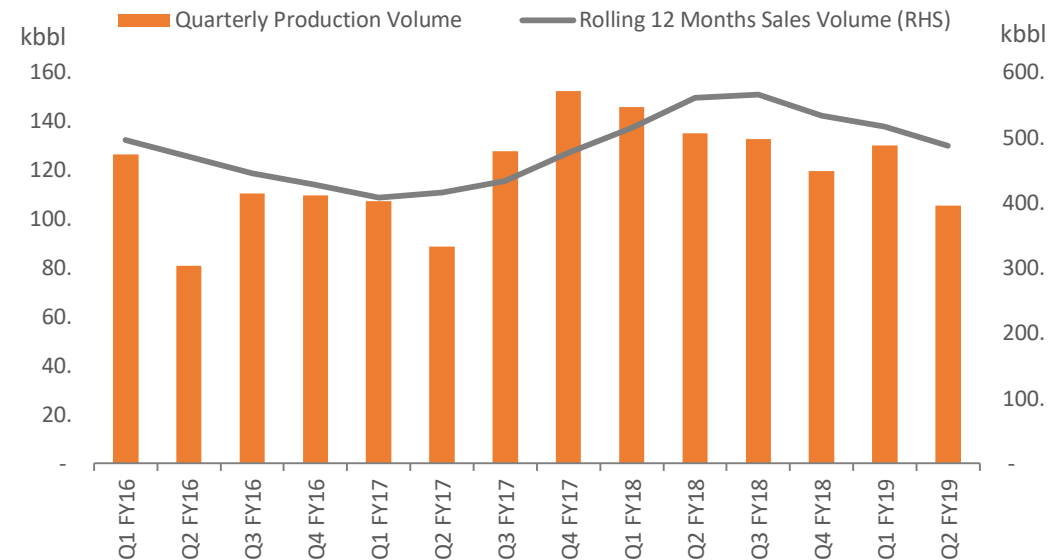


Appendix: Kupe Segment

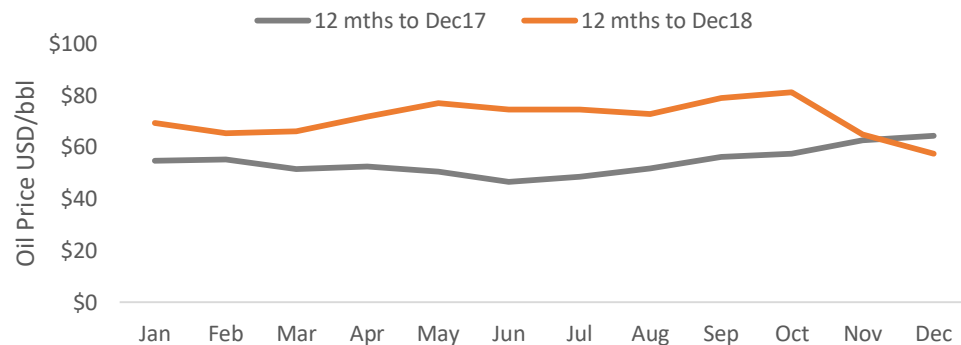
KUPE GAS SALES VOLUMES (GENESIS SHARE, PJ)



KUPE OIL PRODCUTION VOLUMES (GENESIS SHARE, kbbi)



BRENT CRUDE OIL SPOT PRICE (USD/bbl)



OIL PRICE AND FOREX RISK MANAGEMENT

FORWARD RISK MANAGEMENT		
Oil Price Hedges	% Hedged	Average Oil Price
1-12 months	76%	\$59.19
13-24 months	63%	\$56.25
25-36 months	17%	\$67.82
USD/NZD Hedges		Rate
1-12 months	67%	0.689
13-24 months	55%	0.697
25-36 months	13%	0.675

