

Monthly Operating Report

December 2018

December overview

For the month of December 2018

- » The Customer business recorded:
 - Mass market electricity and gas sales of 296 GWh (December 2017: 289 GWh)
 - Mass market electricity and gas netback of \$89.16/MWh (December 2017 \$87.34/MWh)
- » The Generation business recorded:

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- Contracted Wholesale electricity sales, including that sold to the Customer business, totalled 641 GWh (December 2017: 693 GWh)
- Electricity and steam net revenue of \$76.96/MWh (December 2017: \$65.84/MWh)
- Electricity generated (or acquired) in the month of 699 GWh (December 2017: 777 GWh)
- The unit generation cost, which includes acquired generation was \$41.93/MWh (December 2017: \$40.85/MWh)

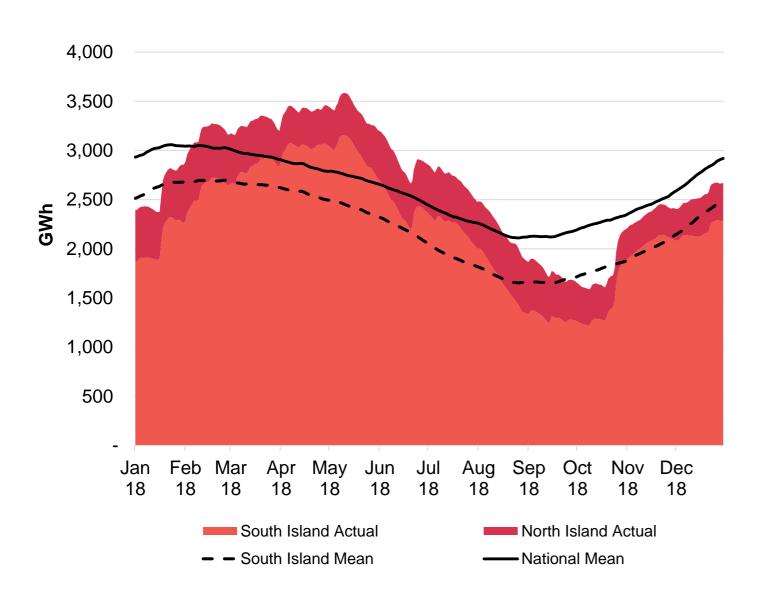
- » Otahuhu futures settlement wholesale price for the 1st quarter of 2019 (ASX):
 - As at 16 January 2019: \$132/MWh
 - As at 31 December 2018: \$125/MWh
 - As at 30 November 2018: \$96/MWh
- » As at 16 January 2019, South Island controlled storage was 91% of mean (31 December 2018: 104%) and North Island controlled storage was 96% of mean (31 December 2018: 66%)
 - As at 16 January 2019, total Clutha scheme storage (including uncontrolled storage) was 76% of mean
 - Inflows into Contact's Clutha catchment for December 2018 were 69% of mean (November 2018: 106%, October 2018: 89%, September 2018: 72%)



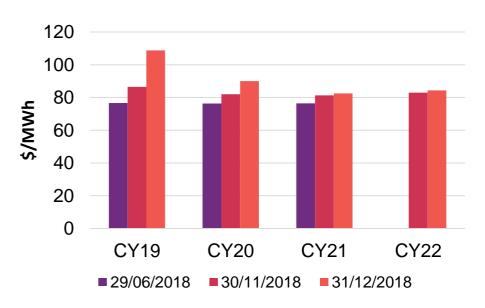
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Hydro storage and forward prices

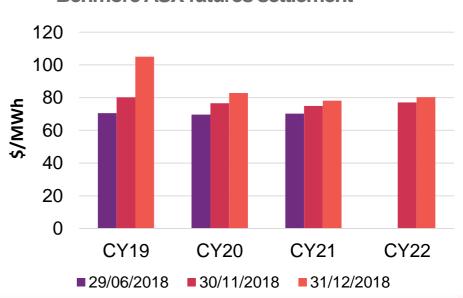
New Zealand controlled hydro storage against mean



Otahuhu ASX futures settlement



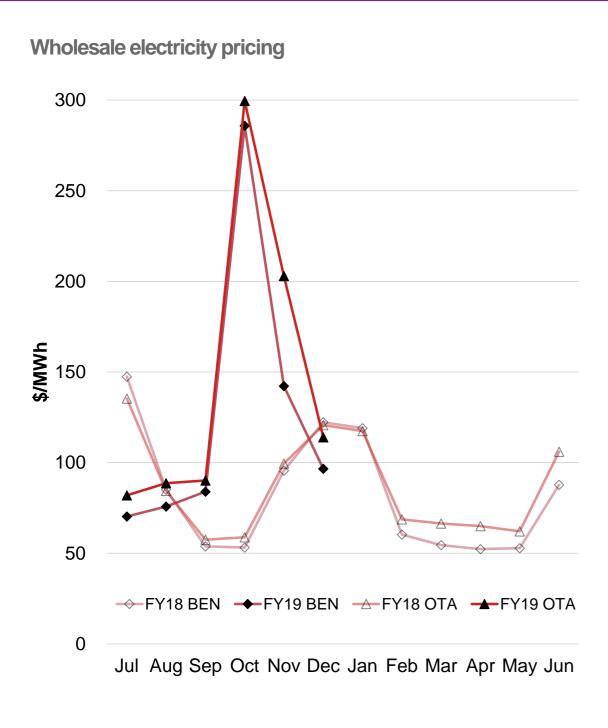
Benmore ASX futures settlement





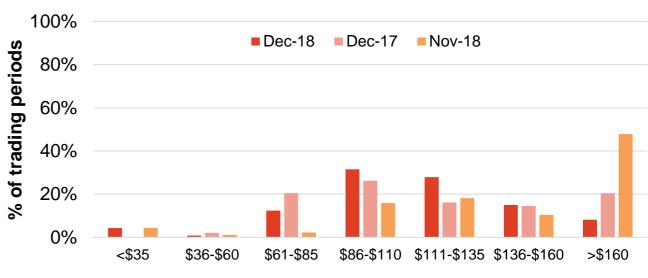
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Wholesale market

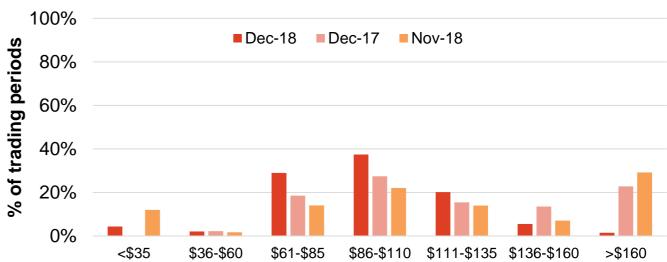


Distribution of wholesale market price by trading periods

Otahuhu node



Benmore node





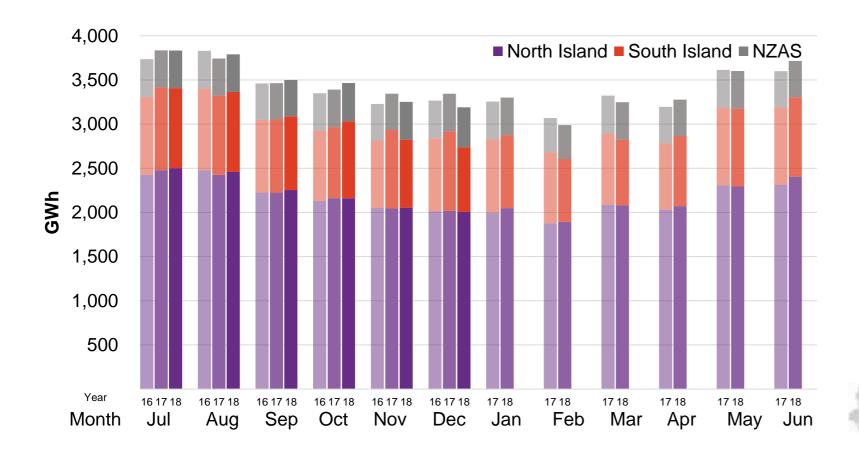
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Electricity demand

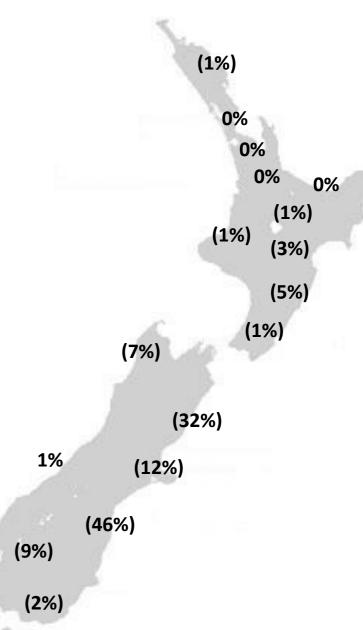
- » New Zealand electricity demand was down 4.6% on December 2017 (down 2.3% on December 2016)
 - Cumulative 12 months demand for January 2018 to December 2018 of 41,116 GWh is flat on the prior comparative period.

Total national demand (FY17, 18 and 19)

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Regional demand change (%) on December 2017



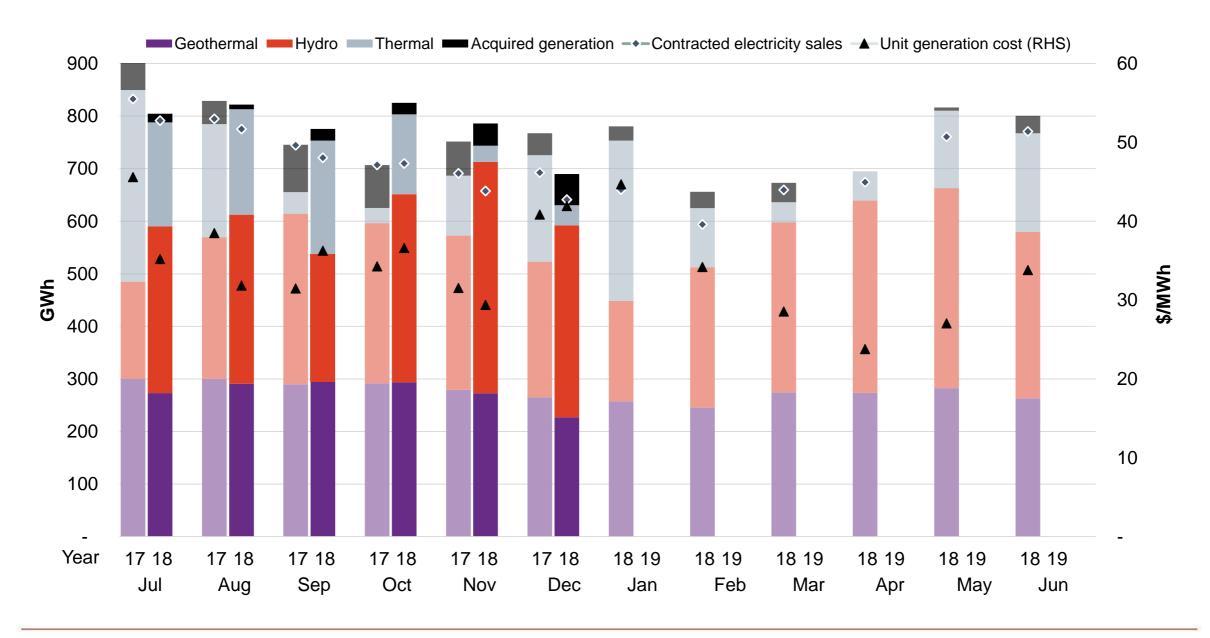
Source: Contact and Electricity Authority grid demand (reconciled) http://www.emi.ea.govt.nz

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Contact's Wholesale business performance

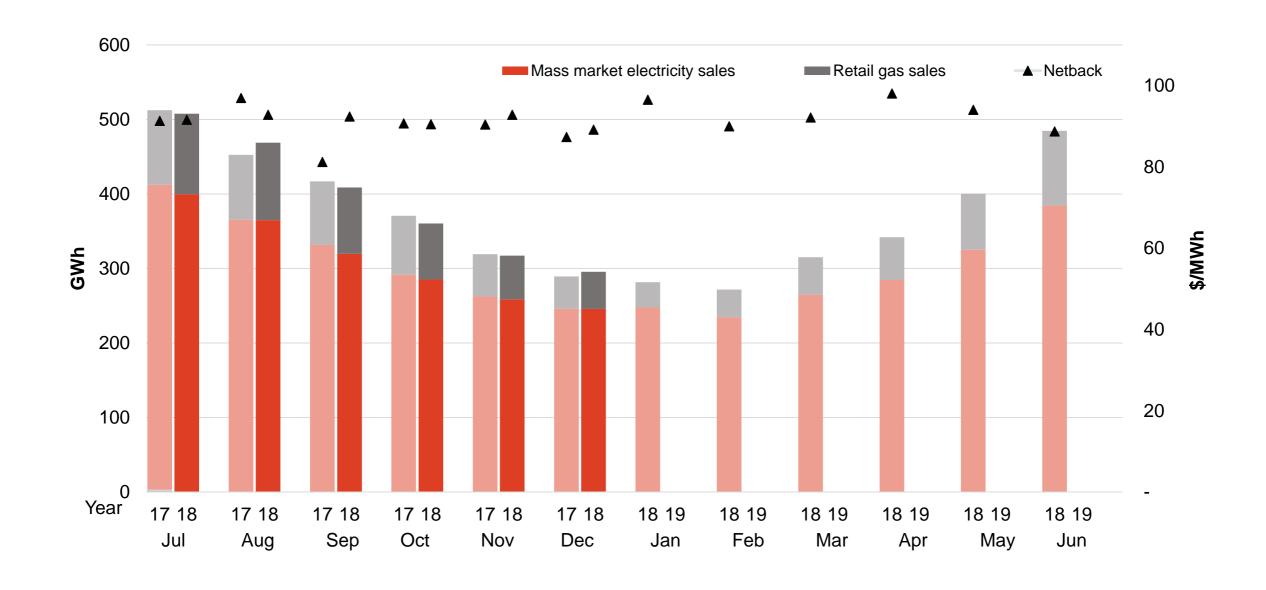
Generation mix, gross sales position and unit generation cost (FY18 and 19)





Contact's Customer business performance

Retail sales volumes and netback (FY18 and 19)





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Contact's operational performance

		Measure	The month ended	The month ended	The month ended	Six months ended	Six months ended
			December 18	December 17	November 18	December 18	December 17
Customer	Mass market electricity sales	GWh	246	246	259	1,874	1,907
	Retail gas sales	GWh	50	43	59	485	452
	Mass market electricity and gas sales	GWh	296	289	317	2,359	2,358
	Average electricity sales price	\$/MWh	250.48	250.69	248.94	242.57	240.42
	Electricity direct pass thru costs	\$/MWh	(127.49)	(131.98)	(119.98)	(116.36)	(117.99)
	Cost to serve	\$/MWh	(23.04)	(20.54)	(20.85)	(17.02)	(17.47)
	Customer netback	\$/MWh	89.16	87.34	92.82	91.66	89.90
	Energy cost	\$/MWh	(58.52)	(57.02)	(61.08)	(71.59)	(71.05)
	Actual electricity line losses	%	7%	9%	8%	7%	8%
	Retail gas sales	PJ	0.2	0.1	0.2	1.7	1.4
	Electricity ICPs (rounded to the nearest 500)	#	406,000	416,500	406,000		
	Gas ICPs (rounded to the nearest 500)	#	65,000	64,500	65,500		
Wholesale	Electricity sales to Customer business	GWh	266	270	282	2,017	2,069
	Electricity sales to Commercial and Industrial	GWh	260	283	261	1,572	1,736
	Electricity CFD sales	GWh	116	140	114	708	658
	Contracted electricity sales	GWh	641	693	657	4,296	4,463
	Steam sales	GWh	56	54	66	351	330
	Total electricity and steam net revenue	\$/MWh	76.96	65.84	68.71	78.89	74.42
	C&I netback (at the ICP)	\$/MWh	83.79	70.57	67.92	84.05	82.94
	C&I line losses	%	4%	1%	4%	4%	4%
	Thermal generation	GWh	38	203	31	836	966
	Geothermal generation	GWh	227	265	273	1,652	1,726
	Hydro generation	GWh	365	258	440	2,045	1,635
	Spot electricity sales	GWh	631	726	744	4,532	4,327
	Electricity sales - Direct	GWh	9	10	10	51	50
	Acquired generation	GWh	59	42	42	171	384
	Electricity generated (or acquired)	GWh	699	777	796	4,754	4,762
	Unit generation cost (including acquired generation)	\$/MWh	(41.93)	(40.85)	(29.39)	(35.06)	(37.39)
	Spot electricity purchases	GWh	(516)	(543)	(533)	(3,538)	(3,755)
	CFD sales	GWh	(116)	(140)	(114)	(708)	(658)
	Spot exposed purchases / CFD settlement	GWh	(632)	(683)	(648)	(4,246)	(4,413)
	Spot revenue and settlement on acquired generation (GWAP)	\$/MWh	101.96	120.45	164.23	134.35	92.23
	Spot purchases and settlement on CFDs sold (LWAP)	\$/MWh	(109.71)	(124.77)	(181.10)	(138.65)	(96.96)
	LWAP/GWAP	%	108%	104%	110%	103%	105%
	Gas used in internal generation	PJ	0.6	2.0	0.5	8.1	9.6
970	Gas storage net movement (extraction) / injection	PJ	0.2	(0.7)	0.4	(2.0)	(0.8)

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Contact's operational performance - history

		Measure	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
<u>_</u>	Mass market electricity sales	GWh	409	365	332	292	263	246	248	234	265	285	325	385	400	365	320	285	259	246
	Retail gas sales	GWh	100	87	85	79	57	43	34	37	50	57	75	100	108	104	89	75	59	50
	Mass market electricity and gas sales	GWh	509	453	417	371	319	289	282	272	315	342	400	485	508	469	409	360	317	296
	Average electricity sales price	\$/MWh	227.83	239.33	238.43	245.70	248.57	250.69	255.99	244.89	246.45	244.83	243.21	235.32	235.88	238.14	241.66	246.06	248.94	250.48
me	Electricity direct pass thru costs	\$/MWh	(106.85)	(110.32)	(125.71)	(119.86)	(121.09)	(131.98)	(125.13)	(120.77)	(121.85)	(115.04)	(117.31)	(112.56)	(112.44)	(111.06)	(114.50)	(117.87)	(119.98)	(127.49
St	Cost to serve	\$/MWh	(14.25)	(14.48)	(17.17)	(18.92)	(22.79)	(20.54)	(25.21)	(23.82)	(22.09)	(18.12)	(16.21)	(15.21)	(13.26)	(14.64)	(15.15)	(19.27)	(20.85)	(23.04)
	Customer netback	\$/MWh	91.32	96.95	81.19	90.70	90.39	87.34	96.50	89.98	92.14	98.05	94.03	88.71	91.59	92.82	92.36	90.48	92.82	89.16
	Energy purchase cost	\$/MWh	(86.97)	(80.78)	(69.62)	(61.09)	(57.97)	(57.02)	(68.74)	(72.00)	(77.39)	(71.54)	(82.67)	(86.77)	(84.65)	(79.53)	(69.09)	(65.64)	(61.08)	(58.52)
\mathbf{O}	Actual electricity line losses	%	7%	8%	6%	7%	10%	9%	7%	6%	4%	7%	11%	6%	5%	7%	8%	7%	8%	7%
	Retail gas sales	PJ	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2
	Electricity ICPs (rounded to the nearest 500)	#	420,000	420,000	419,500	419,000	417,500	416,500	415,500	415,000	414,000	414,000	414,000	413,000	411,500	407,500	406,500	406,500	406,000	406,000
	Gas ICPs (rounded to the nearest 500)	#	64,000	64,500	64,500	64,500	64,500	64,500	64,500	64,500	64,500	65,000	65,000	65,000	65,000	65,000	65,000	65,500	65,500	65,000
	Electricity sales to Customer business	GWh	443	397	354	314	292	270	267	249	277	304	366	409	423	394	346	306	282	266
	Electricity sales to Commercial and Industrial	GWh	284	293	288	291	297	283	285	261	288	268	284	253	254	269	267	261	261	260
	Electricity CFD sales	GWh	106	104	103	103	103	140	109	84	94	101	111	108	115	113	108	143	114	116
	Contracted electricity sales	GWh	833	795	745	707	691	693	660	594	660	674	761	771	791	775	721	710	657	641
	Steam sales	GWh	26	58	67	64	61	54	44	46	51	55	39	20	30	63	68	69	66	56
	Total electricity and steam net revenue	\$/MWh	90.04	82.23	73.92	65.89	65.56	65.84	70.75	70.82	76.15	75.93	84.45	94.86	91.34	83.58	72.82	78.04	68.71	76.96
	C&I netback (at the ICP)	\$/MWh	103.25	91.24	89.34	75.91	67.48	70.57	75.52	78.79	86.57	86.35	93.51	106.26	96.37	89.81	80.03	86.06	67.92	83.79
	C&I line losses	%	6%	3%	5%	5%	6%	1%	1%	3%	4%	4%	5%	4%	3%	4%	7%	2%	4%	4%
	Thermal generation	GWh	365	215	41	29	114	203	305	113	38	55	147	188	198	201	216	152	31	38
	Geothermal generation	GWh	300	300	290	292	279	265	257	245	275	274	283	263	273	291	295	293	273	227
Φ	Hydro generation	GWh	185	270	325	305	293	258	191	267	323	366	380	316	317	322	243	358	440	365
<u>a</u>	Spot electricity sales	GWh	850	785	655	625	687	726	753	625	636	694	810	767	788	813	754	803	744	631
S	Electricity sales - Direct	GWh	3	8	9	10	10	10	10	8	9	8	4	1	4	9	10	10	10	9
	Acquired generation	GWh	62	44	90	82	65	42	27	31	37	0	6	33	17	9	22	22	42	59
_	Electricity generated (or acquired)	GWh	916	837	755	716	761	777	790	665	682	703	821	802	808	831	785	835	796	699
	Unit generation cost (including acquired generation)	\$/MWh	(45.60)	(38.49)	(31.48)	(34.29)	(31.54)	(40.85)	(44.68)	(34.21)	(28.56)	(23.78)	(27.06)	(33.82)	(35.22)	(31.85)	(36.27)	(36.62)	(29.39)	(41.93)
(; ; ; ;	Spot electricity purchases	GWh	(723)	(682)	(632)	(595)	(579)	(543)	(542)	(501)	(557)	(564)	(646)	(661)	(673)	(654)	(604)	(557)	(533)	(516)
	CFD sales	GWh	(106)	(104)	(103)	(103)	(103)	(140)	(109)	(84)	(94)	(101)	(111)	(108)	(115)	(113)	(108)	(143)	(114)	(116)
	Spot exposed purchases / CFD settlement	GWh	(829)	(787)	(735)	(697)	(681)	(683)	(651)	(586)	(651)	(666)	(757)	(770)	(788)	(767)	(711)	(700)	(648)	(632)
	Spot revenue and settlement on acquired generation (GWAP)	\$/MWh	137.88	82.28	54.51	53.43	92.91	120.45	118.17	65.04	58.40	56.91	56.82	101.42	79.16	82.66	86.51	283.25	164.23	101.96
	Spot purchases and settlement on CFDs sold (LWAP)	\$/MWh	(149.05)	(86.05)	(58.20)	(57.51)	(100.50)	(124.77)	(125.81)	(69.57)	(62.03)	(62.05)	(63.62)	(105.45)	(80.72)	(86.52)	(89.73)	(297.49)	(181.10)	(109.71)
	LWAP/GWAP	%	108%	105%	107%	108%	108%	104%	106%	107%	106%	109%	112%	104%	102%	105%	104%	105%	110%	108%
	Gas used in internal generation	PJ	3.1	2.0	0.6	0.5	1.3	2.0	2.7	1.2	0.6	0.7	1.4	1.4	1.8	1.8	1.9	1.5	0.5	0.6
	Gas storage net movement (extraction) / injection	PJ	(1.0)	(0.2)	0.5	0.6	(0.0)	(0.7)	(0.5)	0.2	0.3	0.5	0.4	(0.4)	(0.3)	(0.7)	(1.0)	(0.5)	0.4	0.2

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Customer business

What is Netback?

- » Measures the performance of the Customer business.
- » This enables the performance of the retail channels to be measured without using an energy cost. The netback is meant to cover, inter alia, the net purchase cost, capital return, risk margin and a retail margin.

Electricity revenue from mass market customers

Add: Revenue from gas sales, broadband and legacy meters

Less: Electricity distribution network costs, meter costs and electricity levies

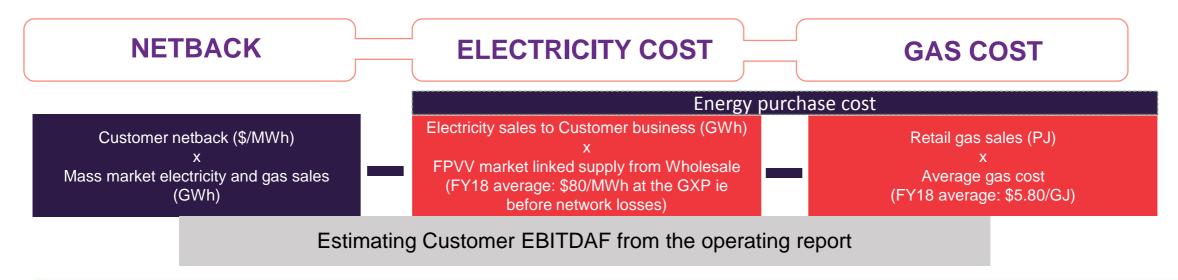
Less: Gas distribution network costs, meter costs and gas levies

Less: Direct operating costs to serve the customer, (excludes head office allocation)

Less: Carbon emission costs on the sale of retail gas

Components of EBITDAF

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Wholesale business

The wholesale business revenues are predominantly linked to ASX futures

CONTRACTED

Electricity sales to Customer

Fixed price variable volume sales to Customer business mass market at a market price

Electricity sales to C&I (netback)

- Fixed price variable volume sales to C&I. includes retailing margin. C&I is shown as a netback (i.e. net of all pass through and cost to serve)
- Only the margin from C&I spot sales is shown (volumes and costs removed – agency relationship only)
- Direct C&I sales from a generation site

CFD electricity sales

Revenue from contracts for difference (CFD) – includes support for NZAS and retailers

Other income

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Revenue from the sale of steam, net proceeds on wholesale gas sales, net proceeds on ancillary services, ASX market making and other income

GENERATION COST

Generation costs

- Electricity transmission and levies
- Thermal fuel (gas and diesel)
- Carbon costs
- Gas transmission and levies
- Wholesale operating costs

Acquired generation cost

- Cost of electricity CFD purchases bought for fuel replacement
- Cost of options for fuel replacement

TRADING / MERCHANT

Spot electricity sales to the wholesale market / settlement of acquired generation

- Spot electricity sales
- Settlement on acquired generation



Spot revenue and settlement on acquired generation (GWAP)

Spot electricity sales + acquired generation (GWh)

Purchases from the wholesale market / settlement on CFD sales

- Spot electricity purchases
- Settlement on CFD sales

Total electricity and steam revenue (\$/MWh)

Contracted electricity and steam sales (GWh)

Unit generation cost (including acquired generation) (\$/MWh)

Electricity generated (or acquired) (GWh)

Spot purchases and settlement on CFDs sold (LWAP)

Spot exposed purchases / CFD settlement (GWh)

Estimating Wholesale EBITDAF from the operating report



Additional insights

EBITDAF

Customer business EBITDAF (see page 10)

Add: Wholesale EBITDAF (see page 11)

Add: LPG EBITDAF - Sold 30 November 2018 - FY18: \$32m, FY19: \$14m, FY20: nil

Less: Corporate costs (FY18: \$24m), will only be updated at results (half and full)

FAQ:

Q: Why are Wholesale contracted sales higher than previously reported?

A: Contact now reports on the gross CFD sales made (these where previously net settled into wholesale revenue), this includes the CFD to support the Tiwai smelter and other market participants. The settlement costs of these contracts has also been included as an effective electricity purchase. Grossing up the CFDs also give a clearer understanding of Contact's effective generation and sales position.

Q: Why are C&I sales volumes lower than previously reported?

A: Contact acts as an agent to allow some sophisticated C&I customers access to the wholesale spot market, as Contact does not take any risk or generate to cover this load, these sales (along with the costs) are eliminated from what is reported.

For further information please refer to page 13 for contact details to discuss.



Keep in touch

Investors

Matthew Forbes - Investor Relations Manager

- investor.centre@contactenergy.co.nz
- contact.co.nz/aboutus/investor-centre
- +64 4 462 1323
- +64 21 072 8578

To find out more about Contact Energy

- contact.co.nz
- @ContactEnergy
- Linkedin.com/company/contact-energy-ltd
- Facebook.com/contactenergy
- Youtube.com/ContactEnergy

