

Market Study into the retail fuel sector:

Draft Report - dated 20 August 2019

Submission

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Introduction

The Commerce Commission invited comment on the draft report on the proposed market study into the retail fuel sector to consider whether competition is promoting benefits to consumers over the long-term.

My comments on the Commission's draft report should be read in conjunction with my prior submissions headed: "Working paper on assessing profitability" and "A submission on Question 9: Trend in Profits".¹

Independence

This third submission has been prepared independent of any interested party.

I have had three decades of experience in the application of the "economic model" of business and the assessment of financial performance. In observing how the original "2017 Fuels Study" has evolved, now reconstituted in the form of a "Retail Fuels Market Study", I offer comments which may assist the Commission.

Approach

1. My comments primarily relate to the Commission's analysis of the significance of excess returns over time including a forward-looking information relevant to the competition study of the New Zealand Fuel market.
2. Based on the most recent publicly disclosed financial reports of Z Energy, BP New Zealand and ExxonMobil New Zealand ("Fuel Majors"), I have updated my financial models. I have also improved the formatting and classifications and the comparability of the corporate analysis.
3. For each Fuel Major I have produced selected basic financial information included in the Appendix.
 - Income Statement

¹https://comcom.govt.nz/_data/assets/pdf_file/0015/127302/Ireland,-Wallace-and-Associates-Submission-on-preliminary-issues-paper-21-February-2019.pdf and https://comcom.govt.nz/_data/assets/pdf_file/0028/168346/Ireland,-Wallace-and-Associates-Limited-Submission-on-assessing-profitability-07-May-2019.PDF

- Financial Statement
 - Excess Profits (or EVA or Economic Profits)
 - Net Operating Profit after Tax (NOPAT) adjusted historic cost basis.
 - Operating Capital adjusted historic cost basis.
4. In **Table A**, “Performance Summary”, profitability information is collected for each Fuel Major and as a group (a partial industry).
 5. In **Table B**, “Performance Indicators”, forward looking indicators are linked to the histories in Table A. Tobin’s q and Future Growth Value analysis address future expectations and persistence of excess returns.
 6. In **Table C**, “Excess or Economic Margin Analysis” (for Z Energy only). The margin is a total value margin as it includes the opportunity cost of capital.
 7. Z Energy is the main reference firm being the largest fuel major and listed on stock exchanges. The share price movement is a prime indicator of investor expectations for Z Energy and for the industry.

The Commission’s analysis

8. I believe that the Commission’s analysis is deficient to the extent that underlying data, assumptions and computations supporting its positions or conclusions are mostly hidden. For instance, few if any performance metrics for each of the major fuel firms are revealed despite the publicly available information. Data is consolidated or grouped in various forms (in charts and graphs), averages, geometric averages, 3 year rolling averages, different time periods, etc. As a result, it is difficult, and potentially time consuming, to test the draft conclusions. To understand how the Commission arrived at results the reader needs underlying information and analysis.
9. I recognise the market study requires a broad-brush approach as a results of data availability and when there are issues of commercially sensitive information. The study requires plausible ranges (or limits) by industry and by parts. In my opinion a fair balance of interests has not been achieved.
10. For input into public policy the Commission’s approach requires a reasoned narrative supported by relevant financial analysis. Yes, it appears that excess profits looking forward and backward are significant and persistent. However, the underlying analysis is hidden in group data and results. For instance, the 3-year rolling average ROACE hides the

assumptions and calculations and the domination of the 3 fuel majors. The rolling 3-year average hides the year by year trends. As set out in **Table A** the Excess Profits (and related returns) of each of the Fuel Majors has significantly declined in the last financial year. [The declining trend is best measured as Excess Returns (or EVA) as it accounts for a capital charge (and a falling cost of capital as the risk-free rate falls).]

IWA analysis

11. My financial analysis is a work in progress. There are number of issues with accounting classifications, when and if resolved, would enhance my work. I have not spoken with any Fuel Major or the Commission about the content of my previous submissions.
12. The Commission has focused on the “new entrant/expansion” assumption for calculating the capital invested. It deducts, among other items, acquired goodwill and contracts from total assets, adds capitalised leases and nets off current liabilities and cash. My fundamental assumption for calculating Excess Returns is based on the “cash returns” related to the “cash invested” in a firm. The accounting anomalies are corrected to establish a modified/adjusted historic cost. Most of these adjustments listed in my submission, “Trends in Profits”, Attachment 4, referred to in footnote 1.
13. The Commission includes Z Energy’s revaluations [D150] in the calculation of NOPAT and Capital.² What is unclear is whether the revaluations for the ROACE calculation were allocated back over the time when they arose?
14. Under the Commission’s “new entrant” assumption acquired contracts are deducted from assets. It is arguable that the entrant costs of acquiring customers should be capitalised as part of the investment. A start up loss to attain a normal return would be part of capital for replacement cost calculations.
15. Generally, my calculation of capital are likely to be higher than the Commission’s estimates. It would be easier for the Commission to reconcile with my definitions and treatments.

Profitability of firms

17. The Commission’s preferred replacement cost (of PP&E) better reflects the cost for new entrants/business expansion. The Commission suggests an index of holding gains of about 2

² Refer to D151 and the option to either reverse revaluations to reflect historic cost or include gains in profit and accumulated gains added to capital. Consistently applied the historic or revaluation approaches are equivalent.

% pa might be appropriate. The Commission has criticised my Excess Profits/EVA approach as it is backward looking and, although the accounting treatment is modified, fails to account for holding gains/revaluations. My answer is that the Commission can just add one line to my NOPAT to account for change in value and a line accumulating holding gains/losses to Capital. [D207] The accumulated holding gains may also be added to Tobin's q replacement cost.

18. The Fuel Majors' historic accounts have been adjusted for accounting anomalies, leasing, etc. to better reflect the operating cash flow (NOPAT) sum of cash invested (Capital). The Commission also made similar modifications including deducting goodwill, contracts, leasing, etc. for its "New Entrant" assessments. The Commission's approach is explicit in Figures D5, D6 and D7.
19. The Commission's ROACE reflects historical performance (grouped or averaged) but is a less nuanced way of presented ROACE (by firm or partial industry). I maintain that it is Excess Profits (with or without a revaluation adjustment) that matter not just one, the ROACE ratio metric).

Normal returns

20. The Commission's cost of capital is the standard for the New Zealand capital market. For the purposes of this study, a cost of capital line is required that generally reflects historical rates and a timely forward rate. The Commission's range is 6.9% to 8.6%. The current forward rate is lower as a result of a lower risk-free rate.
21. The Commission has determined a range of 3.1% and 4.5% for the risk-free rate generally reflecting the rates adopted by a number of investment research analysis over the last year in estimating Z Energy's cost of capital. [CC Table C5]
22. However, the 10-year rate has been below 4% since November 2014. The current August monthly average rate is 1.13%³
23. The risk-free rates I have adopted are 2.45% (balance date December 2018) and 2.02% (balance date March 2019). For completeness the other variables I have assumed are: asset beta 0.8, leverage 34%, debt risk premium 2.5% and market risk premium of 7% in the standard Commission's cost of capital model. [Table A Panel C]

³ <https://www.rbnz.govt.nz/statistics/b2>

24. I observe that PricewaterhouseCoopers use 2.75% "... reflecting implied forward yields on longer term bonds."⁴ (March 2019)
25. For my financial analysis I have used the average month spot 10-year rate ex ante each financial year. The market current month spot 10-year rate is 1.13%. The profile of cost of capital changes through time from 9.9% in 2009 to 8.1% for December 2018 and 8.0% for March 2019.

Observations on Figures: D5 to D9

27. **Figure D5**
NZ v International 3 year rolling average ROACE 2014-2018

The obvious ROACE reversal of international peers and NZ fuel firms' positions has not been explained by the Commission. NZ fuel firms change from a spread of about negative 15% points in 2007 to positive 15% in 2018. It looks like two offsetting cycles. What economics underlie the reversal?

I note the international comparator set includes exploration and production businesses ("Upstream") which have specific accounting policies unrelated to NZ Fuels market ("Downstream"). For instance, E&P apply different accounting approaches including successful efforts or full cost accounting, specific reserve and fair value accounting, etc.⁵

A question: has the Commission included the group or upstream or downstream entities in the ROACE assessments? For instance, the ExxonMobil's 2017 Financial Operating Review includes Group ROACE ranging from 11.1% in 2017 back to 19.2% in 2013 [page 26]; Upstream 5.8% in 2017 back to 17.5% in 2013 and, Downstream 24.9% in 2017 back to 14.1% in 2013. [page 79]

28. **Figure D6**
NZ firms' 3 year rolling average ROACE 2004-2018

The 3-year rolling average disguises the actual change in Excess Returns in 2019. The Return on Capital has fallen from 26.9% to 16.8% or -10.1% points on a simple average basis. The Commission's Figure 6 chart may be misleading. [Table A Panel B]

⁴ <https://www.pwc.co.nz/pdfs/2019pdfs/cost-of-capital-report-1.pdf>

⁵ Antill Nick, K Lee, Company valuation under IFRS, 2nd 2005, 263-273.

29. **Figure D7**
NZ firms v NZX 3 year rolling average ROACE 2012-2018

The NZX companies are weighted on a capital basis. It is unclear whether NZ fuel firms are measured on the same basis (refers to “average ROACE”. [D171 and D172])

Some NZX companies revalue “generation structures and plant” on a regular basis. The asset revaluation is added to assets and between equity and deferred tax. The holding gains arising does not pass through the Income Statement (the BP New Zealand issue [B76 to B79]). For instance, Meridian Energy Annual Report discloses [p118] that the net book value of fixed assets is \$8.6b relative to historical carrying value of just \$2.5m.⁶ Has the Commission adjusted the NZX 50 data as it suggests should be done in D171.4?

The conclusion at D172 may need to be reviewed.

The chart shows the NZX 50 (minus 3 banks) rolling 3-year average ROACE ranging from just below 5% in 2012 to about 7% in 2018. The ROACE appears to be below the average cost of capital for all years.

30. **Figure D8**
NZ firms’ High ROACE 2016-2018

Again, this chart disguises the fall in ROACE in 2019 (as shown in **Table A Panel B**).

31. **Figure D9**
Major firms v Gull/smaller companies annual average excess return 2016-2018

Based on the chart the total Excess Profits were approximately \$398m, split \$360m Fuel Majors) and \$35m for Gull et al. The Fuel Major’s dominance on a dollar basis is stark: 91% by size.

Based on my analysis the Fuel Majors have suffered a negative change of 6.6% on a weighted average basis in the 2019 financial year from \$517m in 2018 to \$316m in 2019, a change of -\$201m [**Table A Panel D**]. The return on capital falls by 10.1% points [**Table A Panel B**].

⁶ As indicated by the size by market capitalisation at \$32b, the 5 listed generators and retailers are material to the assessments.

Table A		3 Fuel Majors (Partial Industry)											
13/09/2019 10:30												Backward	Forward
Fuel Market Study		1	2	3	4	5	6	7	8	9	10	11	12
Performance Summary		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		<i>Financial years shifted forward to match Z Energy</i>											
Panel A	NOPAT and Capital												
	NOPAT												
	Z Energy					109	135	61	135	356	364	313	
	BP NZ	108	76	128	148	80	61	44	113	162	285	212	
	ExxonMobil	(93)	37	28	40	17	65	(19)	12	96	150	77	
	total	16	113	156	188	206	261	86	260	614	799	602	
	Average Capital												
	Z Energy					715	678	703	686	1,231	1,764	1,849	
	BP NZ	799	879	970	893	853	957	1,024	945	929	1,182	1,255	
	ExxonMobil	479	488	513	496	482	526	507	432	381	417	469	
	total	1,278	1,367	1,483	1,389	2,050	2,161	2,235	2,063	2,541	3,363	3,573	
	Change in capital		89	116	(94)	661	111	74	(171)	478	822	210	
Panel B	Return on Capital												
	Z Energy					15.2%	19.9%	8.7%	19.7%	28.9%	20.6%	16.9%	
	BP NZ	13.6%	8.6%	13.2%	16.6%	9.4%	6.4%	4.3%	12.0%	17.4%	24.1%	16.9%	
	ExxonMobil	-19.4%	7.5%	5.5%	8.0%	3.6%	12.4%	-3.8%	2.7%	25.3%	35.9%	16.5%	
	simple ave.	-2.9%	8.1%	9.3%	12.3%	9.4%	12.9%	3.1%	11.5%	23.9%	26.9%	16.8%	
	Change in return on capital	%points	11.0%	1.3%	3.0%	-2.9%	3.5%	-9.8%	8.4%	12.4%	3.0%	-10.1%	
Panel C	Cost of Capital												
	Z Energy	Mar			9.7%	9.1%	9.2%	9.0%	8.5%	8.5%	8.4%	8.0%	7.7%
	BP NZ	Dec	9.9%	10.0%	10.3%	9.7%	8.9%	9.2%	9.3%	8.8%	8.7%	8.4%	8.1%
	ExxonMobil	Dec	9.9%	10.0%	10.3%	9.7%	8.9%	9.2%	9.3%	8.8%	8.7%	8.4%	8.1%
	simple ave.		9.9%	10.0%	10.3%	9.7%	9.0%	9.2%	9.2%	8.7%	8.6%	8.4%	8.1%
	Change in cost of capital	%points		0.1%	0.3%	-0.6%	-0.7%	0.2%	0.0%	-0.5%	-0.1%	-0.2%	-0.3%
Panel D	Excess Profit												
	Z Energy					44	73	(2)	77	251	216	166	
	BP NZ	29	(12)	28	61	4	(27)	(51)	30	81	186	111	
	ExxonMobil	(140)	(12)	(25)	(8)	(26)	17	(66)	(26)	63	115	39	
	total	(111)	(24)	3	53	22	63	(119)	81	395	517	316	
	%weighted ave. return	-8.7%	-1.8%	0.2%	3.8%	1.1%	2.9%	-5.3%	3.9%	15.6%	15.4%	8.8%	
	Change in weighted % return	%points	6.9%	2.0%	3.6%	-2.7%	1.8%	-8.2%	9.3%	11.6%	-0.2%	-6.5%	
	Change in excess \$ profit		87	27	50	(31)	40	(182)	200	315	121	(201)	
Panel E	Excess Profit Margin												
	Z Energy					6.1%	10.7%	-0.3%	11.2%	20.4%	12.2%	8.9%	
	BP NZ	3.7%	-1.4%	2.9%	6.9%	0.5%	-2.8%	-5.0%	3.2%	8.7%	15.7%	8.8%	
	ExxonMobil	-29.3%	-2.5%	-4.8%	-1.7%	-5.3%	3.2%	-13.1%	-6.1%	16.6%	27.5%	8.4%	
	simple ave.	-12.8%	-1.9%	-1.0%	2.6%	0.4%	3.7%	-6.1%	2.8%	15.2%	18.5%	8.7%	
	Change in excess margin	%points	10.9%	1.0%	3.6%	-2.2%	3.3%	-9.8%	8.9%	12.5%	3.2%	-9.8%	

Replacement cost and Tobin's q

32. Tobin's q provides a measure of market entry/expansion attractiveness. The gap between market value⁷ and estimated depreciated replacement cost⁸ signals future potential economic value. A new entrant will recognise the value enhancing prospects of a possible entry discount, albeit at one point of time as presented by the Commission. The Tobin q for Z Energy is 2.05 (or 1.95 after correcting for the number of Z Energy shares in the valuation).⁹ The value gap is \$1.97m (or \$1.79m after my correction) [Table B Panel A]

33. To quote the Commission:

"Tobin's q estimates, albeit for only a few firms, indicate that investors expect ongoing returns well in excess of the levels that should attract either new entrants or expansion given the current cost to enter or expand." [E11.3]

The value gap can be rationalised as the sum of investors' expected future excess profit or return, including real option value.

Persistence of Excess Returns

34. Tobin's q is a broad indicator of the prospect of future excess profits or returns, i.e. future economic income less a capital charge. The "future earnings" are more than just EBITA/EBIT/Net Income as implied by analysts' forecasts. [E27-29 and Figure E1] Margins may rise but not result in a change in excess profits. Excess profits factor in all costs, including a changing cost of capital.¹⁰

35. Another view of future expected profitability can be derived from investment analysts' research and expectations. Also, the unbiased implied performance can be inferred from the capital markets as reflected in the current share price. What future EVA growth (or decay) does the market expect to equate with today's share price?

⁷ The Market Value estimation includes deferred tax which largely results from revaluations. [Table D2]

⁸ The Replacement Cost for Z Energy includes "construction in progress" and "software in progress" totalling \$42m would not normally apply to a new entrant/expansion. [Table D5]

⁹ The Commission has assumed there are 429m shares issued [TableD2]. See note 20 at page 95 of the 2019 Z Energy Annual Report and issued shares of 400m. Also, NZX <https://www.nzx.com/instruments/ZEL>

¹⁰ The future excess profits are a function of a combination of business drivers: revenue, volumes, margins, investment and cost of capital and not just one or two of them.

36. Another approach for understanding the value gap derived by the Tobin q approach is the concept of Future Growth Value (FGV).¹¹ This approach identifies the timing and extend of expected excess profits/returns implicitly baked into the share price of Z Energy.

37. Tobin's q and FGV are similar concepts.

Market Value - Capital = Net Present Value [termed "Market Value Added"]

[noting q: $MV - RC = \text{Value Gap}$], and

Net Present Value = present value of future expected Excess Returns/EVA

We can now split the Market Value into 2 parts:

$MV = \text{Capital} + \text{Current Operating Value (COV)}$,

Where,

$\text{COV} = \text{capitalised current Excess Profits}$

+ Present value of future improvement in Excess Profits

38. **Table B** analyses the implicit FGV for Z Energy.

¹¹ O'Byrne, Stephen F., A Better Way to Measure Operating Performance (or Why the EVA Math Really Matters) (Summer 2016). Journal of Applied Corporate Finance, Vol. 28, Issue 3, pp. 68-86, 2016. Available at SSRN: <https://ssrn.com/abstract=2876919> or <http://dx.doi.org/10.1111/jacf.12194>

Table B		3 Fuel Majors (Partial Industry)								
12/09/2019 10:49									Backward	Forward
Fuel Market Study		0	1	2	3	4	5	6	7	
Performance Indicators		2013	2014	2015	2016	2017	2018	2019	2020	
Panel A Commerce Commission Tobin's q										
Z Energy										correction
Market Value	Table D2							3,850	3,668	
Replacement cost (DRC Table D5)								1,880	1,880	
Value Gap								1,970	1,788	
Tobin's q									2.05	1.95
Panel B IWA Excess Profits Approach										11/09/2019
Share price	\$	3.63	3.91	4.82	7.84	7.45	7.26	6.33	6.30	
Market Value (MV)			1,869	2,199	3,432	4,136	3,890	3,583	beg. Capital 1,924	
Operating beg. Capital (adj Historic cost)		613	742	664	707	1,754	1,774	1,924		
Market Value Added (MVA)			1,127	1,535	2,725	2,382	2,116	1,659		
Change in MVA				408	1,190	(343)	(266)	(457)		
Ratio	(MV/Capital)		2.5	3.3	4.9	2.4	2.2	1.9		
Panel C Future Growth Value Analysis										
Excess Returns/EVA		44	73	(2)	77	251	216	166		
Cost of Capital		9.1%	9.2%	9.0%	8.5%	8.5%	8.4%	8.0%	7.7%	
Current Operating Value (COV)										
Excess Returns (capitalised as a present value)		484	793	(22)	906	2,953	2,571	2,075		
Capital			742	664	707	1,754	1,774	1,924		
COV			1,535	642	1,613	4,707	4,345	3,999		
Implied Future Growth Value (FGV)										
MV			1,869	2,199	3,432	4,136	3,890	3,583		
COV			1,535	642	1,613	4,707	4,345	3,999		
FGV			334	1,557	1,819	(571)	(455)	(416)		
FGV as % of MV			17.8%	70.8%	53.0%	-13.8%	-11.7%	-11.6%		
Implied Improvement(decay)										
Panel D Return Ratio										
Return on Capital			19.9%	8.7%	19.7%	28.9%	20.6%	16.9%		
Cost of Capital			9.2%	9.0%	8.5%	8.5%	8.4%	8.0%		
Ratio			2.2	1.0	2.3	3.4	2.5	2.1		
Panel E note										
Capital			742	664	707	1,754	1,774	1,924		
EVA/Excess Profits capitalised			793	(22)	906	2,953	2,571	2,075		
COV			1,535	642	1,613	4,707	4,345	3,999		
MV			1,869	2,199	3,432	4,136	3,890	3,583		
FGV			334	1,557	1,819	(571)	(455)	(416)		

In Panel B the MVA is estimated by deducting Operating Capital from the its Market Value based on Z Energy's closing annual share price. This has been calculated for each year since 2014. The annual change in MVA and the ratio of MV to Capital is calculated providing a time series of regular market expectations.

39. In Panel C the COV is the Capital plus the sum of the capitalised Excess Profits. The FGV is the residual of MV less COV. It is negative for the last three years. Expressed as a

percentage of MV, FGV is negative 11 to 14%. This is an expression of the unbiased market expectations.

40. The market price for Z Energy implicitly assumes that given current Excess Profits are maintained the future growth in future Excess Profits will be reduced by a net present value of around \$416m to justify the current share price. Of course, negative Excess Profits may be a combination of COV and FGV.
41. FGV is an answer to the Commission's request for reliable forward-looking information. The market is saying the future Excess Profits are expected to decline. [E7.3] The equivalent change in annual Excess Profits could be estimated by an annuity calculation.
42. Panel **D** shows the ratio of MV to Capital since 2014. Broadly, it can be compared to Tobin' q in Panel **A** and ratio of MV to Capital in Panel **B**. [note; some definitions may be different to the Commissions. No reconciliation has been attempted]

Economic Margin update

43. The economic margin is what matters: Excess Profits divided by Sales.

A backward-looking summary of the Z Energy's economic margin performance is presented in **Table C**. The Net Economic Margin should be contrasted with the rising fuel margins shown in the Commission's Figure X2 and X32.

Table C									
13/09/2019 10:30		Z Energy							
Economic Margin Analysis									
	\$m	0	1	2	3	4	5	6	7
		2012	2013	2014	2015	2016	2017	2018	2019
Sales		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
- Cash Operating Expenses		95.9%	94.8%	96.6%	93.0%	88.5%	89.8%	92.0%	
= Operating Margin		4.1%	5.2%	3.4%	7.0%	11.5%	10.2%	8.0%	
- Net Working Capital Charge		0.8%	0.7%	0.6%	0.5%	0.5%	0.5%	0.5%	
- PP&E Charge		2.1%	2.6%	3.3%	4.1%	4.4%	4.3%	3.9%	
- Other Asset Charge		0.0%	(0.3%)	(0.5%)	(0.7%)	(0.2%)	0.2%	0.1%	
- Adjusted Goodwill Charge		0.0%	0.0%	0.0%	0.1%	0.3%	0.4%	0.5%	
Total Asset Ownership Charges		2.9%	3.0%	3.5%	3.9%	5.0%	5.5%	5.0%	
= Net Economic Margin		1.2%	2.2%	(0.1%)	3.1%	6.5%	4.7%	3.0%	
x Adjust Sales		3,558	3,371	3,064	2,521	3,863	4,570	5,450	
= EVA		44	73	(2)	77	251	216	166	

Preliminary conclusions:

1. The historic Excess Profits and Returns on Capital for the Fuel Majors have been at a high level.
 2. However, in the 2018/19 financial year the Excess Profits fell by about a half.
 3. With the drop in current in Excess Profits their persistence is questionable. It can be inferred that the market expectations are for a future decline in Excess Profits of some \$400m.
 4. The Fuel margins rose while the economic margins fell.
 5. There is a need for more transparency of underlying data and application.
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Appendix: ZEL1

Z Energy		Z Energy						
13/09/2019 10:49								
Income Statements		0	1	2	3	4	5	6
	Mar	2013	2014	2015	2016	2017	2018	2019
Revenue								
Fuel	\$m	3,465	3,287	3,003	2,457	3,794	4,487	5,342
Other		56	59	61	64	69	23	45
Convenience retail							60	63
Chemicals		37	25					
Total Revenue		3,558	3,371	3,064	2,521	3,863	4,570	5,450
Purchases of crude & product		2,511	2,311	2,073	1,417	2,010	2,579	3,450
Exercise and carbon expenses		569	546	562	569	941	1,011	1,091
Primary distribution		24	25	25	27	41	56	48
Operating expenses								
Employee benefits		41	50	44	53	69	69	
Secondary distribution		47	46	44	45	64	71	
Selling commissions		59	56	59	59	59	59	
On-site expenses		40	46	51	52	57	59	
Administration & other expenses		48	4	12	15	24	31	380
Acquisition costs								
Lease cost		16	22	22	22	30	31	33
Professional fees		-	19	21	39	39	22	
Marketing expenses		-	19	21	23	28	28	
Storage & handling		20	18	14	13	20	22	
Insurance		8	8	6	6	6	6	
(Gains)/losses on foreign exchange		10	(10)	11	15	(7)	(1)	
Losses on commodity transactions			3	16	11			
Total operating expenses		289	281	321	353	389	397	413
Share of earnings of associates net of tax		-	(5)	10	23	6	1	(1)
EBITDAF		165	203	93	178	488	528	447
Depreciation & amortisation		39	39	43	41	89	102	122
Interest income		(3)	(26)	(23)	(26)	(22)	(16)	(52)
Financing expense		-	51	57	58	78	68	103
Fair value movements interest rate derivatives		-	2	7	6	(3)	9	4
Impairment		-	(1)		5	5		
Loss (gain) on sale of PP&E		(41)	4		1	1	(4)	
Decommissioning & restoration provision				3	7	(2)	3	18
		(5)	69	87	92	146	162	195
Profit Before Tax		170	134	6	86	342	366	252
Current Tax		30	44	2	23	108	109	84
Deferred Tax/Adjustments		3	(5)	(3)	(1)	(9)	(6)	(18)
Total Income Tax Expense		33	39	(1)	22	99	103	66
Profit After Tax		137	95	7	64	243	263	186

Appendix: ZEL2a

Z Energy									
13/09/2019 10:49									
Z Energy									
Financial Statements									
	Mar	0	1	2	3	4	5	6	
	2012	2013	2014	2015	2016	2017	2018	2019	
	\$m								
Assets									
Cash & equivalents	17	115	178	206	76	9	72	111	
Held-for-Sale Assets	-	2	-	-	-	-	9	27	
Acquisition deposit	-	-	-	-	79	-	-	-	
Accounts receivable & prepayments	245	241	227	163	155	278	337	499	
Inventories	671	483	483	313	212	474	639	578	
Inventory Adjustment Reserve	-	(1)	(4)	(9)	(9)	(10)	3	0	
	671	482	479	304	203	464	642	578	
Income tax receivable	-	-	-	16	28	-	-	-	
Derivative financial Inst.	0	-	1	4	8	4	4	9	
Intercompany balances	385	720	-	-	-	-	-	-	
	1,318	1,560	885	693	549	755	1,064	1,224	
Goodwill	-	-	-	-	-	158	158	193	
Intangible assets brands/contracts	-	-	-	-	-	463	463	482	
Software in Progress	-	-	-	-	-	-	15	37	
Intangible assets emission units	4	16	20	21	33	84	128	8	
Intangible assets other	28	20	22	19	42	40	100	119	
Gross intangibles	32	36	42	40	75	587	706	646	
accumulated amortisation	(15)	(9)	(7)	(8)	(31)	(52)	(114)	(171)	
Net Intangibles	17	27	35	32	44	535	592	475	
Derivatives financial instruments	-	-	12	6	11	5	5	17	
Deferred tax	7	4	-	-	-	-	-	-	
Other non-current assets	2	3	1	1	1	4	3	3	
Investments associates/subsidiaries	1	1	96	105	115	116	3	4	
Investments at BV	2	-	-	-	-	-	110	101	
Buildings	154	108	52	59	113	135	118	122	
Land & improvements	72	107	154	156	206	305	324	311	
Plant & machinery	313	351	289	226	258	341	369	393	
Terminal plant	-	-	-	110	115	183	183	195	
Capital Work in Progress	78	33	47	47	67	48	33	25	
Gross PP&E	617	599	542	598	759	1,012	1,027	1,046	
Accum. Depreciation	(311)	(288)	(31)	(62)	(85)	(112)	(157)	(216)	
Net PP&E	306	311	511	536	674	900	870	830	
Total	1,652	1,906	1,540	1,373	1,394	2,473	2,805	2,847	

Appendix: ZEL2b

Z Energy									
	0	1	2	3	4	5	6	7	
Equity and Liabilities	2012	2013	2014	2015	2016	2017	2018	2019	
Accounts payable	452	499	410	335	263	378	585	666	
Accrual/other liabilities	-	-	-	-	-	35	96	-	
Employee benefits	8	10	14	16	15	18	15	11	
Income tax payable	19	4	12		-	24	61	19	
Provisions	5	4	11	10	6	18	26	23	
Loan & bonds				-	147	51	150	135	
Derivative financial Instruments	10	5	2	6	9	10	17	13	
Intercompany balances	313	315	-	-	-	-	-	-	
	807	837	449	367	440	534	950	867	
Other liabilities		18	17	17	15	14	16	20	
Provisions	21	24	21	27	37	50	47	68	
Derivative financial Instruments		-	10	9	21	12	33	26	
Deferred tax		-	22	18	32	170	156	143	
Loan & bonds	298	430	430	430	283	991	746	803	
	319	472	500	501	388	1,237	998	1,060	
Non-controlling interest	-	-	-	-	-	-	-	18	
Share Capital	527	10	432	432	431	430	429	429	
Employee share reserve	-	-	(2)	(3)	(3)	(3)	(4)	(5)	
Hedging Reserves	-	-	-	-	-	-	(2)	(5)	
Asset revaluation reserve		587	141	135	232	235	250	258	
Investment Revaluation Reserve	-	-	-	-	-	-	(4)	(13)	
Retained Earnings	-	-	20	(59)	(94)	40	188	238	
Equity	527	597	591	505	566	702	857	920	
Total	1,652	1,906	1,540	1,373	1,394	2,473	2,805	2,847	

Appendix: ZEL3**ZEL3**

13/09/2019 10:49

Economic Value Added**Z Energy**

History 2013 to 2019

March	\$m	2013	2014	2015	2016	2017	2018	2019
<u>Performance Summary</u>								
NOPAT		109	135	61	135	356	364	313
Avg Capital		715	678	703	686	1,231	1,764	1,849
NOPAT/Avg Capital		15.2%	20.0%	8.7%	19.7%	28.9%	20.6%	17.0%
Cost of Capital (C*)		9.1%	9.2%	9.0%	8.5%	8.5%	8.4%	8.0%
<u>Spread Method</u>								
Profit Spread R-C*		6.1%	10.8%	(0.3%)	11.2%	20.4%	12.2%	9.0%
x Avg Capital		715	678	703	686	1,231	1,764	1,849
EVA = (R-C*) x Average Capital		44	73	(2)	77	251	216	166
<u>Residual Income Method</u>								
NOPAT		109	135	61	135	356	364	313
Cost of Capital (C*)		9.1%	9.2%	9.0%	8.5%	8.5%	8.4%	8.0%
x Avg Capital		715	678	703	686	1,231	1,764	1,849
Capital Charge		65	62	63	58	105	148	148
EVA = NOPAT-Capital Charge		44	73	(2)	77	251	216	166
Increase in EVA			29	(75)	79	174	(35)	(50)
Cumulative EVA		44	117	115	192	443	659	825
<u>Market Valuation</u>								
Performance Index R/C*		1.67 x	2.17 x	0.97 x	2.32 x	3.40 x	2.46 x	2.12 x
Price/Adj Book Ratio		0.03 x	3.58 x	4.91 x	7.63 x	4.98 x	3.70 x	2.90 x
Return Div & Capital Gain			53.5%	28.9%	67.8%	(1.5%)	1.4%	(7.9%)
Value of \$1 Investment		1.00	1.54	1.98	3.32	3.27	3.32	3.06

Appendix: ZEL4**ZEL4**

10/09/2019 22:28

NOPAT Operating Approach**Z Energy**

History 2013 to 2019

March	\$m #	2013	2014	2015	2016	2017	2018	2019
Sales		3,558	3,371	3,064	2,521	3,863	4,570	5,450
Cost of Goods Sold		3,104	2,882	2,660	2,013	2,992	3,646	4,589
Operating Expenses		215	262	260	290	342	336	0
Depreciation/Amortisation		39	39	43	41	89	102	122
Administration & Other		48	4	12	15	24	31	380
Other Operating Expenses		10	(7)	30	33	(9)	2	18
Lease & Rental Expenses		16	22	22	22	30	31	33
Int Exp Non-Cap Leases		(8)	(11)	(11)	(11)	(15)	(15)	(17)
(Incr) Employment Benefits		8	0	(16)	1	(3)	3	4
(Incr) Provisions		(7)	(4)	(5)	(6)	(25)	(5)	(18)
(Incr) NOPAT & Capital Adjustments		0	0	0	(25)	(14)	0	(1)
(Incr) Accum Intangible Amortisation		(9)	2	(1)	(23)	(21)	(62)	(57)
(Incr) Inventory Reserve Adjustment		(1)	(3)	(5)	0	(1)	13	(3)
Total Operating Expenses		3,415	3,186	2,989	2,350	3,389	4,082	5,050
Adjusted EBIT		143	185	75	171	474	488	400
Operating Taxes		34	50	14	36	118	124	86
NOPAT		109	135	61	135	356	364	313

Appendix: ZEL5

ZEL5									
10/09/2019 22:28									
Operating Capital Approach								Z Energy	
History 2013 to 2019									
March	2012	2013	2014	2015	2016	2017	2018	2019	
Net Accts Receivable	245	241	227	163	155	278	337	499	
Inventory Reserve Adjustment	0	1	4	9	9	10	(3)	0	
Net Inventory	671	482	479	304	203	464	642	578	
Other Current Assets	0	0	0	16	28	0	0	0	
Current Operating Assets	916	724	710	492	395	752	976	1,077	
Accounts Payable & Other	457	509	424	335	263	413	681	666	
Tax Payable	19	4	12	0	0	24	61	19	
NIBCLs	476	513	436	335	263	437	742	685	
Net Working Capital	440	211	274	157	132	315	234	392	
Net Prop Plant & Equip	306	311	511	536	674	900	870	830	
Capital Work in Progress	(78)	(33)	(47)	(47)	(67)	(48)	(33)	(25)	
PV of Non-Cap Leases	122	122	179	182	188	273	305	343	
Adjusted Prop Plant & Equipmen	350	400	643	671	795	1,125	1,142	1,148	
Goodwill	0	0	0	0	0	158	158	193	
Accum Intangible Amortisation	0	9	7	8	31	52	114	171	
Adjusted Goodwill	0	9	7	8	31	210	272	364	
Intangible Assets	17	27	35	32	44	535	592	475	
Operating Investments	0	0	13	10	19	9	9	26	
Other Assets	2	3	1	1	1	4	3	3	
Capital Adustments a/tax	0	(41)	(37)	(29)	(28)	(19)	(27)	(25)	
NOPAT & Capital Adjustments	0	0	0	0	25	39	39	40	
Revaluation Reversal Soft cwip	0	0	(172)	(168)	(280)	(294)	(334)	(356)	
(Net Deferred Taxes)	7	4	(22)	(18)	(32)	(170)	(156)	(143)	
Other Assets	26	(7)	(182)	(172)	(251)	104	126	20	
Capital	816	613	742	664	707	1,754	1,774	1,924	

Appendix: BP1

BP1										BP New Zealand	
10/09/2019 22:28											
Income Statements										1	
Income Statement and Notes										Dec	
	0	1	2	3	4	5	6	7	8	9	10
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue	\$'000										
Oil Products	3,621,443	2,869,894	3,155,488	3,478,246	3,564,271	3,268,681	3,269,671	2,748,943	2,691,002	2,907,195	3,441,212
Non-oil and Other Revenue										251,631	257,630
	3,621,443	2,869,894	3,155,488	3,478,246	3,564,271	3,268,681	3,269,671	2,748,943	2,691,002	3,158,826	3,698,842
Rent	2,728	354	2,911	5,336	8,070	5,392	5,153	4,996	5,077	4,425	4,363
Interest	1,530	5,100	7,856	7,447	2,587	3,966	5,244	8,926	4,674	8,147	4,056
Cost Recoveries	2,559	3,237	3,752	7,701	7,872	8,182	7,802	5,864	6,121	5,379	6,900
Other	4,243	4,018	5,043	6,431	7,757	26,695	7,841	15,710	8,499	18,046	17,743
Dividends	-	-	7	7	7	7					
Share of profit associate	34,313	7,987	20,077	12,691	16,050	7,951	10,293	37,549	18,227	13,096	10,998
Gain on sale non-current assets								2,350	4,233	15,477	1,018
	45,373	20,696	39,646	39,613	42,343	52,193	36,333	75,395	46,831	64,570	45,078
Change Inventories of finished Goods & WIP										(42,195)	(36,550)
Raw Materials and Consumables Used										2,425,103	2,966,335
Cost of sales	3,126,512	2,466,236	2,678,692	2,943,385	3,097,719	2,785,260	2,851,104	2,184,409	2,033,639	2,382,908	2,929,785
Employee expenses	77,824	74,476	67,918	73,799	77,154	77,850	79,877	88,775	92,656	94,115	98,767
Bad and doubtful debts	1,045	440	366	89	479	171	420	247	271	17	181
Operating lease rentals	16,306	16,724	16,422	18,379	19,892	36,476	18,178	19,354	17,764	16,991	18,703
Environmental costs								18,157	29,902	58,254	90,208
Freight costs								171,099	149,018	106,190	110,676
Fees & commissions								13,687	15,327	19,911	25,843
Materials								5,538	5,805	5,423	5,120
Utilities								8,860	10,737	9,421	9,476
Other expenses	259,706	189,297	231,276	256,838	232,513	232,330	242,569	19,053	30,782	85,778	99,701
Brand/franchise costs								5,669	6,976	5,603	6,375
Repairs & maintenance								28,499	26,494	26,828	27,873
Advertising								6,112	5,684	6,897	5,557
Legal costs								1,847	1,388	1,101	1,081
Travel expenses								1,843	1,701	2,054	2,095
Total other expenses	354,881	280,937	315,982	349,105	330,038	346,827	341,044	388,740	394,505	438,583	501,656
EBITDAF											
Depreciation	29,367	29,430	31,685	27,403	25,059	23,196	30,502	31,212	33,447	32,145	35,703
Amortisation & impairment	1,954	2,987	2,688	1,760	110	185	1,061	1,096	30,102	1,858	1,831
Interest income											
Financing expense	55,357	41,143	31,729	30,737	25,607	30,733	32,459	32,062	31,244	29,433	19,562
Net Loss (gain) on sale of Non-current assets	1,358	(932)	(843)	(155)	(999)	2,153	(701)	619	690	5,185	-
Associate share of profits											
Losses on FX	34,694	(41,806)	(27,113)	(267)	(5,250)	1,473	14,462	21,237	(796)	4,599	9,934
Other income											
	122,730	30,822	38,146	59,478	44,527	57,740	77,783	86,226	94,687	73,220	67,030
Profit Before Tax											
Current Tax	(3,653)	(33,454)	(43,609)	(43,974)	(35,200)	(31,453)	(13,418)	(36,989)	(68,376)	(87,267)	(67,709)
Deferred Tax/Adjustments	(801)	405	(6,116)	3,224	1,296	2,786	7,671	227	858	1,485	1,616
Total Income Tax Expense	(4,454)	(33,049)	(49,725)	(40,750)	(33,904)	(28,667)	(5,747)	(36,762)	(67,518)	(85,782)	(66,093)
Profit After Tax	58,239	79,546	112,589	125,141	100,426	102,380	30,326	128,201	147,484	242,903	179,356
	-	-	-	-	-	-	-	-	-	-	-

Appendix: BP2

BP2											BP New Zealand	
0/01/1900 0.00												
Financial Statements											2	
	0	1	2	3	4	5	6	7	8	9	10	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Assets												
Cash & equivalents	6,023	8,230	-	5,546	4,000	8,213	9,317	1,677	12,755	17,812	24,191	20,402
Hold-for-Sale Assets	-	-	-	-	-	-	-	-	-	75,528	-	-
Trade receivables	138,641	132,435	126,336	159,934	249,021	143,941	144,712	132,240	104,532	118,001	128,519	115,969
Allowance doubtful debts	(161)	(1,018)	(1,040)	(913)	(706)	(520)	(414)	(587)	(746)	(876)	(738)	(844)
Net trade receivables	138,480	131,417	125,296	159,021	248,315	143,421	144,298	131,653	103,786	117,125	127,781	115,125
Sundry receivables	20,668	4,514	2,500	10,666	6,641	2,599	3,173	3,410	1,623	7,810	8,124	3,805
Receivables related parties not trade	20,092	172,952	307,240	419,461	174,825	231,746	315,349	338,810	225,840	324,077	689,428	278,065
Inventories	432,299	406,178	434,776	507,337	424,131	394,009	509,006	294,170	269,610	366,557	383,703	421,606
Prepayments	2,583	1,767	1,361	2,000	2,622	3,241	3,059	4,470	2,942	10,093	3,202	2,133
Emission Allowance	-	-	-	-	-	-	-	-	-	-	31,313	925
Income tax receivable	2,514	17,744	-	-	-	-	910	24,855	2,077	-	-	-
Goodwill	437,396	425,689	436,137	509,337	426,753	397,250	512,975	323,495	274,629	407,963	387,830	426,393
Development costs	8,938	7,453	4,466	1,778	458	338	53,174	53,174	24,371	24,371	-	-
Intangible assets emission units	-	-	-	-	-	-	-	-	-	-	-	-
Intangible assets other	-	-	-	-	-	-	-	-	-	-	-	-
Gross intangibles	8,938	7,453	4,466	1,778	458	338	58,119	57,335	56,017	28,149	4,450	2,814
accumulated amortisation	-	-	-	-	-	-	-	-	-	-	-	-
Net Intangibles	8,938	7,453	4,466	1,778	458	338	58,119	57,335	56,017	28,149	4,450	2,814
Deferred tax assets	14,743	27,271	19,394	12,088	15,841	20,505	13,907	22,664	18,760	19,643	22,050	24,644
Other non-current assets	6,486	8,018	7,146	6,617	5,997	6,056	6,890	6,968	7,967	10,377	16,205	16,217
Investments in associates	99,911	97,179	89,519	109,485	107,595	115,206	110,144	124,146	156,849	78,452	108,876	112,097
Trade & other receivables	12,777	15,014	12,236	11,368	9,389	7,203	7,553	6,029	4,532	3,480	2,672	1,898
	133,917	147,482	128,295	139,558	138,822	148,970	138,494	159,807	188,108	111,952	149,803	154,856
Land & improvements	136,035	137,191	138,621	137,611	134,663	144,353	145,203	166,200	178,380	193,419	222,152	250,685
Buildings	104,450	40,862	38,785	34,084	33,113	32,117	30,414	29,289	29,105	28,897	28,320	27,775
Plant & machinery	48,984	34,159	35,764	34,339	34,932	35,088	36,138	47,018	49,498	52,368	39,476	42,331
Depots/tanks/stations	231,784	296,990	299,216	289,707	292,950	324,625	336,987	382,550	422,746	454,675	503,461	530,544
Other	23,497	21,955	18,250	16,575	16,013	12,754	11,442	10,645	11,570	4,472	4,447	4,830
Capital Work in Progress	27,795	17,686	15,601	39,334	59,334	36,979	66,841	52,128	49,022	42,369	33,562	46,021
Gross PP&E	572,545	548,843	546,237	551,850	571,005	585,916	627,025	687,830	740,321	776,200	831,418	902,186
Accum. Depreciation	285,042	269,099	278,363	283,497	298,144	306,991	322,971	346,724	364,912	370,460	397,699	416,142
Net PP&E	287,503	279,744	267,874	268,153	272,861	278,925	304,054	341,106	375,409	405,740	433,719	486,044
Total	1,053,017	1,177,481	1,271,808	1,513,520	1,272,675	1,211,462	1,485,779	1,357,293	1,238,167	1,496,156	1,825,326	1,487,504
	-	-	-	-	-	-	-	-	-	-	-	-
		0	1	2	3	4	5	6	7	8	9	10
Equity and Liabilities	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bank	-	-	4,000	-	-	-	3,361	-	-	-	-	-
Trade payables	94,197	103,228	171,157	158,881	175,191	134,316	402,765	230,555	246,017	315,817	393,200	284,909
Other payables	17,550	10,374	8,768	9,920	12,789	11,085	9,146	6,140	6,462	7,250	10,530	16,351
Emission trading scheme	-	-	-	25,174	38,862	12,086	2,133	1,872	18,447	36,126	59,337	92,804
Related party payables	92,323	222,628	168,034	276,652	192,695	105,196	2,618	17,266	41,250	52,067	11,677	14,949
Income tax payable	-	-	7,701	20,976	13,283	9,236	-	-	-	15,985	34,582	2,447
Employee provisions	6,947	6,611	7,089	6,281	7,726	8,052	8,493	8,889	8,977	8,865	9,312	10,076
Other provisions	-	3,500	3,966	1,826	166	834	4,028	3,279	655	251	1,028	1,146
Loan & bonds	223,916	124	85	81	146	600,071	25,296	25,123	25,233	24,240	622,703	44
Derivative financial Instruments	-	-	-	-	-	-	-	-	-	-	-	-
Intercompany balances	434,933	346,465	370,800	499,791	440,858	880,876	457,840	293,124	347,041	460,601	1,142,369	422,726
Other liabilities	-	-	-	-	-	-	-	27	-	-	-	206
Employee provisions	26,186	65,521	40,525	30,984	33,472	40,771	8,060	13,971	13,031	14,578	18,630	23,978
Other provisions+deferred income	2,076	1,772	1,125	2,706	3,633	3,238	1,936	2,619	2,091	824	1,350	981
Restoration costs provision	1,066	718	575	1,740	1,209	-	-	-	-	-	-	-
Derivative financial Instruments	-	-	-	-	-	-	-	-	-	-	-	-
Deferred tax	623	2,267	952	1,699	716	635	845	-	-	-	-	-
Loan & bonds	450,000	600,000	600,000	600,000	600,000	-	601,918	601,684	600,000	600,000	-	600,000
	479,951	670,278	643,177	637,129	639,030	44,644	612,759	618,301	615,122	615,402	19,980	625,165
Share Capital	33,530	33,530	33,530	33,530	33,530	33,530	33,530	33,530	33,530	33,530	33,530	33,530
Retained Earnings	104,603	127,208	224,301	343,070	159,257	252,412	381,650	412,338	242,474	386,623	629,447	406,083
Equity	138,133	160,738	257,831	376,600	192,787	285,942	415,180	445,868	276,004	420,153	662,977	439,613
Total	1,053,017	1,177,481	1,271,808	1,513,520	1,272,675	1,211,462	1,485,779	1,357,293	1,238,167	1,496,156	1,825,326	1,487,504

Appendix: BP3

BP3											
13/09/2019 12:22											
Economic Value Added											BP New Zealand
Dec	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Performance Summary											
NOPAT	108,422	75,908	127,873	147,960	80,102	61,211	44,335	113,201	161,961	285,349	212,184
Avg Capital	799,185	879,028	969,877	892,601	853,310	957,321	1,024,407	945,255	928,760	1,181,594	1,254,653
NOPAT/Avg Capital	13.6%	8.6%	13.2%	16.6%	9.4%	6.4%	4.3%	12.0%	17.4%	24.1%	16.9%
Cost of Capital (C*)	9.9%	10.0%	10.3%	9.7%	8.9%	9.2%	9.3%	8.8%	8.7%	8.4%	8.1%
Spread Method											
Profit Spread R-C*	3.7%	(1.4%)	2.9%	6.9%	0.5%	(2.8%)	(5.0%)	3.2%	8.7%	15.7%	8.8%
x Avg Capital	799,185	879,028	969,877	892,601	853,310	957,321	1,024,407	945,255	928,760	1,181,594	1,254,653
EVA = (R-C*) x Average Capital	29,302	(11,995)	27,976	61,377	4,158	(26,862)	(50,934)	30,018	81,159	186,095	110,557
Residual Income Method											
NOPAT	108,422	75,908	127,873	147,960	80,102	61,211	44,335	113,201	161,961	285,349	212,184
Cost of Capital (C*)	9.9%	10.0%	10.3%	9.7%	8.9%	9.2%	9.3%	8.8%	8.7%	8.4%	8.1%
x Avg Capital	799,185	879,028	969,877	892,601	853,310	957,321	1,024,407	945,255	928,760	1,181,594	1,254,653
Capital Charge	79,119	87,903	99,897	86,582	75,945	88,073	95,270	83,182	80,802	99,254	101,627
EVA = NOPAT-Capital Charge	29,302	(11,995)	27,976	61,377	4,158	(26,862)	(50,934)	30,018	81,159	186,095	110,557
Increase in EVA	N/A	(41,297)	39,970	33,402	(57,220)	(31,020)	(24,072)	80,953	51,141	104,935	(75,538)
Cumulative EVA	29,302	17,308	45,284	106,661	110,819	83,957	33,022	63,041	144,200	330,295	440,852
Market Valuation											
Performance Index R/C*	1.37 x	0.86 x	1.28 x	1.71 x	1.05 x	0.70 x	0.47 x	1.36 x	2.00 x	2.87 x	2.09 x

Appendix: BP4

BP4												
13/09/2019 12:45												
NOPAT Operating											BP New Zealand	
History 2007 to 2018												
Dec	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sale of Goods	3,004,710	3,621,443	2,869,894	3,155,488	3,478,246	3,564,271	3,268,681	3,269,671	2,748,943	2,691,002	3,158,826	3,698,842
Cost of Sales	2,892,373	3,465,087	2,730,449	2,978,242	3,274,111	3,407,865	3,095,611	3,173,970	2,553,795	2,410,380	2,804,500	3,412,738
Depreciation/Amortisation	30,142	31,321	32,417	34,373	29,163	25,169	23,381	31,563	32,308	63,549	34,003	37,534
Cost Recoveries	0	(2,559)	(3,237)	(3,752)	(7,701)	(7,872)	(8,182)	(7,802)	(5,864)	(6,121)	(5,379)	(6,900)
FX (gains)/losses	(7,460)	34,694	(41,806)	(27,113)	(267)	(5,250)	1,473	14,462	21,237	(796)	4,599	9,934
Lease Expense	13,042	13,578	16,370	13,511	13,043	11,822	31,084	13,025	14,358	12,687	12,566	14,340
Int Exp Non-Cap Leases	0	(6,788)	(8,185)	(6,756)	(6,521)	(5,911)	(6,822)	(6,513)	(7,179)	(6,343)	(6,283)	(7,170)
(Incr) Emission Trading/Other Pro	N/A	(3,500)	(466)	(23,034)	(12,028)	26,108	6,759	1,010	(13,951)	(17,275)	(23,988)	(33,585)
(Incr) Employment Provisions	N/A	(38,999)	24,518	10,349	(3,933)	(7,625)	32,270	(6,307)	852	(1,435)	(4,499)	(6,112)
(Incr) Provisions	N/A	652	790	(2,746)	(396)	1,604	1,302	(710)	555	1,267	(526)	369
(Incr) NOPAT/Capital adj.	N/A	(973)	(1,954)	(2,987)	(2,688)	(1,760)	(110)	(185)	(1,061)	(1,096)	(30,102)	(1,858)
(Incr) Bad Debt Reserve	N/A	(857)	(22)	127	207	186	106	(173)	(159)	(130)	138	(106)
Total Operating Expenses	N/A	3,491,656	2,748,874	2,970,214	3,282,990	3,444,336	3,176,872	3,212,340	2,594,891	2,454,687	2,785,029	3,419,184
Adjusted EBIT	N/A	129,787	121,020	185,274	195,256	119,935	91,809	57,331	154,052	236,315	373,797	279,658
Operating Taxes	N/A	21,366	45,112	57,401	47,296	39,833	30,597	12,995	40,852	74,354	88,448	67,474
NOPAT	N/A	108,422	75,908	127,873	147,960	80,102	61,211	44,335	113,201	161,961	285,349	212,184

Appendix: BP5

BP5		BP New Zealand										
13/09/2019 12:22												
Operating Capital												
History 2007 to 2018												
December												
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net Accts Receivable	181,823	310,650	436,397	591,148	432,403	381,007	465,879	478,343	334,191	459,105	828,535	399,128
Bad Debt Reserve	161	1,018	1,040	913	706	520	414	587	746	876	738	844
Net Inventory	432,299	406,178	434,776	507,337	424,131	394,009	509,006	294,170	269,610	366,557	383,703	421,606
Other Current Assets	2,514	17,744	0	0	0	0	910	24,855	2,077	31,313	925	2,654
Current Operating Assets	616,797	735,590	872,213	1,099,398	857,240	775,536	976,209	797,955	606,624	857,851	1,213,901	824,232
Accounts Payable & Other	204,070	336,230	347,959	445,453	380,675	250,597	414,529	253,961	293,729	375,134	415,407	316,209
Tax Payable	0	0	7,701	20,976	13,283	9,236	0	0	0	15,985	34,582	2,447
Other Current Liabs	0	0	0	0	0	0	0	0	0	0	0	206
NIBCLs	204,070	336,230	355,660	466,429	393,958	259,833	414,529	253,961	293,729	391,119	449,989	318,862
Net Working Capital	412,727	399,360	516,553	632,969	463,282	515,703	561,680	543,994	312,895	466,732	763,912	505,370
Net Prop Plant & Equip	287,503	279,744	267,874	268,153	272,861	278,925	304,054	341,106	375,409	405,740	433,719	486,044
Capital Work in Progress	(27,795)	(17,686)	(15,601)	(39,334)	(59,334)	(36,979)	(66,841)	(52,128)	(49,022)	(42,369)	(33,562)	(46,021)
PV of Non-Cap Leases	81,416	81,416	99,557	82,714	82,443	80,536	101,009	99,377	109,967	100,877	106,823	129,656
Adjusted Prop Plant & Equipment	341,124	343,474	351,830	311,533	295,970	322,482	338,222	388,355	436,354	464,248	506,980	569,679
Goodwill	0	0	0	0	0	0	53,174	53,174	53,174	24,371	0	0
Development Costs	8,938	7,453	4,466	1,778	458	338	4,945	4,161	2,843	3,778	4,450	2,814
Other Assets	19,263	23,032	19,382	17,985	15,386	13,259	14,443	12,997	12,499	13,857	18,877	18,115
Cum Unusual Loss A/T	0	2,901	42,259	3,327	2,484	23,299	13,330	3,483	2,782	1,051	(2,492)	(12,784)
NOPAT/Capital adj.	0	973	2,927	5,914	8,602	10,362	10,472	10,657	11,718	12,814	42,916	44,774
(Net Deferred Taxes)	14,120	25,004	18,442	10,389	15,125	19,870	13,062	22,664	18,760	19,643	22,050	24,644
Other Assets	33,383	51,910	83,010	37,615	41,597	66,790	51,307	49,801	45,759	47,365	81,351	74,749
Capital	796,172	802,197	955,859	983,895	801,307	905,313	1,009,328	1,039,485	851,025	1,006,494	1,356,693	1,152,612

Appendix: EXM1

EXM1		ExxonMobil New Zealand											
10/09/2019 22:28													
1-Income Statements													
		Dec	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue													
Fuel	\$'000		2,389,719	1,809,663	1,938,833	2,465,953	2,527,650	2,909,537	2,783,901	2,363,506	2,200,712	2,675,556	3,364,118
Other			18,046	17,008	15,777	16,214	17,000	29,461	26,801	32,055	33,682	32,832	36,825
Rental income			3,722	3,366	3,575	3,502	3,407	3,028	5,040	6,259	6,302	6,987	6,801
Total Revenue			2,411,487	1,830,037	1,958,185	2,485,669	2,548,057	2,942,026	2,815,742	2,401,820	2,240,696	2,715,375	3,407,744
Raw materials & consumables			1,965,813	1,438,222	1,477,122	1,916,926	1,999,737	2,228,435	1,956,589	1,418,157	1,328,748	1,587,524	2,257,351
Change in inventories of raw materials, etc			31,911	-106,327	(43,394)	(2,573)	(14,883)	(25,977)	110,919	43,869	(107,333)	(28,740)	8,668
Sales tax and duties			280,183	293,407	316,387	324,711	367,801	457,127	516,219	587,886	606,642	640,590	700,159
Refinery processing fees									34,761	91,046	63,947	84,649	63,870
Net Revenue			133,580	204,735	208,070	246,605	195,402	282,441	197,254	260,862	348,692	431,352	377,696
Operating expenses													
Employee benefits			32,552	36,581	35,561	31,393	32,472	34,185	17,262	12,279	11,781	11,985	13,681
Other expenses			126,788	122,611	109,809	112,319	122,081	151,650	168,845	188,418	183,591	211,160	222,463
Lease cost			14,667	13,854	14,026	14,388	13,447	13,103	13,935	13,130	13,928	15,026	15,493
(Gains)/losses on foreign exchange			62,968	(25,648)	(18,941)	23,889	(5,281)	(13,281)	10,158	20,549	(3,001)	(4,037)	11,592
Total operating expenses			236,975	147,398	140,455	181,989	162,719	185,657	210,200	234,376	206,299	234,134	263,229
EBITDAF			(103,395)	57,337	67,615	64,616	32,683	96,784	(12,946)	26,486	142,393	197,218	114,467
Depreciation & amortisation			16,300	15,104	14,223	13,558	12,928	13,489	15,546	12,819	13,508	14,605	14,045
Interest income			2,777	1,434	1,210	4,022	5,882	5,876	9,236	11,608	9,196	2,923	2,819
Dividend income			79	3	1	-	-	38	-	3,201	12,365	6,451	8,064
Financing expense			82,388	45,652	40,132	40,816	31,683	29,750	32,090	32,095	26,321	13,735	9,541
Gain(loss) on NZRC investment reclass'n			-	-	-	-	-	-	3,862	-	-	2,688	(16,128)
Associate share of profits			23,981	4,526	11,069	6,614	5,943	(961)	-	-	-	-	-
Loss (gain) on sale of PP&E			628	148	616	(308)	(320)	(134)	380	473	1,822	928	(178)
Profit Before Tax			(175,874)	2,396	24,924	21,186	217	58,632	(47,864)	(4,092)	122,303	180,012	85,814
Current Tax			-	-	-	-	-	-	-	-	-	4,123	26,029
Deferred Tax/Adjustments			(47,662)	(4,650)	12,084	5,217	(1,840)	15,386	(14,354)	(1,401)	31,137	29,912	562
Total Income Tax Expense			(47,662)	(4,650)	12,084	5,217	(1,840)	15,386	(14,354)	(1,401)	31,137	34,035	26,591
Profit After Tax			(128,212)	7,046	12,840	15,969	2,057	43,246	(33,510)	(2,691)	91,166	145,977	59,223

Appendix: EXM3

EXM3											
13/09/2019 13:40											
Economic Value Added											ExxonMobil
Dec	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Performance Summary											
NOPAT	(92,662)	36,803	28,245	39,757	17,106	64,937	(19,269)	11,677	96,363	149,692	77,208
Avg Capital	478,515	487,953	513,138	495,977	481,608	525,736	507,347	432,060	381,252	417,479	469,032
NOPAT/Avg Capital	(19.4%)	7.5%	5.5%	8.0%	3.6%	12.4%	(3.8%)	2.7%	25.3%	35.9%	16.5%
Cost of Capital (C*)	9.9%	10.0%	10.3%	9.7%	8.9%	9.2%	9.3%	8.8%	8.7%	8.4%	8.1%
Spread Method											
Profit Spread R-C*	(29.3%)	(2.5%)	(4.8%)	(1.7%)	(5.3%)	3.2%	(13.1%)	(6.1%)	16.6%	27.5%	8.4%
x Avg Capital	478,515	487,953	513,138	495,977	481,608	525,736	507,347	432,060	381,252	417,479	469,032
EVA = (R-C*) x Average Capital	(140,035)	(11,992)	(24,608)	(8,353)	(25,757)	16,570	(66,452)	(26,344)	63,194	114,623	39,217
Residual Income Method											
NOPAT	(92,662)	36,803	28,245	39,757	17,106	64,937	(19,269)	11,677	96,363	149,692	77,208
Cost of Capital (C*)	9.9%	10.0%	10.3%	9.7%	8.9%	9.2%	9.3%	8.8%	8.7%	8.4%	8.1%
x Avg Capital	478,515	487,953	513,138	495,977	481,608	525,736	507,347	432,060	381,252	417,479	469,032
Capital Charge	47,373	48,795	52,853	48,110	42,863	48,368	47,183	38,021	33,169	35,068	37,992
EVA = NOPAT-Capital Charge	(140,035)	(11,992)	(24,608)	(8,353)	(25,757)	16,570	(66,452)	(26,344)	63,194	114,623	39,217
Increase in EVA	N/A	128,043	(12,616)	16,255	(17,404)	42,326	(83,022)	40,108	89,538	51,429	(75,407)
Cumulative EVA	(140,035)	(152,027)	(176,635)	(184,988)	(210,745)	(194,175)	(260,627)	(286,971)	(223,777)	(109,153)	(69,937)
Market Valuation											
Performance Index R/C*	(1.96 x)	0.75 x	0.53 x	0.83 x	0.40 x	1.34 x	(0.41 x)	0.31 x	2.91 x	4.27 x	2.03 x

Appendix: EXM4

EXM4												
13/09/2019 12:45												
NOPAT Operating											ExxonMobil	
History 2007 to 2018												
Dec	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue	1,754,774	2,407,765	1,826,671	1,954,610	2,482,167	2,544,650	2,938,998	2,810,702	2,395,561	2,234,394	2,708,388	3,400,943
Cost of Goods Sold	1,683,500	2,437,247	1,784,494	1,895,485	2,382,776	2,507,208	2,845,420	2,804,595	2,341,655	2,087,376	2,507,168	3,266,192
Depreciation/Amortisation	17,921	16,300	15,104	14,223	13,558	12,928	13,489	15,546	12,819	13,508	14,605	14,045
FX (gain) Losses	(18,140)	62,968	(25,648)	(18,941)	23,889	(5,281)	(13,281)	10,158	20,549	(3,001)	(4,037)	11,592
Lease Expense	15,177	14,667	13,854	14,026	14,388	13,447	13,103	13,935	13,130	13,928	15,026	15,493
Int Exp Non-Cap Leases	0	(5,393)	(5,177)	(5,234)	(5,443)	(5,020)	(5,038)	(4,448)	(3,436)	(3,813)	(4,020)	(3,817)
(Incr) Employee Provisions	N/A	65	359	(1,102)	(409)	896	(10)	1,996	42	(177)	47	(206)
(Incr) NOPAT & Capital adj Amorti	N/A	0	0	0	0	0	0	(120)	(268)	(512)	(1,378)	(2,265)
(Incr) Bad Debt Reserve	N/A	456	79	(336)	(276)	(216)	(156)	(96)	(36)	24	84	(40)
Total Operating Expenses	N/A	2,526,310	1,783,065	(413,641)	6,521	426,684	846,846	1,267,008	1,687,171	2,107,333	2,527,495	3,300,994
Rental Income	4,063	3,722	3,366	3,575	3,502	3,407	3,028	5,040	6,259	6,302	6,987	6,801
Adjusted EBIT	N/A	(114,823)	46,972	53,576	56,800	23,896	88,419	(25,978)	16,975	133,363	187,880	106,750
Operating Taxes	N/A	(22,161)	10,168	25,331	17,043	6,790	23,481	(6,710)	5,297	37,000	38,188	29,542
NOPAT	N/A	(92,662)	36,803	28,245	39,757	17,106	64,937	(19,269)	11,677	96,363	149,692	77,208

Appendix: EXM5

EXM5

13/09/2019 13:17

Operating Capital

ExxonMobil

History 2007 to 2018 December	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net Accts Receivable	111,789	81,339	56,137	81,846	81,422	90,880	81,705	74,848	81,192	103,444	150,729	151,025
Bad Debt Reserve	7,240	6,784	6,705	553	443	460	536	478	124	100	16	56
Net Inventory	205,474	173,661	280,787	324,181	326,754	341,637	367,613	256,694	212,825	320,158	348,898	340,231
Other Current Assets	30,427	8,549	13,769	4,907	5,500	18,831	26,777	8,805	3,582	8,124	5,166	13,611
Current Operating Assets	354,930	270,333	357,398	411,487	414,119	451,808	476,631	340,825	297,723	431,826	504,809	504,923
Trade Payables	29,054	32,578	70,280	41,465	68,056	76,883	108,321	88,930	91,347	60,186	94,298	86,708
Provisions	528	66	465	438	0	0	0	0	0	0	0	0
Tax Payable	68,473	56,594	16,748	47,123	36,139	59,440	40,406	60,102	58,744	70,952	58,992	59,230
Other Current Liabs	49,610	39,086	84,075	102,906	148,193	141,930	64,195	49,828	39,999	245,755	195,220	300,022
NIBCLs	147,665	128,324	171,568	191,932	252,388	278,253	212,922	198,860	190,090	376,893	348,510	445,960
Net Working Capital	207,265	142,009	185,830	219,555	161,731	173,555	263,709	141,965	107,633	54,933	156,299	58,963
Net Prop Plant & Equip	195,501	178,603	166,108	156,153	152,369	159,980	162,794	159,447	160,497	172,493	186,011	229,546
Assets under Construction	(2,878)	(32)	(19)	(96)	(60)	0	0	(8,450)	(8,627)	(18,760)	(27,644)	(55,686)
PV of Non-Cap Leases	65,628	63,784	63,980	63,980	68,809	68,396	74,593	67,866	52,624	60,636	68,339	78,590
Adjusted Prop Plant & Equipment	258,251	242,355	230,069	220,037	221,118	228,376	237,387	218,863	204,494	214,369	226,706	252,450
Net Intangibles	0	0	0	0	0	0	0	1,843	1,974	12,944	12,372	11,592
Other Assets	9,316	13,530	12,747	13,527	28,810	30,555	11,127	29,783	29,520	33,006	77,722	120,705
Retirement Benefit Obligations	(2,417)	(2,642)	0	0	0	(10,133)	(3,624)	(6,520)	(2,193)	(1,497)	(60)	(309)
NOPAT & Capital adj Amortisation (Net Deferred Taxes)	0	0	0	0	0	0	120	388	900	2,278	4,543	7,345
Other Assets	22,568	84,582	91,061	79,723	89,789	88,647	59,797	91,129	96,219	69,938	87,397	132,284
Capital	488,084	468,946	506,960	519,315	472,638	490,578	560,893	453,800	410,320	352,184	482,774	455,289