

## THE SHELL-BG GROUP TIE-UP: YES OR NO?

*Research Fellow Abraham Hongze Lu prepared this case under the supervision of Professor Didier Cossin as a basis for class discussion rather than to illustrate either effective or ineffective handling of a business situation.*

On January 8, 2016, Standard Life, a major shareholder in both Royal Dutch Shell plc and BG Group, announced that it would vote No to a merger between Shell and BG at a Shell shareholder meeting to be held on January 27. “We have concluded that the proposed terms of the acquisition of BG are value-destructive for Shell shareholders,” said David Cumming, head of equities at Standard Life Investments. The investor, with its 1.3% stake in BG, would take an unusual dual position – it would vote Yes at a BG shareholder meeting on January 28. Shell had to seek approval from at least 50% of its shareholders and BG Group would require the backing of 75% of its shareholders for the deal to go through. With investors nervous about Shell’s shrinking profits in the previous quarter, the deal might not go through.

Shell had coveted BG’s assets for years if not decades, but had not made an offer until April 2015, when the premium came down significantly after oil prices fell. Shell’s rationale for the acquisition was clear. The transaction would enhance Shell’s growth priorities – deepwater and liquefied natural gas (LNG). By 2018 Shell would control 61 million metric tons per annum (mmtpa), almost three times the volume of its next-largest competitor, Exxon, and 20% more than Qatar Petroleum.<sup>1</sup> The deal made sense strategically, but some investors thought that a better way to spend billions was to invest in renewable energy and that Shell was paying too much.

In April 2015, Shell had offered to pay 0.4454 of its B shares and 383 pence in cash for each BG share in a deal valued at \$70 billion. The offer entailed a sizable 50% plus premium for the BG Group by assuming a \$90/bbl forward oil price. In the course of the next nine months, a drop of more than 30% in Shell’s stock had cut the value of the deal to about \$52 billion. With oil prices in the low \$30s/bbl, the market was worried that Shell’s view of the future was overoptimistic. Yet the deal won support from both boards, reflecting the divergent views on oil prices – Andrew Gould, chairman of BG Group, believed the current decline in the oil price had many similarities with the downturn of 1986. “The time necessary to bring supply and demand back into balance will likely depend on two things: some resumption of growth in demand and a slowdown in drilling in the USA,” he said.<sup>2</sup> It seemed that neither of the two trends would reverse direction in the near term.

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<sup>1</sup> Gammel, Jason and Marc Kofler. “Royal Dutch Shell: Downgrade to Hold: Going Deep.” Jefferies, April 14, 2015.

<sup>2</sup> Andrew Gould. BG Annual Report 2014.

To drum up support for the deal from shareholders, Shell promised to sell \$30 billion of assets from 2016 to 2018, cut capital spending, realize \$2.5 billion per year in pre-tax synergies accretive from 2018 onwards, launch a \$25 billion share buyback from 2017 to 2020, and continue paying a dividend in 2015 of \$1.88/share and maintain that level in 2016 (worth \$14 billion per year). This was a significant return to shareholders and a temptation hard to resist.

“Shell has made many bold promises in recent years that wound up being missed by a wide margin. For example, its previous target to grow production to 4 MMboe/day by 2017;<sup>3</sup> the company wound up being unable to grow production at all. Shell has made some big mistakes in recent years: betting aggressively on shale gas and exploration while not possessing the requisite knowledge to effectively evaluate acreage it was purchasing, cost overruns at multiple megaprojects, and choosing not to aggressively restructure its downstream segment stand out as the most damaging ones,” warned Morningstar.<sup>4</sup>

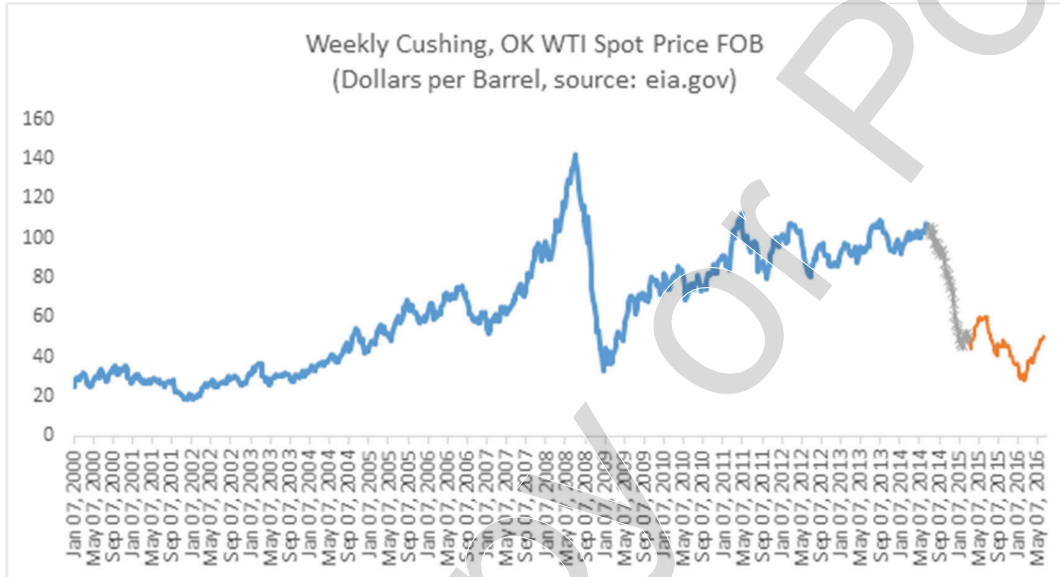
In the end, it all depended on the oil prices. Could Shell make good on its promises? Was it smart to make promises on fundamentals out of its control? Could this turn into a case of overpromising and underdelivering to investors? Was Shell overpaying for BG?

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<sup>3</sup> MMboe/day – million barrels of oil equivalent per day

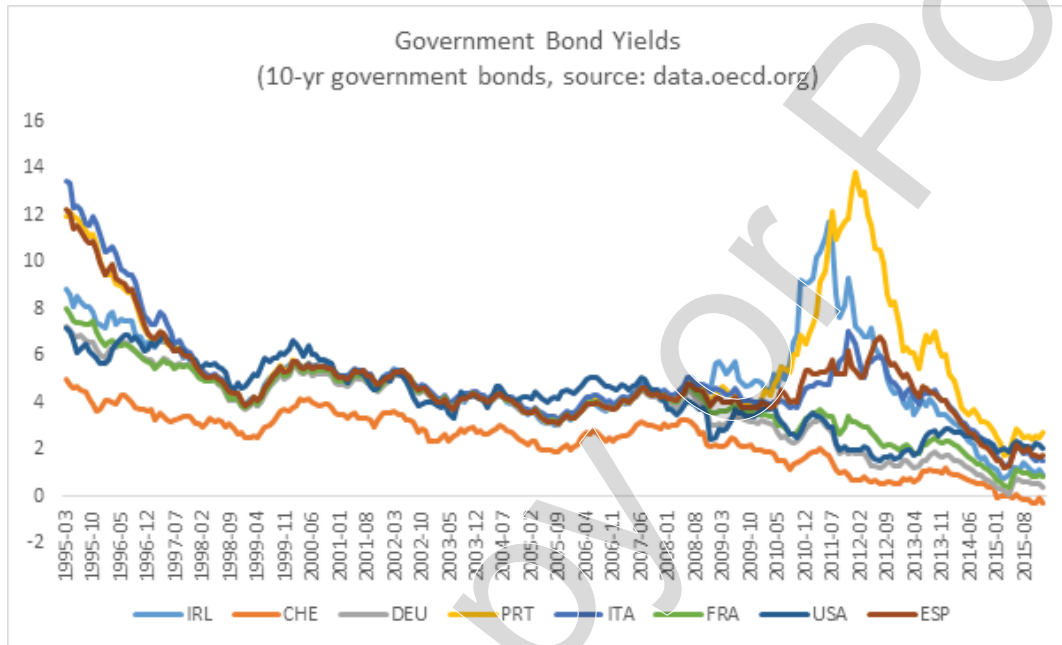
<sup>4</sup> Bruss, Jed and Michael Dimler. “Royal Dutch Shell PLC: Credit Perspective.” Morningstar Corporate Credit Research, April 24, 2015.

## Appendix 1 Crude Oil WTI



Source: US Energy Information Administration, accessed June 2016. [www.eia.gov](http://www.eia.gov).

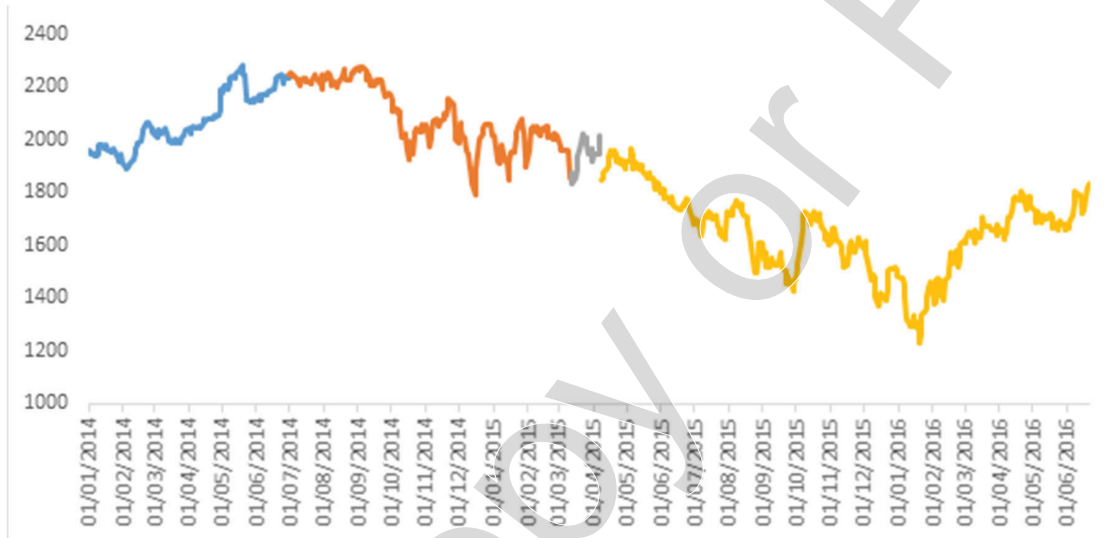
## Appendix 2 Government Bond Yields



Source: OECD, accessed June 2016. <https://data.oecd.org/interest/long-term-interest-rates.htm>.

**Appendix 3**  
**Royal Dutch Shell Historical Share Prices in GBP**

**Royal Dutch Shell plc (RDSB.L)**



Source: Yahoo Finance, accessed June 2016. <https://finance.yahoo.com/>.

**Appendix 4**  
**BG Group Historical Share Prices in GBP**

**BG Group plc**



Source: Yahoo Finance, accessed June 2016. <https://finance.yahoo.com/>.

## **Appendix 5 Ben van Beurden**

Born: April 23, 1958, Netherlands  
Alma mater: Delft University of Technology, Master's in Chemical Engineering  
Occupation: CEO, Royal Dutch Shell plc  
Family: Married with four children  
Interests: Reading, running, traveling with his family

Ben van Beurden has been CEO of Royal Dutch Shell since January 1, 2014.

He joined the company in 1983, and for the next 20 years or so held a number of operational and commercial roles both upstream and downstream, in the Netherlands and abroad, in Malaysia, the UK, Mexico and the US. He spent one-third of his career in Shell's LNG business, which has become an important driver of the company's growth.

In January 2005, van Beurden became Vice President, Manufacturing Excellence, based in Houston, Texas. He was responsible for standards in operational excellence and high-performance initiatives in refining and chemicals manufacturing.

In December 2006, he was appointed Executive Vice President, Chemicals, based in London, UK. During this time, he served on the boards of a number of leading industry associations, including the International Council of Chemicals Associations (ICCA) and the European Chemical Industry Council.

From January to September 2013, van Beurden was Downstream Director with regional responsibility for Europe and Turkey. He has been a member of Shell's Executive Committee since January 2013.

Source: Company website, accessed August 2016; Bloomberg; Wikipedia

## **Appendix 6 Andrew Gould**

Born: December 17, 1946, United Kingdom  
Alma mater: University of Wales, Cardiff, degree in Economic History  
Occupation: Non-Executive Chairman, BG Group  
Family: Married with children  
Interests: Cinema, reading, fly fishing

Andrew Gould became Non-Executive Chairman of BG Group in May 2012, having been on the board as a Non-Executive Director for a year. A month earlier, he stepped down as Chairman of Schlumberger Limited, a role he had held since 2003, along with the position of CEO. He retired as CEO in August 2011. Schlumberger is the world's largest oil and gas industry service provider with revenue of US\$35.5 billion in 2015 and 95,000 employees in 85 countries.

Gould joined Schlumberger in 1975, performing a variety of functions in finance and management, in Asia, Europe and the United States, including roles as President and Chief Operating Officer.

He served as a Non-Executive Director of Rio Tinto from 2002 to 2012. He was a member of the Prime Minister's Council of Science and Technology from 2004 to 2007.

Source: Company website; Wikipedia; various public sources



**Appendix 7  
Shell Board**

<b>Name</b>	<b>Current Position</b>	<b>Age</b>	<b>Since</b>
Charles Holliday	Non-Executive Chairman of the Board	68	2015
Hans Wijers	Non-Executive Deputy Chairman of the Board, Senior Independent Director	65	2014
Ben van Beurden	Chief Executive Officer, Member of the Executive Committee, Director	58	2014
Simon Henry	Chief Financial Officer, Member of the Executive Committee, Director	55	2009
Guy Elliott	Non-Executive Director	60	2010
Euleen Goh	Non-Executive Director	61	2014
Gerard Kleisterlee	Non-Executive Director	69	2010
Nigel Sheinwald	Non-Executive Director	63	2012
Linda Stuntz	Non-Executive Director	61	2011
Patricia Woertz	Non-Executive Director	63	2014
Gerrit Zalm	Non-Executive Director	63	2013
Michiel Brandjes	General Counsel, Company Secretary	61	2005

Source: Company information. Shell Annual Report 2015 and corporate website.

## Appendix 8 BG Board

Name	Position
Andrew Gould	Chairman
Helge Lund	Chief Executive (appointed 6 February 2015)
Simon Lowth	Chief Financial Officer
Sir John Hood	Senior Independent Director, Non-Executive Director
Vivienne Cox	Non-Executive Director
Pamela Daley	Non-Executive Director
Martin Ferguson	Non-Executive Director
Caio Koch-Weser	Non-Executive Director
Lim Haw-Kuang	Non-Executive Director
Sir David Manning	Non-Executive Director
Patrick Thomas	Non-Executive Director
Baroness Hogg	Non-Executive Director

Source: Company information. BG Group Annual Report and Accounts 2015

**Appendix 9**  
**Shell Offer for BG Group**

<b>Under the terms of the Combination, BG Shareholders would be entitled to receive:</b>			
<b>For each BG Share</b>	<b>Shell price April 7, 2015</b>	<b>Shell Price April 8, 2015</b>	<b>Shell Price Jan. 25, 2016</b>
Cash (pence)	383.0	383.0	383.0
Shell B shares	0.4454	0.4454	0.4454
Shell B share price (Closing price)	2,208.5	2,019.0	1,402
Value of 0.4454 Shell B share (pence)	983.7	899.3	624.5
Cash plus Share (pence)	1,366.7	1,282.3	1,007.5
BG Group share price (Closing price)	895.5	1,134.1	981.7
Offer premium	52.6%	13.1%	3.1%
BG shares (million)	3,414.4	3,414.4	3,414.4
BG Equity Value (£m)	46,663.4	43,781.6	34,398.4
Exchange Rate	1.49	1.49	1.5
<b>Total Value for BG Equity (\$m)</b>	<b>69,528.5</b>	<b>65,234.5</b>	<b>51,597.6</b>
BG Year-End 2014 Net Debt (\$m)	11,998.0	11,998.0	11,998.0
<b>BG Enterprise Value (\$m)</b>	<b>81,526.5</b>	<b>77,232.5</b>	<b>63,595.6</b>

Source: IMD estimates and analysis based on company and market information

## Appendix 10 BG Financial Results

Macro overview	2011	2012	2013	2014
Crude Oil price (\$/bbl) Brent	111.26	111.63	108.56	98.97
Henry Hub (\$/mmbtu)	4.1	2.75	3.73	4.39

BG E&P-production				
Total liquids production (kbd)	165	173	191	222
Total gas production (mmcf/d)	2,856	2,904	2,652	2,310
Total oil & gas production (kboed)	641	657	633	607

BG: P&L overview (\$m)				
Upstream operating profit	5,520	5,489	4,967	3,947
LNG shipping and marketing operating profit	2,202	2,552	2,643	2,544
Other (including T&D)	487	412	6	46
Operating profit	8,209	8,453	7,616	6,537

Cash Flow (\$m)				
DD&A/Exploration Expense	2,584	2,932	3,349	3,036
Working capital	-574	-176	-413	979
Cash interest paid	-247	-541	-560	-556
Cash tax paid	-2,791	-2,720	-2,468	-2,616
Other	-242	-343	-120	-358
<b>Net cash flow from ops</b>	<b>6,939</b>	<b>7,605</b>	<b>7,404</b>	<b>7,022</b>
Capex	-10,300	-9,974	-10,605	-8,510
<b>Free cash flow</b>	<b>-3,361</b>	<b>-2,369</b>	<b>-3,201</b>	<b>-1,488</b>

Source: Company information. BG Group Annual Report and Accounts 2013 and 2014

**Appendix 11**  
**BG: Summary Net Asset Value Model at \$75/bbl LT**

Exchange rate	1.5				
	Value	Value		Value/2P	% of total
<b>Upstream</b>	\$ million	GBP	2P reserves	reserves	EV
Australia domestic	407	271	182	2.24	0.51%
Bolivia	1,097	731	216	5.08	1.38%
Brazil Conc.	26,666	17,777	3,136	8.50	33.62%
Egypt	1,483	989	156	9.51	1.87%
India	921	614	78	11.81	1.16%
Kazakhstan	4,594	3,063	718	6.40	5.79%
Norway	1,212	808	36	33.67	1.53%
Tanzania	2,576	1,717	1,290	2.00	3.25%
Thailand	1,322	881	175	7.55	1.67%
Trinidad	1,335	890	305	4.38	1.68%
Tunisia	1,324	883	78	16.97	1.67%
United Kingdom	2,746	1,831	366	7.50	3.46%
US	1,480	987	372	3.98	1.87%
<b>Subtotal</b>	<b>47,163</b>	<b>31,442</b>	<b>7,108</b>		<b>59%</b>
<b>LNG Plant/midstream</b>					
Egypt Concession LNG	236	157			0.30%
Trinidad Concession LNG	1,083	722			1.37%
Australia QGC	21,419	14,279	1,268	16.89	27.01%
Kazakhstan - CPC pipeline	101	67			0.13%
<b>Total Upstream value</b>	<b>70,002</b>	<b>46,668</b>	<b>8,376</b>		<b>88%</b>
<b>LNG contracts (ex QGC)</b>	<b>6,143</b>	<b>4,095</b>			<b>7.75%</b>
<b>LNG Import terminals</b>					
Lake Charles, USA – Access	0	0			0.00%
Elba Island, USA - Access	0	0			0.00%
Dragon, UK	1,320	880			1.66%
<b>Subtotal</b>	<b>1,320</b>	<b>880</b>			<b>1.66%</b>
<b>LNG Ships</b>					
Own fleet	1,000	667			1.26%
<b>Subtotal</b>	<b>1000</b>	<b>667</b>			<b>1.26%</b>
<b>Transmission &amp; Distribution</b>					
CATS pipeline	0	0			0.00%
Mahanagar Gas	521	347			0.66%
<b>Subtotal</b>	<b>521</b>	<b>347</b>			<b>0.66%</b>
<b>Power Plants</b>					
BG Italia Power	240	160			0.30%
Condamine	84	56			0.11%
<b>Subtotal</b>	<b>324</b>	<b>216</b>			<b>0.41%</b>
<b>Total Enterprise Value</b>	<b>79,310</b>	<b>52,873</b>			
Net Debt end 2014	11,998	7,999			
<b>Net Asset Value (\$m)</b>	<b>67,312</b>	<b>44,875</b>			

Source: Herrmann, Lucas and Mark Bloomfield. "Recommended Offer for BG Group." April 8, 2015, Deutsche Bank Markets Research.

**Appendix 12**  
**BG: Summary Net Asset Value Model at \$90/bbl LT**

<b>Exchange rate</b>	1.5				
<b>Upstream</b>	Value	Value	2P	Value/2P	% of total
	\$ million	GBP	reserves	reserves	EV
Australia domestic	1,958	1,305	199	9.84	2.03%
Bolivia	1,463	975	218	6.71	1.52%
Brazil Conc.	32,766	21,844	3,136	10.45	33.94%
Egypt	2,581	1,721	355	7.27	2.67%
India	1,005	670	81	12.41	1.04%
Kazakhstan	4,708	3,139	822	5.73	4.88%
Norway	1,227	818	39	31.46	1.27%
Tanzania	2,576	1,717	1,445	1.78	2.67%
Thailand	1,050	700	79	13.29	1.09%
Trinidad	1,135	757	322	3.52	1.18%
Tunisia	1,648	1,099	78	21.13	1.71%
United Kingdom	3,576	2,384	365	9.80	3.70%
US	1,302	868	373	3.49	1.35%
<b>Subtotal</b>	<b>56,995</b>	<b>37,997</b>	<b>7,512</b>		<b>59%</b>
<b>LNG Plant/midstream</b>					
Egypt Concession LNG	133	89			0.14%
Trinidad Concession LNG	1,045	697			1.08%
Australia QGC	21,419	14,279	1,250	17.14	22.19%
Kazakhstan - CPC pipeline	136	91			0.14%
<b>Total Upstream value</b>	<b>79,728</b>	<b>53,152</b>	<b>8,762</b>		<b>83%</b>
<b>LNG contracts (ex QGC)</b>	<b>13,646</b>	<b>9,097</b>			<b>14.14%</b>
<b>LNG Import</b>					
Lake Charles, USA - Access	0	0			0.00%
Elba Island, USA - Access rights	0	0			0.00%
Dragon, UK	1,320	880			1.37%
<b>Subtotal</b>	<b>1,320</b>	<b>880</b>			<b>1.37%</b>
<b>LNG Ships</b>					
Own fleet	1,000	667			1.04%
<b>Subtotal</b>	<b>1000</b>	<b>667</b>			<b>1.04%</b>
<b>Transmission &amp; Distribution</b>					
CATS pipeline	0	0			0.00%
Mahanagar Gas	521	347			0.54%
<b>Subtotal</b>	<b>521</b>	<b>347</b>			<b>0.54%</b>
<b>Power Plants</b>					
BG Italia Power S.p.A.(SERENE)	240	160			0.25%
Condamine	84	56			0.09%
<b>Subtotal</b>	<b>324</b>	<b>216</b>			<b>0.34%</b>
<b>Total Enterprise Value</b>	96,539	64,359			
Net Debt end 2014	11,998	7,999			
<b>Net Asset Value (\$m)</b>	<b>84,541</b>	<b>56,361</b>			

Source: Herrmann, Lucas and Mark Bloomfield. "Recommended Offer for BG Group." April 8, 2015, Deutsche Bank Markets Research.

## Appendix 13 Valuation: European Integrated Oils April 7, 2015

Company	Price	Target	Rec	CCY	M. Cap US\$	EPS			PE			EV/DACF					
						2014e	2015e	2016e	2017e	2014e	2015e	2016e	2017e	2014e	2015e	2016e	2017e
<b>DB Oil Price</b>						<b>100</b>	<b>59.4</b>	<b>70</b>	<b>75</b>								
<b>Shell</b>	<b>2132</b>	<b>2425</b>	<b>Hold</b>	<b>US\$</b>	<b>198.1</b>	<b>3.57</b>	<b>1.94</b>	<b>3.08</b>	<b>3.66</b>	<b>9.8</b>	<b>16.5</b>	<b>10.4</b>	<b>8.7</b>	<b>6.8</b>	<b>8.7</b>	<b>6.2</b>	<b>5.5</b>
BP	442	470	Buy	US\$	120.2	0.66	0.32	0.53	0.66	11.1	20.4	12.6	10	5.7	7.1	5.8	5.2
Total	46.37	48	Buy	EUR	116.6	4.24	3.49	4.4	5.13	10.9	13.3	10.5	9	10.4	6.3	5.5	5
Eni	16.24	16	Hold	EUR	62.9	1.02	0.65	1.05	1.3	15.9	24.9	15.4	12.5	6.1	6.1	5.4	4.7
Statoil	144	135	Hold	NOK	57.1	11.2	7.7	11.4	13.3	12.9	18.7	12.6	10.8	5	5.2	4.7	4.2
<b>BG</b>	<b>851</b>	<b>1050</b>	<b>Buy</b>	<b>US\$</b>	<b>43.2</b>	<b>1.21</b>	<b>0.42</b>	<b>1</b>	<b>1.26</b>	<b>11.6</b>	<b>30.7</b>	<b>12.8</b>	<b>10.1</b>	<b>7.7</b>	<b>10.5</b>	<b>6.7</b>	<b>5.7</b>
Repsol	17.53	20	Hold	EUR	26.4	1.27	0.86	1.09	1.23	13.9	20.4	16.1	14.2	10.8	6.4	5.5	5.1
OMV	26.09	24	Hold	EUR	9.1	3.48	1.85	3.2	3.55	7.5	14.1	8.1	7.3	4.6	5.4	4.5	4.2
Galp	10.2	10.75	Buy	EUR	9.1	0.44	0.34	0.38	0.53	23	30	26.8	19.3	25	20	3.1	-0.2
<b>Sector</b>					<b>642.6</b>	<b>-4%</b>	<b>-39%</b>	<b>57%</b>	<b>21%</b>	<b>11.6</b>	<b>18.9</b>	<b>12.1</b>	<b>10</b>	<b>7.5</b>	<b>7.5</b>	<b>5.7</b>	<b>5.1</b>
<b>Majors</b>					<b>554.8</b>	<b>-8%</b>	<b>-36%</b>	<b>51%</b>	<b>20%</b>	<b>11.4</b>	<b>17.9</b>	<b>11.7</b>	<b>9.7</b>	<b>7</b>	<b>7.2</b>	<b>5.7</b>	<b>5.1</b>
<b>April 7, 2015</b>																	
<b>Company</b>	<b>Price</b>	<b>Target</b>	<b>Rec</b>	<b>CCY</b>	<b>M. Cap US\$</b>	<b>FCFY (ex A&amp;D)</b>			<b>FCFY (cum A&amp;D)</b>			<b>Divi Payout</b>			<b>ND/ND+E</b>		
						2014e	2015e	2016e	2017e	2014e	2015e	2016e	2017e	2015e	17e EPS	17e FCF	2014e
<b>Shell</b>	<b>2132</b>	<b>2425</b>	<b>Hold</b>	<b>US\$</b>	<b>198.1</b>	<b>5.9%</b>	<b>-1.2%</b>	<b>2.7%</b>	<b>6.0%</b>	<b>11.8%</b>	<b>-0.8%</b>	<b>3.9%</b>	<b>7.6%</b>	<b>5.9%</b>	<b>54.0%</b>	<b>102.0%</b>	<b>13.0%</b>
BP	442	470	Buy	US\$	120.2	7.2%	3.9%	4.7%	7.5%	9.7%	8.1%	6.6%	9.4%	6.0%	64.0%	85.0%	17.0%
Total	46.37	48	Buy	EUR	116.6	-4.8%	-0.5%	4.0%	6.4%	-4.0%	2.8%	5.1%	7.4%	5.3%	48.0%	82.0%	28.0%
Eni	16.24	16	Hold	EUR	62.9	3.6%	1.5%	2.6%	6.2%	10.5%	1.5%	2.6%	6.2%	4.9%	63.0%	81.0%	18.0%
Statoil	144	135	Hold	NOK	57.1	1.2%	-5.4%	4.9%	4.9%	6.2%	-2.1%	0.2%	4.9%	5.0%	54.0%	103.0%	19.0%
<b>BG</b>	<b>851</b>	<b>1050</b>	<b>Buy</b>	<b>US\$</b>	<b>43.2</b>	<b>-1.8%</b>	<b>-2.2%</b>	<b>5.5%</b>	<b>6.3%</b>	<b>-0.4%</b>	<b>9.4%</b>	<b>6.1%</b>	<b>6.9%</b>	<b>1.5%</b>	<b>28.0%</b>	<b>29.0%</b>	<b>41.0%</b>
Repsol	17.53	20	Hold	EUR	26.4	-6.9%	1.5%	4.0%	3.9%	13.4%	1.5%	4.0%	3.9%	5.7%	83.0%	60.0%	6.0%
OMV	26.09	24	Hold	EUR	9.1	-7.6%	2.3%	8.1%	10.1%	-1.5%	2.5%	8.1%	10.1%	4.8%	35.0%	47.0%	24.0%
Galp	10.2	10.75	Buy	EUR	9.1	-3.6%	-5.1%	6.9%	-1.6%	-3.6%	-5.1%	6.9%	-1.6%	4.1%	113.0%	na	34.0%
<b>Sector</b>					<b>642.6</b>	<b>2.2%</b>	<b>-0.2%</b>	<b>3.5%</b>	<b>6.2%</b>	<b>6.7%</b>	<b>2.4%</b>	<b>4.4%</b>	<b>7.2%</b>	<b>5.3%</b>	<b>55.0%</b>	<b>84.0%</b>	<b>20.0%</b>
<b>Majors</b>					<b>554.8</b>	<b>3.2%</b>	<b>-0.1%</b>	<b>3.1%</b>	<b>6.3%</b>	<b>7.3%</b>	<b>2.0%</b>	<b>4.2%</b>	<b>7.5%</b>	<b>5.6%</b>	<b>56.0%</b>	<b>92.0%</b>	<b>18.0%</b>
<b>April 7, 2015</b>																	
<b>Company</b>	<b>Price</b>	<b>Target</b>	<b>Rec</b>	<b>CCY</b>	<b>M. Cap US\$</b>	<b>ROACE</b>			<b>Adjusted Prod Growth</b>			<b>NAV</b>			<b>P/(NAV(\$75/bbl) x Pm/(Disc))</b>		
						2014e	2015e	2016e	2017e	2014e	2015e	2016e	2017e	2014e	\$75/bbl	\$75/bbl	2014e
<b>Shell</b>	<b>2132</b>	<b>2425</b>	<b>Hold</b>	<b>US\$</b>	<b>198.1</b>	<b>9.1%</b>	<b>4.8%</b>	<b>7.1%</b>	<b>8.0%</b>	<b>-3.8%</b>	<b>-1.8%</b>	<b>2.5%</b>	<b>4.4%</b>	<b>3565</b>	<b>2993</b>	<b>0.71</b>	<b>-7%</b>
BP	442	470	Buy	US\$	120.2	9.1%	5.2%	7.9%	9.4%	-4.9%	1.6%	5.4%	1.4%	659	552	0.8	5%
Total	46.37	48	Buy	EUR	116.6	7.9%	6.4%	7.8%	8.7%	-1.0%	2.2%	9.3%	5.5%	65.09	53.02	0.87	15%
Eni	16.24	16	Hold	EUR	62.9	5.3%	3.7%	5.5%	6.5%	-0.8%	3.1%	7.7%	0.0%	26.09	22.95	0.71	-7%
Statoil	144	135	Hold	NOK	57.1	8.3%	5.3%	7.3%	8.0%	-1.7%	3.3%	0.6%	2.4%	263	198	0.73	-5%
<b>BG</b>	<b>851</b>	<b>1050</b>	<b>Buy</b>	<b>US\$</b>	<b>43.2</b>	<b>7.8%</b>	<b>0.8%</b>	<b>0.6%</b>	<b>0.8%</b>	<b>-4.3%</b>	<b>11.3%</b>	<b>21.6%</b>	<b>11.0%</b>	<b>1618</b>	<b>1281</b>	<b>0.66</b>	<b>-13%</b>
Repsol	17.53	20	Hold	EUR	26.4	5.4%	4.2%	5.3%	6.0%	1.7%	6.3%	20.2%	8.5%	23.75	19.72	0.89	16%
OMV	26.09	24	Hold	EUR	9.1	5.2%	3.3%	5.0%	5.3%	7.3%	0.0%	7.8%	6.1%	45.78	39.84	0.65	-14%
Galp	10.2	10.75	Buy	EUR	9.1	4.8%	4.5%	5.5%	7.1%	28.0%	39.0%	60.8%	58.5%	14.67	12.54	0.31	7%
<b>Sector</b>					<b>642.6</b>	<b>8.1%</b>	<b>4.8%</b>	<b>6.7%</b>	<b>7.6%</b>	<b>-2.2%</b>	<b>2.3%</b>	<b>7.5%</b>	<b>4.8%</b>	<b>14.67</b>	<b>12.54</b>	<b>0.31</b>	<b>7%</b>
<b>Majors</b>					<b>554.8</b>	<b>8.3%</b>	<b>5.2%</b>	<b>7.3%</b>	<b>8.3%</b>	<b>-2.9%</b>	<b>0.9%</b>	<b>4.9%</b>	<b>3.3%</b>	<b>14.67</b>	<b>12.54</b>	<b>0.31</b>	<b>7%</b>

Source: Herrmann, Lucas and Mark Bloomfield. "Recommended Offer for BG Group." April 8, 2015, Deutsche Bank Markets Research.

**Appendix 14**  
**Valuation: European Integrated Oils – January 28, 2016**

Company	Price	Target	Rec	CCY	M. Cap	EPS			PE			EV/DACF			
						2015e	2016e	2018e	2015e	2016e	2018e	2015e	2016e	2017e	2018e
<b>DB Oil Price</b>						<b>55.5</b>	<b>57</b>	<b>70</b>							
<b>Shell</b>	<b>1463</b>	<b>2200</b>	<b>Buy</b>	<b>US\$</b>	<b>135.7</b>	<b>2.15</b>	<b>2.7</b>	<b>3.05</b>	<b>13</b>	<b>10.2</b>	<b>8.1</b>	<b>7.2</b>	<b>7.1</b>	<b>5.5</b>	<b>4.8</b>
BP	363	450	Buy	US\$	95.5	0.36	0.48	0.68	14.5	15.3	11.2	8	6.2	5.9	5.2
Total	40.1	50	Buy	EUR	104.6	3.82	4.14	5.78	10.5	9.7	8.2	6.9	5.5	5.1	4.6
Eni	13.1	16	Hol	EUR	51.4	0.2	0.74	1.28	67.2	17.8	14	10.3	7.7	5.2	4.5
Statoil	107.	130	Hol	NOK	39.3	5.6	6.6	10.1	19.2	16.3	12.6	10.6	4.1	3.7	3.4
<b>BG</b>	<b>1030</b>	<b>1355</b>	<b>Buy</b>	<b>US\$</b>	<b>50.3</b>	<b>0.37</b>	<b>0.59</b>	<b>1.19</b>	<b>41.6</b>	<b>26.1</b>	<b>18.2</b>	<b>13</b>	<b>14.6</b>	<b>10.6</b>	<b>8.7</b>
Repsol	8.83	13	Hol	EUR	14	1.01	0.55	2.03	8.7	15.9	11.4	4.4	6.6	4.2	3.9
OMV	23.1	26	Hol	EUR	8.2	3.25	2.36	2.63	7.1	9.8	8.9	8.8	4.3	4.9	4.7
Galp	10.3	10.75	Hol	EUR	9.3	0.65	0.44	0.64	16	23.3	23.8	16	16.7	16	13.3
<b>Sector Majors</b>					<b>508.2</b>	<b>-32%</b>	<b>31%</b>	<b>42%</b>	<b>21.4</b>	<b>14.3</b>	<b>11.1</b>	<b>8.6</b>	<b>7.3</b>	<b>6</b>	<b>5.2</b>
					<b>426.5</b>	<b>-47%</b>	<b>66%</b>	<b>25%</b>	<b>19.9</b>	<b>12.7</b>	<b>10</b>	<b>8</b>	<b>6.3</b>	<b>5.3</b>	<b>4.7</b>

Company	Price	Target	Rec	CCY	M. Cap	FCFY (ex A&D)			FCFY (cum A&D)			DY	Divi Payout	ND/ND+E	
						2015e	2016e	2018e	2015e	2016e	2018e				17e EPS
<b>Shell</b>	<b>1463</b>	<b>2200</b>	<b>Buy</b>	<b>US\$</b>	<b>135.7</b>	<b>2.9%</b>	<b>7.8%</b>	<b>10.0%</b>	<b>4.6%</b>	<b>5.5%</b>	<b>11.0%</b>	<b>13.2%</b>	<b>8.6%</b>	<b>70.0%</b>	<b>109.0%</b>
BP	363	450	Buy	US\$	95.5	1.4%	3.0%	9.3%	6.2%	7.3%	8.9%	11.7%	7.3%	84.0%	114.0%
Total	40.1	50	Buy	EUR	104.6	-2.4%	2.9%	10.1%	0.5%	5.4%	8.9%	11.6%	6.1%	50.0%	81.0%
Eni	13.1	16	Hol	EUR	51.4	-3.8%	5.7%	6.9%	-3.8%	5.7%	6.9%	8.8%	6.1%	87.0%	90.0%
Statoil	107.	130	Hol	NOK	39.3	-3.1%	0.0%	4.4%	4.9%	0.0%	4.4%	8.8%	6.7%	85.0%	154.0%
<b>BG</b>	<b>1030</b>	<b>1355</b>	<b>Buy</b>	<b>US\$</b>	<b>50.3</b>	<b>-3.1%</b>	<b>1.7%</b>	<b>4.3%</b>	<b>6.3%</b>	<b>2.1%</b>	<b>4.7%</b>	<b>7.5%</b>	<b>1.2%</b>	<b>41.0%</b>	<b>35.0%</b>
Repsol	8.83	13	Hol	EUR	14	-14.0%	0.1%	6.0%	-7.1%	0.1%	6.0%	10.3%	11.3%	132.0%	78.0%
OMV	23.1	26	Hol	EUR	8.2	4.7%	4.9%	5.2%	6.5%	4.9%	4.6%	5.2%	5.4%	48.0%	27.0%
Galp	10.3	10.75	Hol	EUR	9.3	1.1%	-2.6%	2.3%	1.1%	-2.6%	0.4%	2.3%	4.0%	138.0%	na
<b>Sector Majors</b>					<b>508.2</b>	<b>-1.0%</b>	<b>2.7%</b>	<b>6.6%</b>	<b>1.3%</b>	<b>4.8%</b>	<b>8.2%</b>	<b>10.8%</b>	<b>6.6%</b>	<b>71.0%</b>	<b>96.0%</b>
					<b>426.5</b>	<b>-0.4%</b>	<b>3.0%</b>	<b>9.6%</b>	<b>3.0%</b>	<b>5.4%</b>	<b>8.9%</b>	<b>11.5%</b>	<b>7.2%</b>	<b>71.0%</b>	<b>105.0%</b>

Company	Price	Target	Rec	CCY	M. Cap	ROACE			Adjusted Prod			NAV	P/NAV(\$75/bbl x Pm/(Disc))	
						2015e	2016e	2018e	2015e	2016e	2018e			\$75/bbl
<b>Shell</b>	<b>1463</b>	<b>2200</b>	<b>Buy</b>	<b>US\$</b>	<b>135.7</b>	<b>4.5%</b>	<b>5.6%</b>	<b>7.4%</b>	<b>-2.4%</b>	<b>2.5%</b>	<b>3.6%</b>	<b>1.4%</b>	<b>2690</b>	<b>-0.54</b>
BP	363	450	Buy	US\$	95.5	6.1%	5.9%	10.1%	5.7%	4.0%	1.9%	2.1%	543	0.67
Total	40.1	50	Buy	EUR	104.6	7.3%	7.8%	9.9%	9.2%	6.2%	6.8%	2.4%	50.18	0.8
Eni	13.1	16	Hol	EUR	51.4	1.1%	4.1%	6.6%	9.1%	3.2%	0.2%	2.5%	19.39	0.68
Statoil	107.	130	Hol	NOK	39.3	4.0%	4.6%	6.7%	3.4%	1.2%	0.7%	2.7%	177	0.6
<b>BG</b>	<b>1030</b>	<b>1355</b>	<b>Buy</b>	<b>US\$</b>	<b>50.3</b>	<b>2.1%</b>	<b>3.5%</b>	<b>7.5%</b>	<b>15.2%</b>	<b>17.2%</b>	<b>9.7%</b>	<b>11.0%</b>	<b>1232</b>	<b>0.84</b>
Repsol	8.83	13	Hol	EUR	14	3.7%	2.8%	4.3%	54.8%	30.5%	4.2%	1.5%	18.38	0.48
OMV	23.1	26	Hol	EUR	8.2	4.6%	3.9%	4.4%	-1.9%	7.6%	5.5%	2.5%	43.4	0.53
Galp	10.3	10.75	Hol	EUR	9.3	6.4%	6.2%	8.7%	57.1%	38.8%	47.0%	34.1%	13.18	0.78
<b>Sector Majors</b>					<b>508.2</b>	<b>4.8%</b>	<b>5.6%</b>	<b>8.2%</b>	<b>7.5%</b>	<b>6.5%</b>	<b>4.8%</b>	<b>3.5%</b>	<b>0.67</b>	<b>0.67</b>
					<b>426.5</b>	<b>5.1%</b>	<b>5.9%</b>	<b>8.5%</b>	<b>4.2%</b>	<b>3.7%</b>	<b>3.3%</b>	<b>2.1%</b>	<b>0.66</b>	<b>0.66</b>

Source: Herrmann, Lucas and Tom Robinson. "Repsol Q4 trading (+), RDS/BG (+), Kosmos (+)." January 28, 2016, Deutsche Bank Markets Research.