

## BG Group (BG.L)

### Progress at QC LNG Offers Visibility on 2013-16 Cashflow Growth

- **QC LNG delivery provides confidence on 2013-16 cashflow growth** - while Brazil continues to remain the key contributor to BG's long-term growth plans, it is the delivery of its QC LNG project in Australia that is the main driver of the inflexion in BG's near-term cashflows. The effect of higher post-tax operating cashflow and lower capex from this project sees BG deliver a substantial rise in free cashflow by 2016. Recent commentary gives us confidence that first commercial production will be delivered by mid-2014 and within the current capex budget. In addition, recent agreements on third-party gas supply also help to de-risk (and accelerate) the ramp-up phase of the project. We increase our 2015 and 2016 earnings and cashflows for BG by 3% to reflect this quicker delivery.
- **First production on track for mid-2014** — We see a strong likelihood of QC LNG achieving first commercial production in June 2014 with first LNG sales by September 2014 given the recent delivery of key infrastructure and acceleration in upstream drilling activity. BG had drilled 1,499 wells by the end of 2Q13, which represents c.75% of the total wells required ahead of first production. The current capex budget also looks achievable and is helped by the recent weakening in the Australian dollar. Recent third-party gas agreements should also accelerate the ramp-up phase with the QC LNG project on plateau by late 2015/early 2016.
- **Financial impact of QC LNG on BG is considerable** — The delivery and ramp up of QC LNG drives a significant uplift in BG's group cashflows. We estimate the swing in free cashflow from rising post-tax operating cashflow and lower capex at QC LNG to be around US\$5bn between 2013 and 2016, which represents the majority (c.80%) of our forecast uplift in BG group free cashflow over this period. Positive progress towards the delivery of the project gives us increasing confidence on our medium-term forecasts. All-in, we see capacity for cashflow to grow 16% CAGR 2013-16E and ROCE to expand from 8.7% to 11.8%. A 2015E valuation of around 9.7x earnings, c.15-20% discount to the UK market, looks undemanding. BG remains a constituent of the Citi Focus List Europe.

#### ■ Estimate Change

<b>Buy</b>	<b>1</b>
Price (06 Aug 13)	£12.10
Target price	£14.20
Expected share price return	17.4%
Expected dividend yield	1.5%
<b>Expected total return</b>	<b>18.9%</b>
Market Cap	£41,175M
	US\$63,238M

#### Price Performance (RIC: BG.L, BB: BG/ LN)



#### BG Group (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales (\$M)	21,148.0	18,963.0	20,134.4	26,099.8	32,749.2
Profit Before Tax (\$M)	7,990.0	7,919.0	7,782.0	8,999.9	11,490.9
Diluted EPS (¢)	127.6	128.6	127.5	152.7	191.6
Diluted EPS (Old) (¢)	127.6	128.6	127.5	152.7	186.7
PE (x)	14.6	14.4	14.6	12.2	9.7
EV/EBITDA (x)	6.8	7.1	6.9	6.0	4.9
DPS (¢)	23.8	26.1	28.2	30.5	32.9
Net Div Yield (%)	1.3	1.4	1.5	1.6	1.8

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#### See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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BG.L: Fiscal year end 31-Dec						Price: £12.10; TP: £14.20; Market Cap: £41,192m; Recomm: Buy					
Profit & Loss (US\$m)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	21,148	18,963	20,134	26,100	32,749	PE (x)	14.6	14.4	14.6	12.2	9.7
Cost of sales	-12,919	-10,922	-12,152	-16,615	-20,712	PB (x)	2.1	1.9	1.8	1.6	1.4
Gross profit	8,229	8,041	7,982	9,485	12,037	EV/EBITDA (x)	6.8	7.1	6.9	6.0	4.9
Gross Margin (%)	38.9	42.4	39.6	36.3	36.8	FCF yield (%)	-6.3	-5.1	-6.2	-5.7	1.5
EBITDA (Adj)	10,768	10,640	10,909	12,721	15,970	Dividend yield (%)	1.3	1.4	1.5	1.6	1.8
EBITDA Margin (Adj) (%)	50.9	56.1	54.2	48.7	48.8	Payout ratio (%)	19	20	22	20	17
Depreciation	-2,559	-2,593	-2,947	-3,255	-3,953	ROE (%)	14.2	14.5	13.2	14.1	15.6
Amortisation	0	0	0	0	0	<b>Cashflow (US\$m)</b>					
EBIT (Adj)	8,209	8,047	7,962	9,465	12,017	EBITDA	10,768	10,640	10,909	12,721	15,970
EBIT Margin (Adj) (%)	38.8	42.4	39.5	36.3	36.7	Working capital	-574	-176	179	0	0
Net interest	-219	-128	-180	-465	-526	Other	-2,987	-2,859	-2,953	-3,788	-4,957
Associates	0	0	0	0	0	<b>Operating cashflow</b>	<b>7,207</b>	<b>7,605</b>	<b>8,135</b>	<b>8,932</b>	<b>11,013</b>
Non-op/Except	10	-823	-128	0	0	Capex	-10,300	-9,974	-11,160	-11,587	-9,009
Pre-tax profit	8,000	7,096	7,654	9,000	11,491	Net acq/disposals	-257	2,939	4,292	0	0
Tax	-3,550	-3,524	-3,425	-3,780	-4,941	Other	0	0	0	0	0
Extraord./Min.Int./Pref.div.	-495	947	260	0	0	<b>Investing cashflow</b>	<b>-10,557</b>	<b>-7,035</b>	<b>-6,868</b>	<b>-11,587</b>	<b>-9,009</b>
Reported net profit	3,955	4,519	4,489	5,220	6,550	Dividends paid	-908	-877	-918	-995	-1,075
Net Margin (%)	18.7	23.8	22.3	20.0	20.0	<b>Financing cashflow</b>	<b>4,431</b>	<b>263</b>	<b>-996</b>	<b>2,655</b>	<b>-2,004</b>
Core NPAT	4,355	4,395	4,357	5,220	6,550	<b>Net change in cash</b>	<b>1,081</b>	<b>833</b>	<b>271</b>	<b>0</b>	<b>0</b>
<b>Per share data</b>	<b>2011</b>	<b>2012</b>	<b>2013E</b>	<b>2014E</b>	<b>2015E</b>	<b>Free cashflow to s/holders</b>	<b>-4,001</b>	<b>-3,246</b>	<b>-3,944</b>	<b>-3,650</b>	<b>929</b>
Reported EPS (¢)	115.9	132.3	131.3	152.7	191.6						
Core EPS (¢)	127.6	128.6	127.5	152.7	191.6						
DPS (¢)	23.8	26.1	28.2	30.5	32.9						
CFPS (¢)	211.2	222.6	238.0	261.3	322.1						
FCFPS (¢)	-117.3	-95.0	-115.4	-106.8	27.2						
BVPS (¢)	866.9	972.7	1,026.8	1,151.0	1,312.0						
Wtd avg ord shares (m)	3,390	3,397	3,400	3,400	3,400						
Wtd avg diluted shares (m)	3,412	3,417	3,419	3,419	3,419						
<b>Growth rates</b>	<b>2011</b>	<b>2012</b>	<b>2013E</b>	<b>2014E</b>	<b>2015E</b>						
Sales revenue (%)	20.3	-10.3	6.2	29.6	25.5						
EBIT (Adj) (%)	17.3	-2.0	-1.1	18.9	27.0						
Core NPAT (%)	7.5	0.9	-0.9	19.8	25.5						
Core EPS (%)	7.2	0.8	-0.9	19.8	25.5						
<b>Balance Sheet (US\$m)</b>	<b>2011</b>	<b>2012</b>	<b>2013E</b>	<b>2014E</b>	<b>2015E</b>						
Cash & cash equiv.	3,601	4,434	4,705	4,705	4,705						
Accounts receivables	7,375	6,369	6,401	6,401	6,401						
Inventory	768	792	873	873	873						
Net fixed & other tangibles	38,966	46,131	47,505	54,313	57,669						
Goodwill & intangibles	6,911	4,493	4,954	6,020	7,210						
Financial & other assets	3,761	3,028	2,941	2,941	2,941						
<b>Total assets</b>	<b>61,382</b>	<b>65,247</b>	<b>67,379</b>	<b>75,253</b>	<b>79,799</b>						
Accounts payable	5,342	5,301	5,816	5,816	5,816						
Short-term debt	1,160	1,064	1,044	1,044	1,044						
Long-term debt	13,977	14,443	14,035	17,685	16,756						
Provisions & other liab	11,228	11,345	11,562	11,562	11,562						
<b>Total liabilities</b>	<b>31,707</b>	<b>32,153</b>	<b>32,457</b>	<b>36,107</b>	<b>35,178</b>						
Shareholders' equity	29,384	33,037	34,910	39,135	44,609						
Minority interests	291	57	0	0	0						
<b>Total equity</b>	<b>29,675</b>	<b>33,094</b>	<b>34,910</b>	<b>39,135</b>	<b>44,609</b>						
<b>Net debt</b>	<b>11,536</b>	<b>11,073</b>	<b>10,374</b>	<b>14,024</b>	<b>13,095</b>						
Net debt to equity (%)	38.9	33.5	29.7	35.8	29.4						

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## QC LNG delivery underpins cashflow growth

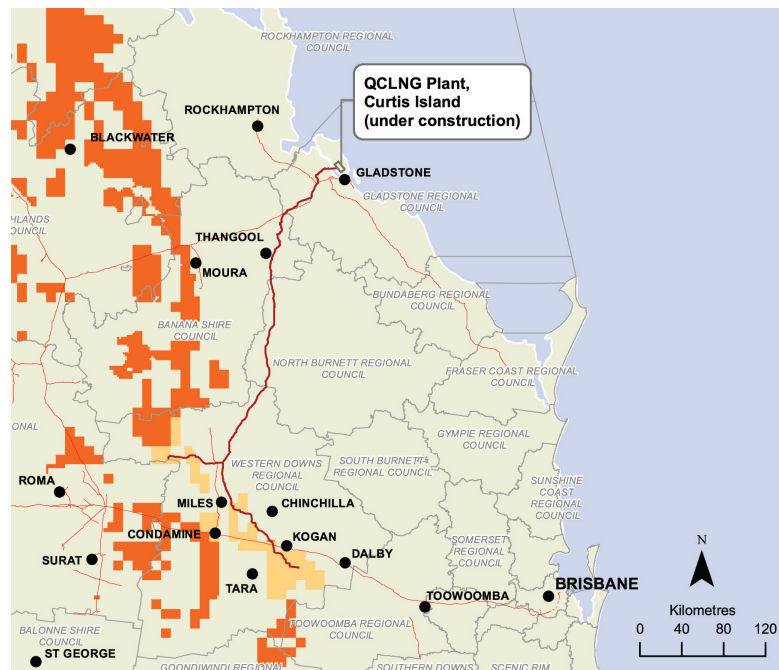
While Brazil continues to remain the key contributor to BG's long-term growth plans, it is the delivery of its QC LNG project in Australia that is the main driver of the inflexion in the BG's near-term cashflows. The effect of higher post-tax operating cashflow and lower capex from this project sees BG deliver a substantial rise in free cashflow by 2016. Recent commentary gives us confidence that first commercial production will be delivered by mid-2014 and within the current capex budget. In addition, recent agreements on third-party gas supply also help to de-risk (and accelerate) the ramp-up phase of the project. We increase our 2015 and 2016 earnings and cashflows for BG by 3% to reflect this quicker delivery.

### Positive steps towards project delivery

BG has made significant progress with its QC LNG project over the last 6 months, which gives us increasing confidence around the timing of gas commissioning at the end of the year and commercial production by mid-2014:

- **Key infrastructure completed in 2Q13** – The Kenya water treatment facility was commissioned and brought into operation, while the entire 200km gas collection header network was also completed with hydro-testing underway during 2Q13. In addition, around 70% of the 340km export pipeline has now been lowered into the ground with 80kms left to lay. The main export line remains on the critical path to start gas commissioning in 4Q13 and BG has mobilised additional resource to ensure that the pipeline is delivered on time. At the LNG site on Curtis Island, the roof on the second storage tank has been raised and all modules for Train 1 and the common facilities are in place earlier than expected. Around 62 of the 80 modules required for the two-train facility have been installed.
- **Drilling activity accelerating** – BG had drilled 1,499 wells (versus its target of 1,450 wells) by the end of 2Q13, which represents c.75% of the total wells required ahead of first production. BG's current run-rate of c.70 wells per month looks more than sufficient to achieve its target of over 2,000 wells by 2H14.

Figure 1. QC LNG Project - Overview



Source: BG Presentation

- **Gas commissioning on schedule for 4Q13** – With the Narrows pipeline crossing and export pipeline moving ahead on schedule, BG remains confident that the commissioning of the LNG plant will start in 4Q13. The initial focus will be testing the power generation equipment at the LNG site. We expect the plant commissioning to take around 6 months to complete.
- **First LNG in 2H14 looks achievable** – Given the significant progress so far in 2013, we see a strong likelihood of QC LNG achieving commercial production in June 2014 ahead of our previous expectation of September 2014. We expect the first train will ramp up within 6 months, unconstrained by gas volumes. We also think the second train will ramp up faster than our previous expectations with plateau production achieved by late 2015/early 2016. Our confidence is based on stable flow rates from the wells drilled so far and given the recent 3<sup>rd</sup> party gas supply agreements that have been put in place to de-risk the ramp-up phase of the second train.

Figure 2. QC LNG – Significant progress was made in 2Q13 on the key QCLNG project milestones to deliver first LNG in 2H14

		2013				2014	
		Q1	Q2	Q3	Q4	H1	H2
Upstream	Wells drilled	1,286 (A)	1,499 (A)	1,600	1,750		> 2,000
	First major water facility (Kenya)			Complete			
	Central processing plant (Ruby)						
	Six Field Compressor Stations (Ruby)						
Pipeline	Gas collection header			Complete			
	Narrows crossing						
	Export pipeline						
LNG	T1 & Common Facilities		Complete				
	T2						
	Gas in plant/Start Commissioning						
	LNG sales						

Source: Company reports, Citi Research

### Ramp up further de-risked by recent deal with Santos

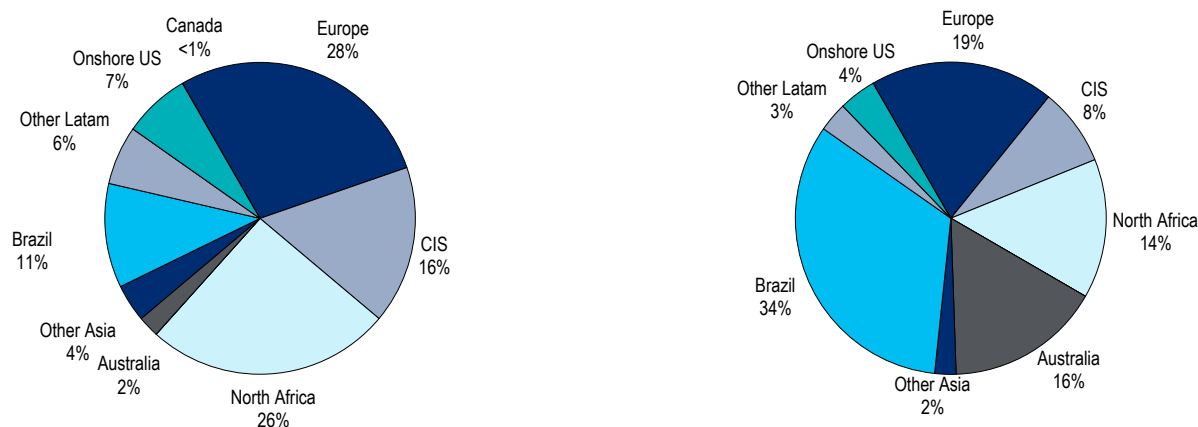
With significant progress made with the execution of the construction of the QC LNG plant and associated infrastructure, the key focus is the delivery of the ramp up of the two-train LNG project. BG has taken a number of steps to de-risk this phase of the project, which gives us confidence that the ramp up will be delivered by the end of 2015/early 2016:

- (1) Well performance has been in line with expectations – the flow rates from the wells drilled to date have been in line with expectations. While there has been a range in well performance across BG's acreage this has been broadly as expected and BG remains confident that the wells will deliver the planned ramp-up profile.
- (2) Early de-watering of wells – The original plan was that de-watering of many of the wells would not commence until the gas processing facilities were in place. However, BG has looked to dewater some of the CSG wells early by producing and flaring the gas, which is permitted in Australia. We believe this has allowed BG to obtain greater clarity regarding the delivery of the ramp-up phase of the project.

(3) Use of third-party gas – BG has signed a third-party gas sales agreement with AP LNG under which BG can buy up to 190PJ of gas over an initial period of around two years reducing thereafter to 25 PJ per annum. Additionally, to help manage the ramp up BG has entered into an agreement with AGL Energy to use a depleted field in the Surat Basin to store gas that can be drawn down during the ramp up phase.

(4) Collaboration with GLNG – more recently, BG signed a collaboration agreement with Santos' GLNG project, which links the major pipelines for QC LNG and GLNG in two places – one on the western side of the Narrows Crossing and one on Curtis Island. The two interconnection points will enable gas to flow from one project to the other when necessary, for example to allow for LNG plant downtime and planned maintenance without interrupting either project's gas field operations. It will also enable both companies to buy, sell and swap gas during the ramp up phases of both projects. The construction of these interconnection points will be completed in 2014.

Figure 3. QC LNG ramp up sees BG's Australia business represent c. 16% of group production (up from 2% in 2012)



Source: Citi Research

### Capex budget appears under control and is helped by weakening FX

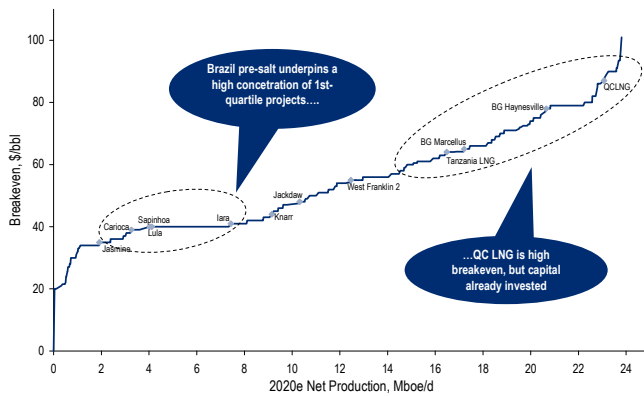
We believe the shares have largely discounted the increased 2011-14 capex budget from US\$15bn to US\$20.4bn for QC LNG since the announcement at BG's 2Q12 results. The higher capex has been driven partly by a strengthening in the A\$:US\$ exchange rate (c.US\$2.5bn impact), but also a 19% increase in underlying upstream costs. The uplift in capex weakened the project economics for Trains 1 and 2 shifting our estimated project breakeven by c.US\$14/boe to US\$82/boe and we now forecast the project will deliver an IRR of 12%, based on our long-term oil price assumption of US\$90/bbl (real).

However, there remains a concern that project costs will escalate further and BG will have to raise capex guidance again before the project is onstream. We believe the significant progress made so far this year and the recent 10% weakening in the A\$:US\$ exchange rate helps to reduce this risk. BG has also been helped by the recent decline in mining activity in Australia, which has led to some cost deflation in certain areas of the capex budget (e.g. civil works). We believe the US\$20.4bn 2012-14 budget remains realistic and costs in fact come in lower on completion.

The one risk on labour costs could be the expiry of Bechtel's Enterprise Bargaining Agreement with the local unions, which is set to expire in mid-2014 and will be replaced with a new agreement. BG does not anticipate a major increase in labour

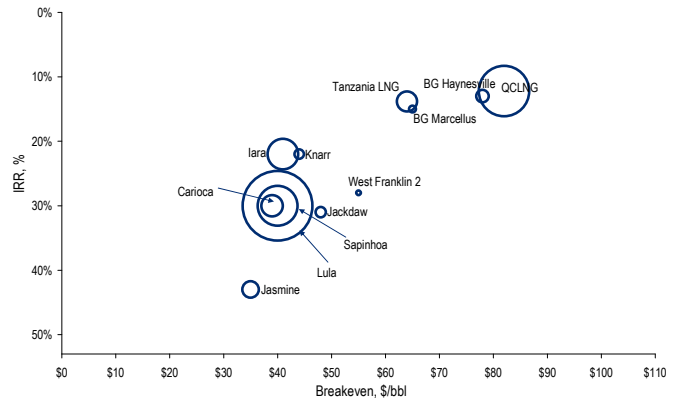
costs given that the pay currently offered is comparable or better than the unions' offer. However, it could cause some short-term disruption (and negative press comment) while this agreement is being renegotiated.

Figure 4. BG project portfolio versus the industry cost curve



Source: Citi Research and company reports

Figure 5. BG project portfolio (2012-2020e start-ups)

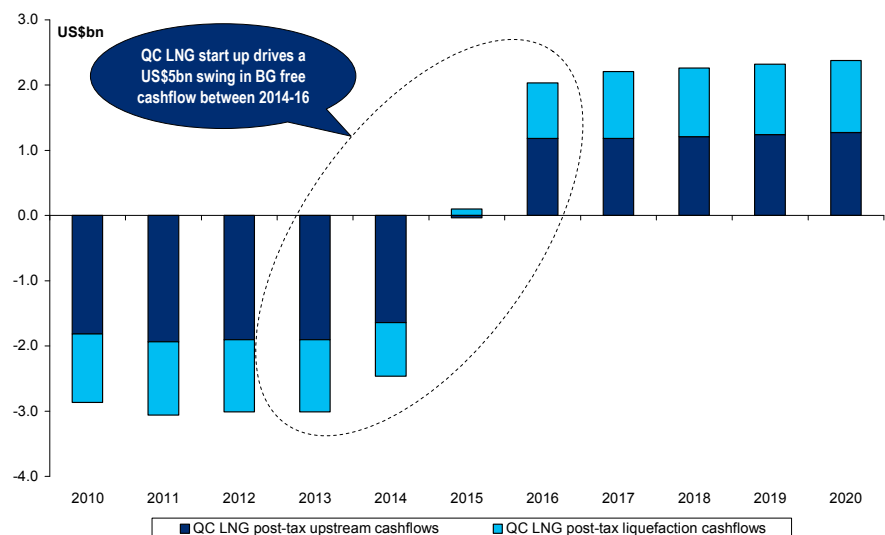


Source: Citi Research and company reports

### Delivery of QC LNG drives a significant uplift in BG group cashflows

The delivery and ramp up of QC LNG drives a significant uplift in BG's group cashflows with the effect of higher post-tax operating cashflow and lower capex from this project. We estimate the swing in free cashflow (net to BG) will be around US\$5bn between 2013 and 2016, which represents the majority (c.80%) of the uplift in BG group cashflows that we forecast over the 2013-16 period.

Figure 6. QC LNG start up in late 2014 drives a significant US\$5bn swing in free cashflow



Source: Citi Research

### Post-tax cashflows to benefit from capital allowances against PRRT

The changes made to the Australian fiscal regime means that Petroleum Resource Rent Tax (PRRT) is now levied on coal-bed methane LNG projects at a rate of 40%. This comes in addition to the standard petroleum royalty in Queensland (c.8% after deductions) and corporate tax of 30%. However, BG will be able to reduce its PRRT tax liability for a number of years by deducting the large amount of capital allowances that have been compounded through the investment phase of the project. These capital allowances also include the cost to acquire QGC and Pure Energy (c.A\$7bn), which established its Australian business in 2009. Given these allowances, we do not forecast PRRT to be payable until late next decade.

### Possible further monetisation of QC LNG stake as first gas arrives

In 2012, BG announced the sale of c.20% of QC LNG to CNOOC for US\$1.93bn and we expect the deal to complete by year end. On completion, CNOOC will also reimburse BG for its share of project expenditure incurred from 1 January 2012 and we estimate total proceeds will be c.US\$3.7-3.8bn at the end of the year.

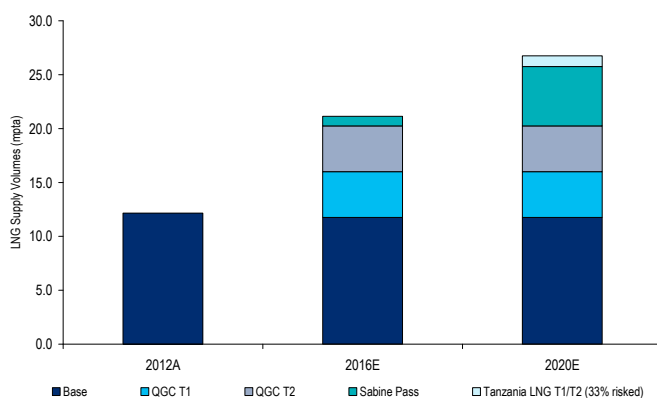
BG retains a c.74% stake in the QC LNG project and we think it likely BG will look to sell down further as the project is de-risked and brought onstream. We value BG's stake in the QC LNG project at US\$13.1bn (or 246p/share in our base case NAV of 1,880p/share), which has increased from US\$11.5bn incorporating our updated production profile and Citi macro (FX / oil price assumptions).

In addition, we see the potential for BG to unlock further value in the infrastructure assets that relate to the QC LNG development (such as water treatment plants and pipelines). These assets could be attractive to infrastructure funds when the project is onstream. We estimate the value of these assets to be c.US\$1-2bn.

### Train 3 could provide additional growth option within LNG portfolio

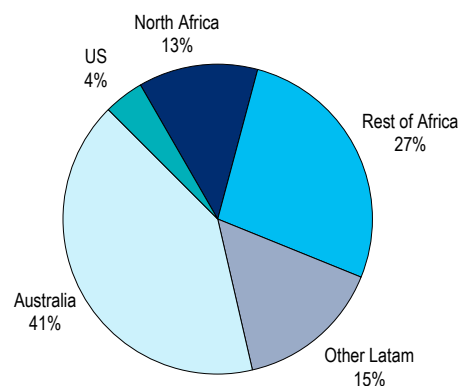
We forecast BG's LNG supply volumes to rise from c.11mtpa currently to c.22mtpa by 2016. QC LNG represents the majority of the growth with BG also taking 3.5mtpa from Sabine Pass in the US (first LNG expected in late 2015). Over the longer term, BG has a strong pipeline of LNG projects (Tanzania LNG, Prince Rupert, Lake Charles), but another growth option remains a possible Train 3 at QC LNG.

Figure 7. LNG Offtake volumes to reach c. 22mtpa by 2016



Source: Citi Research

Figure 8. Australia to account for 40% of LNG volumes by 2016

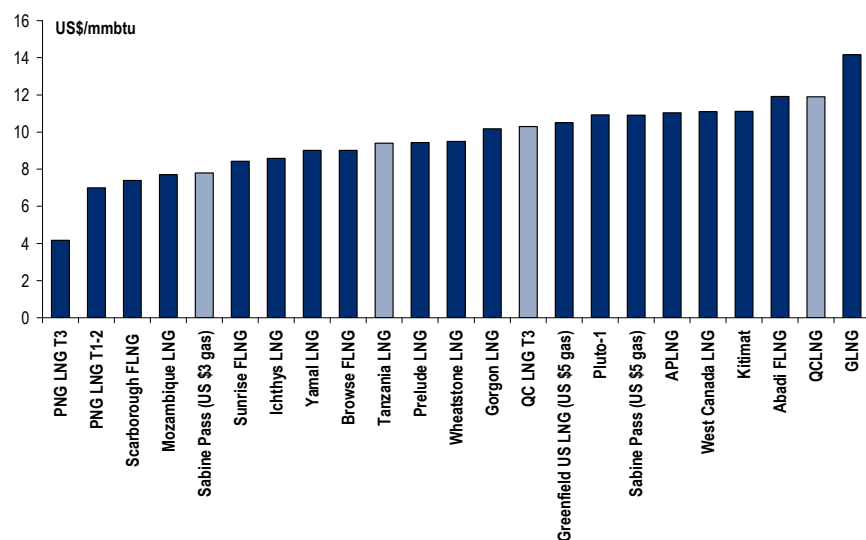


Source: Citi Research



BG has physical space for 5 trains on its QCLNG site on Curtis Island and would not need another tank or jetty to expand the facility. We would expect the execution of a third train would take around 3-4 years following project sanction and see the economics of a third train at QC LNG sitting competitively versus East Africa LNG and brownfield US LNG exports.

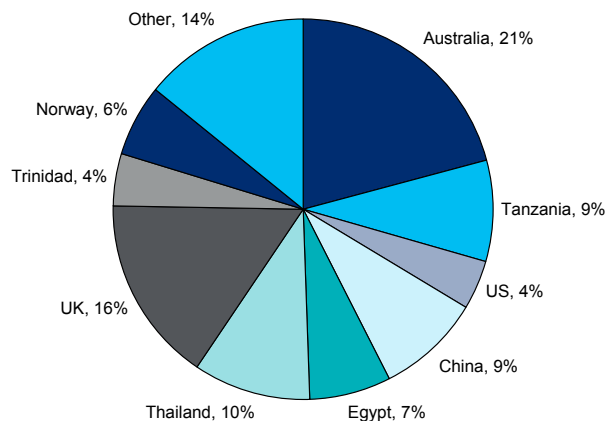
**Figure 9. QC LNG Train 3 remains a viable long-term growth option (Breakevens @10% WACC)**



Source: Citi Research

The key challenge will be to define the reserves base for a third train. BG has accelerated its Australian exploration activity this year with drilling focused on four areas. BG plans further E&A activity in the Surat CSG basin and is also exposed to new exploration plays that include the Bowen deep gas sands, which lie under the Surat Basin development, Bowen CSG and the shale gas potential in the Cooper Basin.

**Figure 10. Around 20% of exploration (by value) continues to lie in Australia**



Source: Citi Research



## BG – Summary NAV and financial model

Figure 11. BG Summary NAV

	Developed Reserves (mmboe)	% Split	Co. Estimated Reserves (mm boe)	Citi Risk Factor %	Citi Risked Reserves (mmboe)	\$/boe	Enterprise value (US\$ million)	Enterprise value (£ million)	per share (GBP)
UK	305	17%	649						
Atlantic Basin	447	25%	952						
Asia and Middle East	669	38%	1,425						
RoW	362	20%	770						
<b>Core assets ex Brazil &amp; Australia</b>	<b>1,782</b>		<b>3,795</b>	<b>100%</b>	<b>3,795</b>	<b>7.3</b>	<b>27,704</b>	<b>17,759</b>	<b>5.19</b>

Sanctioned Growth Projects	BG % Interest	Gross Reserves (mm boe)	Co. Estimated Reserves (mm boe)	Citi Risk Factor %	Citi Risked Reserves (mmboe)	\$/boe	Enterprise value (US\$ million)	Enterprise value (£ million)	per share (GBP)
Lula (BM-S-11)	25%	8,690	2,173	100%	2,173	7.3	15,859	10,166	2.97
Cernambi (BM-S-11)	25%	2,030	508	100%	508	7.3	3,705	2,375	0.69
Sapinhoa (BM-S-9)	30%	2,932	880	100%	880	7.3	6,421	4,116	1.20
QC LNG	74%	1,667	1,230	100%	1,230	9.6	11,866	7,606	2.22
Margarita-Huacaya	38%	263	99	100%	99	4.0	394	253	0.07
Knarr	45%	60	27	100%	27	7.2	194	125	0.04
Panna/Mukta & Tapti infill program	30%	78	23	100%	23	11.0	257	165	0.05
Egypt (WDDM) ph 9	50%	191	96	100%	96	2.0	191	123	0.04
Trinidad (NCMA) - Phase 4,5	46%	115	53	100%	53	6.0	316	203	0.06
Trinidad (ECMA) - Starfish & Manatee	50%	333	167	100%	167	6.0	1,000	641	0.19
Jasmine	31%	170	52	100%	52	12.0	620	398	0.12
Haynesville & Marcellus Shale	Var		1,333	100%	1,333	0.5	667	427	0.13
<b>Sanctioned growth projects</b>			<b>6,639</b>		<b>6,639</b>	<b>6.3</b>	<b>41,492</b>	<b>26,597</b>	<b>7.78</b>
Iara (BM-S-11)	25%	2,939	735	90%	661	5.2	3,439	2,204	0.64
Carioca (BM-S-9)	30%	1,048	314	90%	283	4.7	1,324	849	0.25
Jackdaw	41%	166	68	75%	51	8.0	408	262	0.08
Tanzania LNG	60%	2,100	1,260	66%	832	2.3	1,913	1,226	0.36
Karachaganak phase III	29%	1,718	503	50%	251	3.2	804	515	0.15
QC LNG Train 3	74%	750	554	33%	183	6.2	1,132	726	0.21
Bream	40%	50	20	50%	10	6.8	68	44	0.01
Iguacu (BM-S-9)	30%	995	299	33%	99	4.2	410	263	0.08
Abare West (BM-S-9)	30%	650	195	33%	64	4.2	268	172	0.05
Other Brazil Discoveries	Var	-	240	33%	79	4.2	329	211	0.06
<b>Unsanctioned growth projects</b>			<b>4,187</b>		<b>2,513</b>	<b>4.0</b>	<b>10,095</b>	<b>6,471</b>	<b>1.89</b>
<b>Reserves &amp; Resources</b>			<b>14,620</b>		<b>12,946</b>		<b>79,290</b>	<b>50,827</b>	<b>14.87</b>

Exploration	% Split	Co. Reported Reserves (mm boe)	Citi Risk Factor %	Citi Risked Reserves (mmboe)	\$/boe	Enterprise value (US\$ million)	Enterprise value (£ million)	per share (GBP)
Brazil	5%	240	20%	48	4.5	216	138	0.04
Other	95%	4,343	20%	869	4.5	3,909	2,506	0.73
<b>Total Exploration</b>		<b>4,583</b>		<b>917</b>		<b>4,125</b>	<b>2,644</b>	<b>0.77</b>

<b>Upstream Valuation</b>	<b>19,203</b>	<b>13,863</b>	<b>83,415</b>	<b>53,471</b>	<b>15.64</b>
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	2013e EBIT (\$m)	2013e EBITDA (\$m)	EV/EBITDA Multiple	EV (US\$m)	EV (£m)	per share (GBP)
<b>LNG</b>						
Liquefaction (ex-Australia)	429	499	10.0	4,970	3,186	
Shipping & Marketing	2,619	2,649	8.0	21,112	13,533	
Other	-113	-113	10.0	(1,130)	(724)	
<b>LNG</b>	<b>2,936</b>	<b>3,036</b>	<b>8.2</b>	<b>24,951</b>	<b>15,994</b>	<b>4.68</b>
EV				108,366	69,465	20.32
Net debt (2012) & 2013 Disposal proceeds				(6,959)	(4,461)	(1.30)
Minorities (2012)				-	-	-
<b>Shareholder value</b>				<b>101,407</b>	<b>65,005</b>	<b>19.01</b>

Source: Citi Research

Figure 12. BG – Summary Financial Model

US\$B, unless stated	'07	'08	'09	'10	'11	'12	'13E	'14E	'15E	'16E	'17E	'18E	'19E	'20E	CAGR 13-17	CAGR 13-20
<b>Key assumptions:</b>																
Brent oil (US\$/bbl)	72.7	97.4	62.3	80.3	110.8	111.9	105.2	97.5	92.5	99.0	102.0	105.0	109.0	112.0	-0.8%	0.9%
US\$/GBP rate	2.00	1.89	1.55	1.54	1.60	1.58	1.55	1.56	1.56	1.56	1.56	1.56	1.56	1.56		
LNG volumes (mpta)	11.9	12.4	12.4	13.0	12.8	12.1	11.1	12.9	19.5	21.5	22.5	23.5	23.5	25.5	19.5%	12.7%
E&P volumes (kboepd)	604	620	644	646	641	657	653	694	829	931	1,015	1,060	1,091	1,137	11.6%	8.2%
YoY growth	0.5%	2.6%	3.9%	0.4%	-0.7%	2.5%	-0.6%	6.2%	19.5%	12.4%	9.0%	4.5%	2.9%	4.2%		
% oil	13%	14%	13%	12%	11%	12%	15%	20%	25%	27%	34%	39%	42%	44%		
E&P cash margins (US\$/boe)	20.2	25.3	18.1	20.6	22.5	23.4	26.1	28.5	32.7	32.6	33.7	35.5	37.3	39.1	6.6%	6.0%
<b>Per share data:</b>																
Adjusted EPS (US\$)	1.06	1.74	0.93	1.19	1.28	1.29	1.27	1.53	1.92	2.25	2.69	3.13	3.53	3.95	20%	18%
Adjusted EPS (GBP)	0.53	0.92	0.60	0.77	0.80	0.81	0.82	0.98	1.23	1.44	1.72	2.00	2.26	2.53	20%	17%
DPS (US\$)	0.19	0.21	0.20	0.22	0.24	0.26	0.28	0.30	0.33	0.38	0.44	0.50	0.58	0.66	11%	13%
DPS (GBP)	0.09	0.11	0.12	0.14	0.15	0.16	0.18	0.20	0.21	0.24	0.28	0.32	0.37	0.42	11%	13%
<b>Valuation ratios:</b>																
P/E	7.6x	11.9x	17.6x	14.8x	14.6x	14.4x	14.6x	12.2x	9.7x	8.2x	6.9x	5.9x	5.2x	4.7x		
EV/DACF	4.3x	8.0x	9.4x	9.2x	9.2x	9.0x	8.7x	8.2x	6.8x	5.8x	4.9x	4.1x	3.5x	2.8x		
Dividend yield	1.9%	1.0%	1.1%	1.1%	1.2%	1.4%	1.5%	1.6%	1.7%	1.8%	2.2%	2.5%	2.9%	3.3%		
Free cash yield	7.5%	4.7%	-2.1%	-1.7%	-5.3%	-3.7%	-4.8%	-4.2%	3.2%	5.6%	8.1%	10.6%	12.7%	15.3%		
<b>Cash flow:</b>																
Upstream	4.4	5.7	4.24	4.9	5.3	5.6	6.2	7.2	9.9	11.1	12.5	13.7	14.9	16.2	19%	15%
LNG Shipping & Marketing	0.8	2.2	1.5	1.8	2.0	2.0	1.9	2.1	2.1	2.8	2.8	3.1	3.2	3.3	10%	8%
Other (T&D, Corporate, financing)	0.5	0.5	0.5	0.5	0.3	0.2	(0.2)	(0.4)	(1.0)	(1.1)	(0.7)	(0.5)	(0.3)	0.1		
<b>Sources of funds</b>	<b>5.8</b>	<b>8.4</b>	<b>6.3</b>	<b>7.1</b>	<b>7.5</b>	<b>7.8</b>	<b>8.0</b>	<b>8.9</b>	<b>11.0</b>	<b>12.7</b>	<b>14.5</b>	<b>16.3</b>	<b>17.8</b>	<b>19.6</b>	16%	14%
Changes in working capital	(0.3)	0.1	(0.7)	(0.8)	(0.6)	(0.2)	0.2	-	-	-	-	-	-	-		
<b>Cash flow from operations</b>	<b>5.5</b>	<b>8.5</b>	<b>5.6</b>	<b>6.4</b>	<b>6.9</b>	<b>7.6</b>	<b>8.1</b>	<b>8.9</b>	<b>11.0</b>	<b>12.7</b>	<b>14.5</b>	<b>16.3</b>	<b>17.8</b>	<b>19.6</b>	16%	13%
Capex	(3.4)	(5.3)	(6.8)	(7.4)	(10.3)	(10.0)	(11.2)	(11.6)	(9.0)	(9.2)	(9.4)	(9.6)	(9.8)	(9.9)	-4%	-2%
<b>Free cash flow</b>	<b>2.1</b>	<b>3.3</b>	<b>(1.2)</b>	<b>(1.1)</b>	<b>(3.4)</b>	<b>(2.4)</b>	<b>(3.0)</b>	<b>(2.7)</b>	<b>2.0</b>	<b>3.5</b>	<b>5.2</b>	<b>6.7</b>	<b>8.0</b>	<b>9.7</b>		
Ordinary dividends	(0.5)	(0.7)	(0.6)	(0.7)	(0.8)	(0.9)	(0.9)	(1.0)	(1.1)	(1.2)	(1.4)	(1.6)	(1.8)	(2.1)		
as % of operating c/flow	10%	8%	11%	11%	11%	11%	11%	11%	10%	9%	9%	10%	10%	11%		
Minority dividend	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.0)	-	-	-	-	-	-	-	-		
<b>Discretionary free cash flow</b>	<b>1.5</b>	<b>2.5</b>	<b>(1.9)</b>	<b>(1.8)</b>	<b>(4.3)</b>	<b>(3.2)</b>	<b>(3.9)</b>	<b>(3.6)</b>	<b>0.9</b>	<b>2.4</b>	<b>3.8</b>	<b>5.1</b>	<b>6.2</b>	<b>7.6</b>		
Disposals	0.9	0.0	0.0	0.9	0.2	2.9	4.3	-	-	-	-	-	-	-		
Acquisitions	(1.2)	(3.8)	(2.0)	(1.5)	(0.5)	-	-	-	-	-	-	-	-	-		
Equity change	(1.0)	(0.4)	0.1	0.1	0.0	0.0	0.0	-	-	-	-	-	-	-		
<b>Surplus (deficit)</b>	<b>0.2</b>	<b>(1.7)</b>	<b>(3.7)</b>	<b>(2.4)</b>	<b>(4.5)</b>	<b>(0.3)</b>	<b>0.4</b>	<b>(3.6)</b>	<b>0.9</b>	<b>2.4</b>	<b>3.8</b>	<b>5.1</b>	<b>6.2</b>	<b>7.6</b>		
<b>Balance sheet:</b>																
Net debt	(0.1)	1.8	4.8	7.0	11.3	10.6	10.1	13.8	12.9	10.5	6.7	1.6	(4.6)	(12.2)		
Net debt/EBITDA	(0.0)	0.2x	0.6x	0.8x	1.1x	1.0x	0.9x	1.1x	0.8x	0.6x	0.3x	0.1x	(0.2)	(0.4)		
Cash interest cover	nm	nm	28.7x	41.9x	34.3x	60.8x	44.2x	19.2x	20.9x	26.5x	36.8x	61.2x	179.6x	nm		
Net debt/equity	0%	10%	21%	26%	38%	32%	29%	35%	29%	20%	11%	2%	-6%	-14%		
<b>Capital employed:</b>																
Upstream	8.6	13.2	19.8	25.6	33.7	41.1	45.7	53.7	58.3	62.6	66.7	70.8	75.0	78.9	10%	8%
LNG	3.4	3.9	4.8	6.1	6.2	10.2	10.0	9.9	9.8	9.6	9.5	9.4	9.3	9.1	-1%	-1%
Other	7.7	8.4	9.6	8.4	9.9	2.4	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.8)	(0.8)	(0.8)		
% Upstream	44%	52%	58%	64%	68%	77%	83%	86%	87%	88%	89%	89%	90%	90%		
<b>Return on capital employed:</b>																
Upstream	30.2%	30.5%	9.8%	8.5%	8.1%	6.0%	5.4%	5.7%	6.2%	6.7%	8.1%	9.1%	10.0%	10.7%		
LNG	18.8%	47.1%	26.3%	27.6%	23.1%	17.4%	13.9%	16.5%	16.3%	21.4%	22.0%	24.5%	25.8%	27.5%		
<b>Aggregate group</b>	<b>20.7%</b>	<b>26.0%</b>	<b>12.9%</b>	<b>11.8%</b>	<b>10.4%</b>	<b>8.7%</b>	<b>8.4%</b>	<b>9.7%</b>	<b>10.9%</b>	<b>11.8%</b>	<b>13.1%</b>	<b>14.2%</b>	<b>14.9%</b>	<b>15.8%</b>		

Source: Citi Research



## BG Group

### Company description

BG is an integrated gas company, which looks to connect equity and third-party gas to higher-value gas markets primarily through its global LNG business. In addition, recent material exploration success in the Brazilian pre-salt provides BG with growing exposure to deepwater oil.

### Investment strategy

Investor confidence in BG's long-term growth ambitions has been dented after repeated production downgrades. However, further re-setting of targets by new management remains a distinct possibility, in our view. We think investors are wrong to view BG with the same low growth/returns compression characteristics that plague the sector as a whole. We point to five years of outstanding reserve replacement (backlog growth) that lays the foundation for growth visibility and options for new management, through portfolio management, to look to defend high returns on equity. We have a Buy (1) rating.

### Valuation

Our 1,420p price target is based on our DCF valuation. This is modelled in USD and set using a 1.56 spot GBP/USD exchange rate. Our DCF is calculated using a 10-year explicit forecast period and Citi's Commodities Team's price outlook of US\$105/bbl in 2013, US\$97.5/bbl in 2014, US\$92.5/bbl in 2015 and then long-term US\$90/bbl (real, 2013 money). We also assume a 0% terminal growth rate and a discount rate of 7.6% (based on CAPM). Our DCF is supported by our sum-of-the-parts valuation of 1,900p/share. Our sum-of-the-parts valuation is based on a DCF of BG's E&P resource base and the non-E&P divisions are valued on a combination of multiples, divisional DCFs or market valuations (for listed associates).

### Risks

Our investment rating on BG considers several company-specific and industry risks:

- **Commodity prices** - BG's earnings are sensitive to changes in oil and natural gas prices, which can fluctuate significantly as a function of economic and geopolitical forces. We calculate a US\$1/bbl move in oil prices (vs Citi's Commodities Team's 2014 forecast of US\$97.5/bbl) would affect EPS by 0.9%.
- **Currency** - BG's principal earnings and costs are in US\$ meaning that GBP/US\$ currency moves are largely translational (ie close to a 1:1 impact on EPS).
- **Political** - Changing political forces can affect BG's legal ownership, fiscal take and pace of development activity in any country in which it operates. Note that Brazil represents c.30% of BG's resource base, while Australia represents 20%. BG also has a key position in Kazakhstan through its stake in the Karachaganak oil and gas development, which accounts for c.10% of its resource base.
- **Natural and man-made disasters** - BG's operating activities can be severely disrupted by the effects of natural disasters or industrial accidents. Accidents may bear the burden of additional costs for remediation, fines and from restrictions on future business activities.

These risks might impede the share price from reaching our target price.

# Appendix A-1

## Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

## IMPORTANT DISCLOSURES

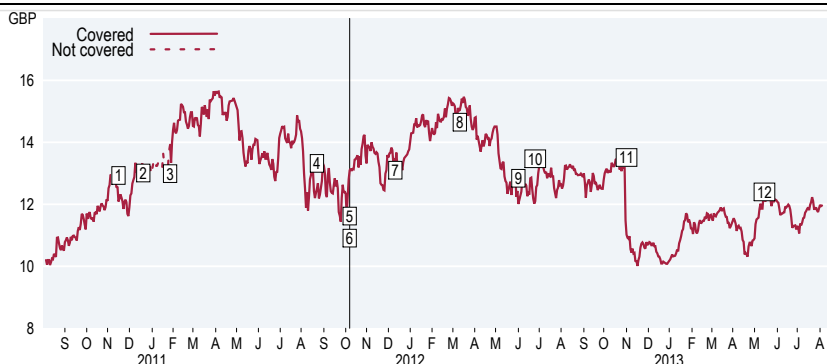
### BG Group (BG.L)

#### Ratings and Target Price History

#### Fundamental Research

Analyst: Michael J Alsford

Covered since January 27 2011



	Date	Rating	Target Price	Closing Price
1	16-Nov-10	1M	*15.00	12.09
2	21-Dec-10	Coverage terminated		
3	27-Jan-11	1M	*16.00	13.92
4	23-Aug-11	1M	*15.50	12.51

\* Indicates change

	Date	Rating	Target Price	Closing Price
5	7-Oct-11	Stock rating system changed		
6	7-Oct-11	*1	15.50	13.10
7	12-Dec-11	1	*16.20	13.25
8	12-Mar-12	1	*17.40	15.04

	Date	Rating	Target Price	Closing Price
9	1-Jun-12	1	*16.00	12.01
10	26-Jun-12	1	*15.30	12.10
11	1-Nov-12	1	*13.80	11.02
12	15-May-13	1	*14.20	12.23

Rating/target price changes above reflect Eastern Standard Time

### BG Group (BG.L)

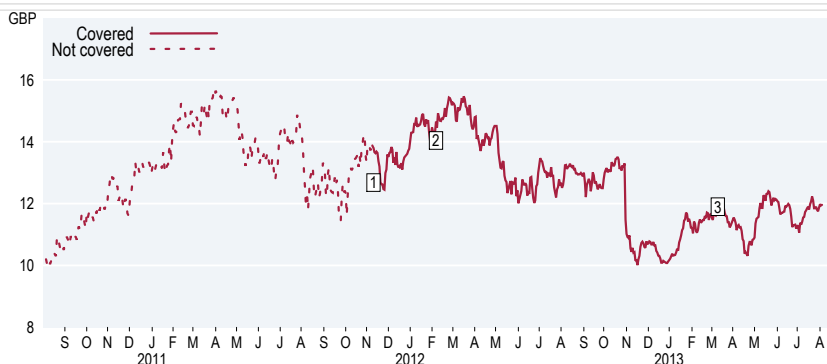
#### Ratings and Target Price History

#### Best Ideas Research

#### Relative Call (3 Month)

Analyst: Michael J Alsford

Covered since January 27 2011



	Date	Rating	Target Price	Closing Price
1	10-Nov-11	*ADD MP	-	13.80

\* Indicates change

	Date	Rating	Target Price	Closing Price
2	7-Feb-12	*REM MP	-	14.65

	Date	Rating	Target Price	Closing Price
3	11-Mar-13	*ADD MP	-	11.74

Rating/target price changes above reflect Eastern Standard Time

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Data current as of 30 Jun 2013

	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
Citi Research Global Fundamental Coverage	48%	40%	12%	6%	88%	6%
% of companies in each rating category that are investment banking clients	53%	50%	45%	58%	51%	49%

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**Risk rating** takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.

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Prior to October 8, 2011, the firm's stock recommendation system included a risk rating and an investment rating. **Risk ratings**, which took into account both price volatility and fundamental criteria, were: Low (L), Medium (M), High (H), and Speculative (S). **Investment Ratings** of Buy, Hold and Sell were a function of the Citi Research expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating. Additionally, analysts could have placed covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" were monitored daily by management and as practically possible, the analyst published a note re-establishing a rating and investment thesis. For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings were: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return). For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings were: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

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Citigroup Global Markets Ltd

Michael J Alsford; Alastair R Syme

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