

Diversified Gas & Oil

Corporate transaction

Core Appalachia offers multiple synergies

Diversified Gas & Oil's (DGO) acquisition of Core Appalachia (Core) offers multiple synergies. These include a material increase in natural gas liquid (NGL) yield from acquired rich gas streams, optimisation of well tender routings, rationalisation of compressor stations, utilisation of existing administrative capabilities to eliminate duplicate functions, and leveraging DGO's expansive midstream operations. The deal values Core at \$183m, which is broadly in line with the valuation of the EQT transaction on a price to NPV₁₀, price to flowing barrel and price to trailing cash flow metric. On addition of the Core assets, assumption of incremental debt and issue of 35m new shares at 115p/share, our valuation rises from 138.1p/share to 145.9p/share (+6%).

Year end	Revenue (US\$m)	EBITDA (US\$m)	PBT* (US\$m)	Net cash/ (debt) (US\$m)	Dividend yield** (%)	Capex (US\$m)
12/16	17.1	26.5	32.5	(37.1)	0.0	(9.2)
12/17	41.8	23.2	4.7	(55.8)	2.7	(93.1)
12/18e	230.8	120.5	52.2	(480.9)	5.2	(912.5)
12/19e	447.8	254.1	142.0	(353.4)	8.6	(23.2)

Note: *PBT normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. **Dividend yield based on expected cash payment during year.

Value accretive bolt-on transaction

Our updated valuation includes the positive impact of the acquisition of Core at a c 28% discount to management-estimated NPV₁₀, as well as the impact of potential corporate and operational synergies, which management estimates at c \$5–10m per year. The deal highlights further potential for value-accretive, bolt-on asset deals within DGO's core areas of operation. Our valuation is based solely on existing assets within the DGO portfolio, with potential for upside in the event of improved gas realisations or further asset M&A.

Midstream, operational and corporate synergies

We discuss synergies in greater detail within this note, but key components include: the ability to leverage midstream infrastructure in order to maximise liquid yield and price realisations; a reduction in 'C-suite' and overheads; optimisation of well tender routings; and rationalisation of redundant infrastructure.

Valuation: Base case increases to 145.9p/share

We recently [initiated on DGO](#) with a base case valuation of 138.1p/share; this rises to 145.9p/share on inclusion of the Core asset transaction, making the deal 6% accretive to our NPV₁₀-based valuation. Our valuation is based on an EIA gas price forecast of \$3.10/mcf in 2018 and \$3.23/mcf in 2019, with a long-term gas price of \$3.10/mcf (2022). Assuming management maintains a \$0.28/share quarterly dividend for the underlying asset base, we forecast a FY19 dividend yield of 8.6% at the current share price.

Oil & gas

22 October 2018

Price **115p**

Market cap **£622m**

US\$/£0.75

Net debt (\$m) at 30 June 2018 130

Shares in issue 541.8m

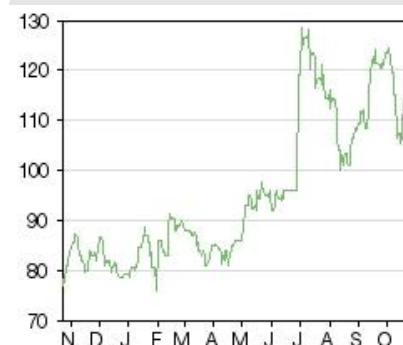
Free float 99%

Code DGO

Primary exchange AIM

Secondary exchange N/A

Share price performance



% 1m 3m 12m

Abs (5.8) (3.0) 50.9

Rel (local) (1.2) 6.0 61.0

52-week high/low 128.5p 76.0p

Business description

Diversified Gas & Oil is a conventional natural gas and oil producer with a main focus in the US onshore. The company possesses long-life, low operational cost, mature producing assets with slow decline profiles in the Appalachian region, in the states of Pennsylvania, West Virginia and Ohio.

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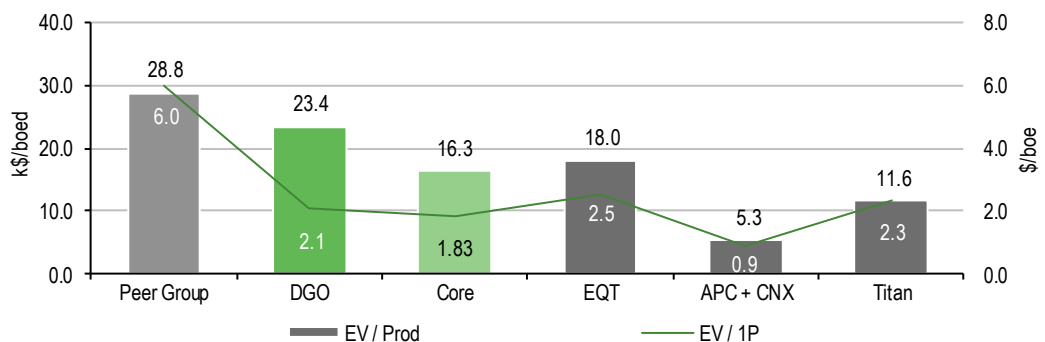
Value-accretive, bolt-on transaction

Acquisition headline metrics

DGO's acquisition of Core for a total consideration of \$183m comprised \$130m in cash payment and the issuance of 35m new shares at an issue price of 115p/share (shareholders are subject to an eight-month lock-in, followed by an orderly market agreement for a further six months thereafter). The cash component of the consideration is to be funded through the assumption of the \$93m balance on Core's revolving credit facility from a consortium led by KeyBank and an incremental draw of \$40m under DGO's existing KeyBank debt facility.

The acquisition is priced at 72% of DGO's estimated NPV₁₀ for Core's asset base. On production and reserve metrics, the deal is broadly in line with the price paid for EQT, as shown in Exhibit 1 below. For further details of DGO's historical transactions, including EQT, please see our recent [initiation note](#).

Exhibit 1: EV/production and EV/1P indexes for the latest acquisitions



Source: Bloomberg, Edison Investment Research. Note: peer group includes Antero Resources, Cabot Oil & Gas, Chesapeake, Devon Energy, EQT, Range Resources, Southwestern Energy and XTO.

Management estimates the impact of synergies to be \$5m to \$10m per annum (excluding G&A synergies) – we take a look at potential midstream, operational and corporate synergies below.

Material midstream component

The acquired asset base comes with a significant midstream component, including 4,100 miles of pipe, 47,000HP compression and c 140,000Dth/d (Dekatherms per day) of inlet throughput, in addition to a 1.3m undeveloped acreage position. DGO's mid-stream assets are increased by c 65% through the transaction. We include production and reserves for the Core producing asset base in our updated model, and also include a \$14m revenue stream that management expects to accrete from third-party tariffs. Gathering and transportation costs for operating midstream infrastructure are included in our asset models.

Midstream consolidation provides the opportunity to utilise EQT's NGL processing/marketing arrangements to extract NGL from Core's rich gas, which is currently unprocessed, and positions DGO to capture additional third-party gathering revenues. Management seeks to continue to enhance the value of the company's midstream portfolio by: increasing operated throughput, thereby reducing unit transport costs; attracting third-party volumes; and acquiring nearby operators – optimising transport routes and product yields.

Operational synergies

In addition to the midstream synergies described above, DGO is to benefit from the streamlining of field level positions and optimisation of well tender routes. An opportunity also exists to rationalise well compression stations and potentially to redeploy redundant equipment. The decline rate of the acquired Core asset base is similar to that of DGO's underlying asset base at c 4% pa, and takes current production to c 70kboed with increased exposure to NGL and liquids pricing. Core gas provides accesses to both the Dominion South and TCO markets, with benchmark pricing at a relatively low differential to Henry Hub (c \$0.30/mmBtu).

The NPV₁₀ of plugging and abandonment (P&A) liabilities under the transaction is estimated by DGO at c \$7m for the acquired well stock of 5,000 producing wells. P&A costs are estimated at a weighted average of \$25k per well location.

Corporate synergies

DGO expects to eliminate 'C-suite' and upper-management positions in Core's organisation structure, but maintain the bulk of Core's operational team in order to mitigate integration risks. Other 'head office' synergies include the rationalisation of existing accounting and back-office infrastructure, office space and the benefit of increased purchasing power with key vendors.

Updated valuation breakdown by asset

The NAV table below provides a breakdown of our valuation by asset, using data available in the company's last published prospectus and CPR, as well as state public sources.

Key assumptions for the Core asset base include a unit LOE of \$3.5/boe, and midstream opex of \$5.70/boe. Midstream opex is higher on a unit basis than that of the acquired EQT asset base, but this is expected to fall over time as assets are consolidated. Differentials are in line with management guidance at \$0.3/mmBtu, oil differential at \$6.2/bbl and NGLs priced at 30% of WTI.

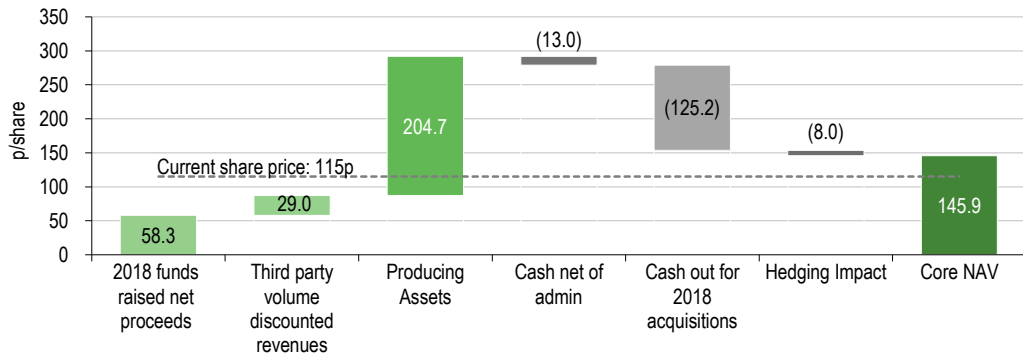
Exhibit 2: Edison detailed NAV breakdown for DGO

Asset	Country	Diluted WI %	CoS %	Recoverable reserves		Net risked value	Risked value
				Net post royalty mboe	NPV ₁₀ /boe \$/boe	US\$m	p/share
Net (debt)/cash end-2017						(55.8)	(7.7)
SG&A – NPV of 3 years						(38.0)	(5.3)
2018 funds raised net proceeds						420.0	58.3
Cash out for 2018 acquisitions						(902.0)	(125.2)
Hedging impact						(57.4)	(8.0)
Third-party volume discounted revenues						209.2	29.0
Production							
Kentucky	US	90%	100%	200	5.6	849.3	117.8
Ohio	US	82%	100%	17	5.1	87.5	12.1
Pennsylvania	US	82%	100%	115	2.1	240.7	33.4
Tennessee	US	82%	100%	5	1.8	8.8	1.2
Virginia	US	81%	100%	10	5.4	31.9	4.4
West Virginia	US	84%	100%	144	5.5	257.3	35.7
Core NAV				491		1,051.5	145.9

Source: Edison Investment Research. Note: number of shares: 541.8m, FX: US\$/£0.75 (due to the recent volatility in exchange rates and for the sake of consistency, we assume the FX based on the average of the last six months before the end of each quarter).

Exhibit 3 below breaks down our valuation by asset class, showing where our base case core NAV is relative to the current share price.

Exhibit 3: NAV/share waterfall



Source: Edison Investment Research

Key sensitivities: Gas price and LOE

Key drivers of DGO's valuation are assumed gas price and LOE. The table below provides a base case valuation sensitivity to these key drivers. Our base assumes a long-term (2022) gas price of \$3.10/mcf and LOE of \$4.52/boe (LOE excludes gathering and transport, SG&A and production taxes), both inflated by 2.5% thereafter.

Exhibit 4: Valuation sensitivity to LOE and gas price assumption

LOE \$/boe	3.39	3.84	4.52	5.20	5.42
HH \$/mcf LT					
-25%	118.6	109.3	95.3	81.3	71.9
-15%	139.3	130.0	116.0	102.1	92.8
3.10	169.1	159.8	145.9	132.0	122.7
+15%	199.6	190.3	176.3	162.4	153.1
+25%	219.6	210.3	196.4	182.5	173.2

Source: Edison Investment Research

Exhibit 5: Financial summary

US\$m	2016	2017	2018e	2019e	2020e
Year-end December	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue	17.1	41.8	230.8	447.8	428.6
Cost of sales	(15.3)	(27.9)	(131.2)	(232.2)	(222.2)
Gross profit	1.7	13.9	99.6	215.5	206.4
General & admin	(2.8)	(8.9)	(13.5)	(25.0)	(24.0)
EBITDA	26.5	23.2	120.5	254.1	243.3
Depreciation	(4.0)	(7.0)	(34.9)	(63.9)	(61.4)
Operating Profit (before amort. and except.)	22.5	16.2	85.7	190.1	181.9
Intangible amortisation	-	-	-	-	-
Exceptionals	-	-	-	-	-
Other	-	-	-	-	-
EBIT	22.5	16.2	85.7	190.1	181.9
Net interest	10.1	(11.5)	(33.4)	(48.1)	(43.0)
Profit Before Tax (norm)	32.5	4.7	52.2	142.0	139.0
Profit Before Tax (FRS 3)	32.5	4.7	52.2	142.0	139.0
Tax	(14.8)	4.1	(13.1)*	(35.5)	(34.7)
Profit After Tax (norm)	32.5	9.2	39.2	106.5	104.2
Profit After Tax (FRS 3)	32.5	8.9	39.2	106.5	104.2
Average Number of Shares Outstanding (m)	42.0	120.1	442.6	541.8	541.8
EPS - normalised (c)	44.2	7.7	8.9	19.7	19.2
EPS - normalised fully diluted (c)	34.3	5.8	6.7	14.8	14.4
EPS - (IFRS) (c)	42.1	7.4	8.9	19.7	19.2
Dividend per share (c)	-	4.0	8.0	13.2	13.2
Gross margin (%)	10.2	33.2	43.2	48.1	48.2
EBITDA margin (%)	155.0	55.5	52.2	56.7	56.8
Operating margin (before GW and except.) (%)	131.4	38.8	37.1	42.5	42.4
BALANCE SHEET					
Non current assets	81.1	198.3	1,196.9	1,156.2	1,117.2
Intangible assets	76.8	190.4	1,188.9	1,148.2	1,109.2
Tangible assets	3.3	6.9	6.9	6.9	6.9
Investments	1.0	1.0	1.0	1.0	1.0
Current assets	4.7	30.3	65.2	65.2	65.2
Stocks	-	-	0.0	0.0	0.0
Debtors	3.1	13.9	13.9	13.9	13.9
Cash	0.2	15.2	50.0	50.0	50.0
Other/ restricted cash	1.4	1.3	1.3	1.3	1.3
Current liabilities	(38.5)	(15.3)	(15.3)	(15.3)	(15.3)
Creditors	(11.3)	(15.0)	(15.0)	(15.0)	(15.0)
Short term borrowings	(27.2)	(0.4)	(0.4)	(0.4)	(0.4)
Long term liabilities	(38.2)	(123.1)	(733.2)	(657.4)	(585.8)
Long term borrowings	(10.1)	(70.6)	(530.6)	(403.0)	(278.6)
Other long term liabilities (inc. decomm.)	(28.1)	(52.5)	(202.6)	(254.4)	(307.2)
Net assets	9.2	90.2	513.6	548.6	581.3
CASH FLOW					
Operating cash flow	5.1	6.9	102.6	222.2	218.4
Capex inc acquisitions	(9.2)	(93.1)	(912.5)	(23.2)	(22.4)
Other	0.1	-	-	-	-
Equity issued	-	77.0	420.0	-	-
Dividends	(1.0)	(5.8)	(35.3)	(71.5)	(71.5)
Net cash flow	(4.9)	(15.0)	(425.1)	127.5	124.4
Opening net debt/(cash)	42.8	37.1	55.8	480.9	353.4
HP finance leases initiated	-	-	-	-	-
Other	10.7	(3.8)	-	-	-
Closing net debt/(cash)	37.1	55.8	480.9	353.4	229.0

Source: Diversified Gas and Oil accounts, Edison Investment Research. Note: *company indication – net operating losses to shelter cash tax through to 2020. Effective P&L tax rate estimated at 25%.

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