

SDX Energy

Significant work programme starting

SDX Energy has completed the \$10m equity raising to fund an accelerated drilling programme in Egypt and Morocco. This means it will be drilling wells with unrisks returns generating IRRs of more than 100%, according to the company, underlining the value of the H217 drilling programme. After the fund-raise, SDX will be fully funded to take the South Disouq discovery to first gas in early 2018, and to drill two exploration wells to explore for a further 150bcf in Egypt while increasing its Moroccan drilling programme to nine wells to boost resources and increase production. These will have the effect of increasing certainty on future developments and bringing forward valuable cash flows. These positive effects have been offset by a reduction in our long-term oil price assumption and some modelling adjustments. Our full NAV is now 64p/share.

Year end	Revenues (\$m)	PBT (\$m)	Cash from operations (\$m)	Net cash (\$m)	Capex (\$m)
12/15	11.4	11.1	(5.2)	8.2	(5.1)
12/16	12.9	(26.7)	(1.9)	4.7	(11.9)
12/17e	35.8	4.8	22.8	23.8	(22.2)
12/18e	51.7	18.3	33.6	15.1	(44.7)

Note: Figures are as reported.

Expanding and delineating resources in Egypt

At South Disouq, the extra funding will allow the company to understand the true extent of the resources in the block sooner (targeting an incremental 150bcf in the Kelvin and Bragg prospects combined), enabling full development facilities to be right-sized and reducing costs in the long-term. Two development wells in the SD-1X structure (which is up-dip and may be connected to the Kelvin prospect) are also planned, potentially increasing resources there.

Adding to heavy drilling campaign in Morocco

In Morocco, the addition of two wells to the existing programme of seven increases the likelihood of finding valuable gas resources that can be put on production quickly and supply a hungry gas market (while also reducing mob/de-mob costs). SDX hopes to increase production by 50% in the next one to two years. Management estimates unrisks IRRs for these wells at significantly above 100% in an area where historical success has been 80%, underlining the commercial attractiveness of the assets.

Valuation: Full NAV of 64p/share

The added wells funded by the equity raise have the net effect of increasing the value in the company. Egyptian drilling will allow processing and pipeline facilities to be right-sized while drilling in Morocco should increase net resources and allow for quicker production increases. However, our NAV falls slightly as a result of reducing our long-term oil price assumption to \$70/bbl in 2022 (from c \$80/bbl) and reducing our nearer-term Egyptian gas price assumptions.

Funds and H2 drilling update

Oil & gas

29 September 2017

Price **52.1p**

Market cap **£103m**

£0.8/US\$

Net cash (\$m) at 30 June 2017 28

Shares in issue 204.5m

Free float 80%

Code SDX

Primary exchange AIM

Secondary exchange TSX Venture

Share price performance



% 1m 3m 12m

Abs 11.8 (3.5) 131.7

Rel (local) 12.7 (3.0) 115.0

52-week high/low 67.4p 22.0p

Business description

SDX Energy is a North African onshore player listed in Toronto and London. It has oil and gas production in Egypt, and Moroccan gas production. A large gas discovery was recently made at South Disouq.

Next events

Heavy work programme in Egypt H217/2018

Heavy work programme in Morocco H217/2018

Analysts

Will Forbes +44 (0)20 3077 5749

Elaine Reynolds +44 (0)20 3077 5713

oilandgas@edisongroup.com

[Edison profile page](#)

SDX Energy is a research client of Edison Investment Research Limited

Investment summary

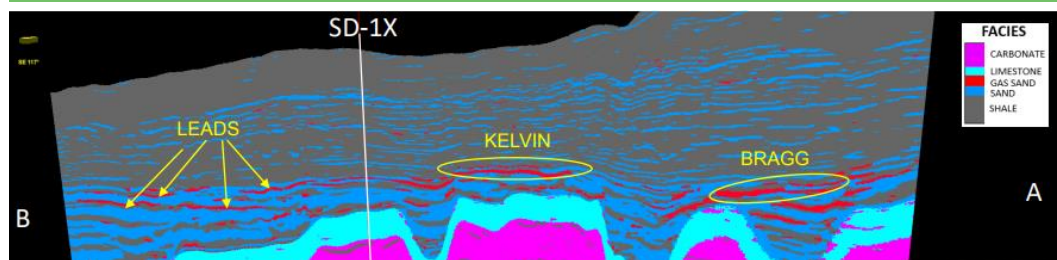
The over-subscribed fund-raising, completed on 15 September 2017, raised \$10m and will enable SDX to drill four additional wells. Two exploration wells will be drilled in Egypt, targeting two prospects close to the South Disouq SD-1X discovery which together could add a further 150bcfe (78% gas/ 22% condensate assuming a similar gas oil ratio to the independent resource report). In Morocco, two further wells will target additional resources of 1.91bcf in aggregate, adding to the five development wells and two exploration wells already slated.

Egypt

The two additional exploration wells in Egypt are important to gauge the size of the resource as soon as possible. This will be used to right-size the processing facilities required to give the most economic development concept over the fields/prospects identified. SDX Energy has also committed to two appraisal/development wells that will target the first discovery, where the company believes substantially more gas could be de-risked by drilling on the flanks of the structure (which is thought to thicken out).

Kelvin and Bragg could add a combined 150bcf to resources (with additional condensates) and lie on trend with the existing discovery at South Disouq. As such, success here could add materially to the existing 47bcf (plus condensates) ascribed to the discovery by reserve auditor Gaffney Cline & Associates.

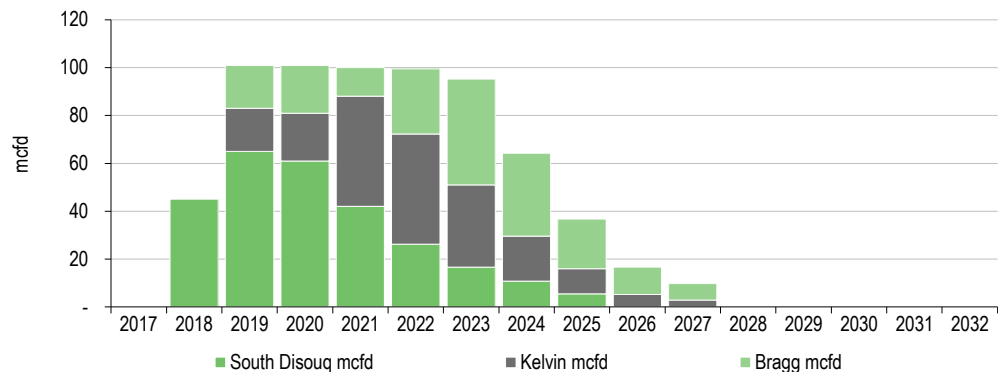
Exhibit 1: Kelvin and Bragg on trend with SD-1X



Source: SDX Energy

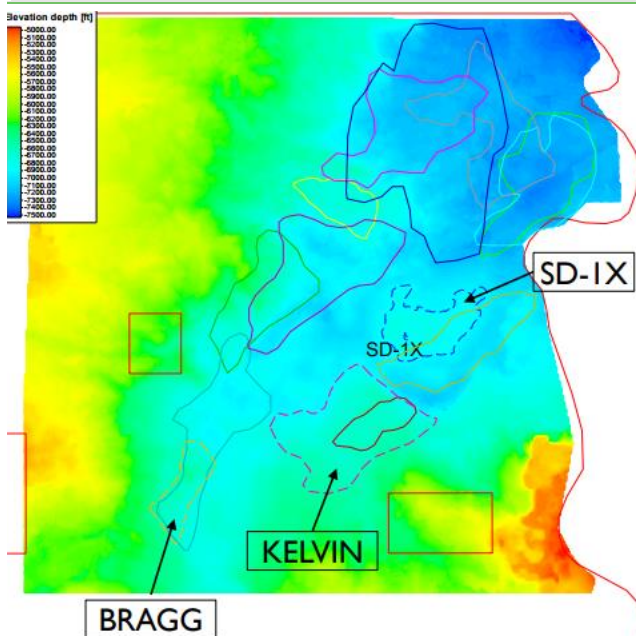
Success at both Kelvin and Bragg will likely justify capex invested in processing, while development of just the SD-1X resource would favour rented facilities. Success at both exploration wells would not mean that they are produced immediately. Instead, volumes would likely be produced over a staged period from all three fields, with gas being fed in as production from South Disouq (first discovery) starts to decline. The chart below gives an indication of our modelling – though this is open to modifications as and when drilling results come in.

Exhibit 2: South Disouq (and others) gas volumes modelled – assumes success in both follow-up wells at South Disouq



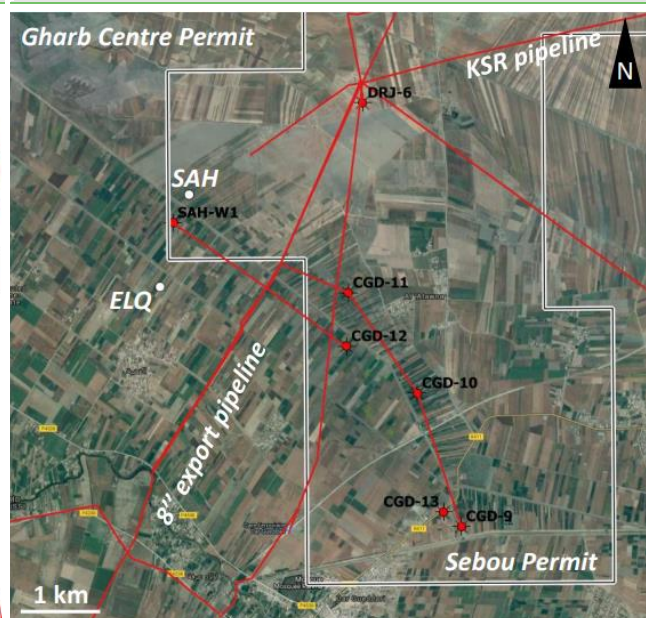
Source: Edison Investment Research. Note: Excludes condensate volumes in gas equivalent terms. In purely gas production.

Exhibit 3: Kelvin and Bragg locations



Source: SDX Energy

Exhibit 4: Well locations in Morocco



Source: SDX Energy

Morocco

In Morocco, SDX Energy plans to continue drilling the types of structures that have seen historical success rates in the licences of over 80%. As a result, the first seven of the nine wells that will now be drilled (with the first having spudded on 18 September) have a high chance of adding useful resources to the portfolio, with two wells at the end of the programme targeting riskier exploration opportunities. With around 0.8-1.0bcf per well, the company should be well-placed to increase production quickly to a market that is gas hungry.

The company believes the work programme can drive an increase in production of more than 50% above current levels (of net 639boe/d on a pro-forma basis in H117) in the next one to two years and increase resources by 100%. This should be absorbed by the market in Kenitra as the competing fuels (diesel or CNG) are substantially more expensive than the current prices paid; CNG prices are around \$18/mcf, while the company expects to sign a future contract with customers at \$10-12/mcf. This would boost cash flows expected from the development which can be recycled to help develop the Egyptian assets.

While the addition of two wells in the Moroccan programme was not obligatory and does add near-term capex, it does mean that virtually all the drilling required to boost production is done in one campaign, reducing the material mob/demob costs on a per well basis. It also fulfils a commitment well in the Gharb Centre licence.

Valuation

In our view the funding round was sensible despite the 9.4% increase in share count – the additional drilling funded by the equity raise is positive for the company, enabling it to firm up its resources faster, right-size development facilities and reduce long-term costs. The demand for the shares was strong, underlining the faith the institutional holders have in the story.

We have introduced our new long-term oil price assumption, with a \$70/bbl Brent in 2022 (equivalent to \$60/bbl real in 2016), inflating at 2.5% thereafter. This is around \$10/bbl lower than our previous long-term assumption. In the nearer term, price assumptions remain the same with \$50.8/bbl in 2017 and \$51.6/bbl in 2018 moving steadily up to our long-term view. In addition, we have reviewed our expectations of gas prices in Egypt which reduces the value for the South Disouq discovery on a dollar per barrel basis.

As a result of the changes, our NAV falls slightly to 64p/share, but this is made up of a core production development NAV of 52p/share and relatively low risk development/exploration making up a further 12p/share. Importantly, the development of the assets/prospects should be internally funded with production from the SD-1X development generating cash flows as early as Q118 and Moroccan additions benefiting from the high gas prices.

Exhibit 5: NAV summary

Asset	Number of shares: 204.5m			Recoverable reserves			NPV	Net riskd value @ 12.5% discount rate		
	Country	WI	CoS	Gross	Net WI	Net			GBp	C\$
		%	%	mmboe				\$/boe	\$m	per share
Net (debt)/cash - June 2017		100%	100%					28	10.8	0.17
Cash in from equity raise		100%	100%					10	3.8	0.06
SG&A - NPV10 of 4yrs		100%	100%					(12)	(4.5)	(0.07)
Receivable for gas and NGLs at Gemsa		100%	100%					8	3.3	0.05
Production										
Meseda Base case - Edison	Egypt	50%	100%	4.3	2.1	0.8	5.3	11	4.5	0.07
Meseda Base + Workovers - Edison	Egypt	50%	90%	5.8	2.9	1.1	4.4	12	4.5	0.07
Gemsa 1P	Egypt	50%	100%	3.3	1.6	1.6	9.5	15	6.0	0.10
Gemsa 2P	Egypt	50%	100%	1.4	0.7	0.7	4.3	3	1.2	0.02
Sebou 2P	Morocco	75%	100%	1.2	0.9	0.9	22.9	21	8.2	0.13
Sebou - accelerated programme (updated)	Morocco	75%	60%	1.0	0.8	0.8	11.8	7	2.9	0.05
South Disouq SD-1X well - GCA estimate	Egypt	55%	85%	10.1	5.6	5.6	4.6	22	8.5	0.14
Acquired working capital (NPV of four-year release)	Morocco	100%	100%					9	3.4	0.05
Core NAV				27.1	14.6	11.5	6.2	134	52.5	0.84
Development upside										
Meseda Base + Workovers + Waterflood - Edison	Egypt	50%	50%	5.5	2.7	1.0	1.1	2	0.6	0.01
Gemsa - Edison modelling on full field	Egypt	50%	75%	1.6	0.8	0.8	4.3	3	1.0	0.02
Exploration (known and funded)										
South Disouq - Kelvin	Egypt	55%	41%	15.1	8.3	8.3	3.4	11	4.4	0.07
South Disouq - Bragg	Egypt	55%	41%	14.6	8.0	8.0	3.2	11	4.1	0.07
South Disouq Upside	Egypt	55%	25%	11.3	3.1	3.1	4.2	3	1.3	0.02
Full NAV				75.2	37.6	32.8		164	64.0	1.03

Source: Edison Investment Research

Financials

As of the end of June 2017, SDX held \$27.6m in cash and is well funded to execute its aggressive work programme in Egypt and Morocco in H217. We anticipate capex in H217 of \$20.4m (after \$1.8m in H1, excluding acquisitions and cash acquired), leaving full 2017 capex as \$22.2m. After the additional cash flows that Egyptian and Moroccan production contributes and a release of working capital, we expect year end cash of \$23m.

This level of cash flow generation and balance sheet strength should ensure the company's ability to develop any discoveries, especially given the early cash flows we expect from the SD-1X discovery and the short timelines from discovery to production in Morocco.

Exhibit 6: Financial summary

Accounts: IFRS, Year-end: December, US\$000s	2014	2015	2016	2017e	2018e
Total revenues	24,533	11,372	12,914	35,809	51,675
Cost of sales	(3,639)	(4,973)	(5,282)	(11,681)	(16,176)
Gross profit	20,894	6,399	7,632	24,128	35,499
SG&A (expenses)	(1,768)	(3,746)	(2,457)	(3,419)	(1,846)
Other income/(expense)	0	(3)	479	0	0
Exceptionals and adjustments	(3,831)	(7,676)	(29,089)	(1,000)	(1,000)
Depreciation and amortisation	(1,602)	(2,057)	(3,266)	(14,913)	(14,397)
Reported EBIT	13,693	(7,083)	(26,701)	4,797	18,256
Finance income/(expense)	(1,009)	(96)	4	0	0
Other income/(expense)	0	18,289	0	0	0
Reported PBT	12,684	11,110	(26,697)	4,797	18,256
Income tax expense (includes exceptionals)	(4,328)	(1,063)	(1,503)	(273)	(1,108)
Reported net income	8,356	10,047	(28,200)	4,524	17,148
End period number of shares, m	376	38	80	204	204
Balance sheet					
Property, plant and equipment	9,392	18,401	12,605	33,894	59,710
Intangible assets	16,460	23,473	10,623	8,645	13,113
Other non-current assets	1,999	2,106	2,503	2,879	2,879
Total non-current assets	27,851	43,980	25,731	45,418	75,702
Cash and equivalents	17,935	8,170	4,725	23,812	15,081
Inventories	0	1,188	1,698	1,698	2,351
Trade and other receivables	3,306	6,678	9,463	38,463	30,770
Other current assets	0	0	0	0	0
Total current assets	21,241	16,036	15,886	63,973	48,203
Non-current loans and borrowings	0	0	0	0	0
Other non-current liabilities	608	286	290	290	290
Total non-current liabilities	608	286	290	290	290
Trade and other payables	1,686	3,556	3,674	18,174	14,539
Current loans and borrowings	2,207	0	0	0	0
Other current liabilities	5,142	928	389	389	389
Total current liabilities	9,035	4,484	4,063	18,563	14,928
Equity attributable to company	39,449	55,246	37,264	90,538	108,687
Non-controlling interest	0	0	0	0	0
Cash flow statement					
Profit before tax	12,684	11,110	(26,697)	4,797	18,256
Depreciation and amortisation	1,602	2,057	3,266	14,913	14,397
Share based payments	1,064	761	(47)	1,000	1,000
Other adjustments	1,670	(12,281)	25,742	(1,156)	(2,354)
Movements in working capital	12,941	(2,183)	(3,440)	3,500	3,404
Interest paid/received	0	0	0	0	0
Income taxes paid	(4,430)	(4,678)	(766)	(273)	(1,108)
Cash from operations (CFO)	25,531	(5,214)	(1,942)	22,781	33,596
Capex	(13,634)	(5,120)	(11,890)	(22,224)	(44,680)
Acquisitions & disposals net	0	0	0	(30,000)	0
Other investing activities	1,110	4,836	825	781	2,354
Cash used in investing activities (CFIA)	(12,524)	(284)	(11,065)	(51,444)	(42,327)
Net proceeds from issue of shares	0	0	10,127	47,750	0
Movements in debt	0	(3,702)	(96)	0	0
Cash from financing activities (CFF)	0	(3,702)	10,031	47,750	0
Increase/(decrease) in cash and equivalents	13,007	(9,200)	(2,976)	19,087	(8,731)
Currency translation differences and other	(615)	(565)	(469)	0	0
Cash and equivalents at end of period	17,935	8,170	4,725	23,812	15,081
Net (debt) cash	15,728	8,170	4,725	23,812	15,081
Movement in net (debt) cash over period	12,392	(7,558)	(3,445)	19,087	(8,731)

Source: Edison Investment Research, company accounts

Edison is an investment research and advisory company, with offices in North America, Europe, the Middle East and AsiaPac. The heart of Edison is our world-renowned equity research platform and deep multi-sector expertise. At Edison Investment Research, our research is widely read by international investors, advisers and stakeholders. Edison Advisors leverages our core research platform to provide differentiated services including investor relations and strategic consulting. Edison is authorised and regulated by the [Financial Conduct Authority](#). Edison Investment Research (NZ) Limited (Edison NZ) is the New Zealand subsidiary of Edison. Edison NZ is registered on the New Zealand Financial Service Providers Register (FSP number 247505) and is registered to provide wholesale and/or generic financial adviser services only. Edison Investment Research Inc (Edison US) is the US subsidiary of Edison and is regulated by the Securities and Exchange Commission. Edison Investment Research Limited (Edison Aus) [46085869] is the Australian subsidiary of Edison and is not regulated by the Australian Securities and Investment Commission. Edison Germany is a branch entity of Edison Investment Research Limited [4794244]. www.edisongroup.com

DISCLAIMER

Copyright 2017 Edison Investment Research Limited. All rights reserved. This report has been commissioned by SDX Energy and prepared and issued by Edison for publication globally. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of Edison at the time of publication. The securities described in the Investment Research may not be eligible for sale in all jurisdictions or to certain categories of investors. This research is issued in Australia by Edison Aus and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. The Investment Research is distributed in the United States by Edison US to major US institutional investors only. Edison US is registered as an investment adviser with the Securities and Exchange Commission. Edison US relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. As such, Edison does not offer or provide personalised advice. We publish information about companies in which we believe our readers may be interested and this information reflects our sincere opinions. The information that we provide or that is derived from our website is not intended to be, and should not be construed in any manner whatsoever as, personalised advice. Also, our website and the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. This document is provided for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. Edison has a restrictive policy relating to personal dealing. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report. Edison or its affiliates may perform services or solicit business from any of the companies mentioned in this report. The value of securities mentioned in this report can fall as well as rise and are subject to large and sudden swings. In addition it may be difficult or not possible to buy, sell or obtain accurate information about the value of securities mentioned in this report. Past performance is not necessarily a guide to future performance. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (ie without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision. To the maximum extent permitted by law, Edison, its affiliates and contractors, and their respective directors, officers and employees will not be liable for any loss or damage arising as a result of reliance being placed on any of the information contained in this report and do not guarantee the returns on investments in the products discussed in this publication. FTSE International Limited ("FTSE") © FTSE 2017. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE data is permitted without FTSE's express written consent.