EDISON

SDX Energy

Material growth still to come

Outlook

Oil & gas

SDX Energy is a North Africa-focused E&P with production in Egypt and Morocco. The company benefits from strong cash flow generation from its oil production (Egypt) and high value gas production in Morocco, which is being re-invested to increase production markedly in H217. The company added to its portfolio in early 2017 and continues to seek other opportunities. We have adjusted our valuation, which sees the core NAV increase to 55p/share (from 40p/share) but RENAV fall to 67p/share. With further success in exploration at South Disouq this could grow further.

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	40.3	6.3	26.3	28.5	(11.5)
12/18e	67.1	31.8	49.7	57.3	(23.5)

Note: Historical figures are as reported.

Aggressive programme by year end

SDX is planning to undertake a significant work programme in H217. Workovers and pump replacements will target an increase in production at NW Gemsa, while electrical submersible pump (ESP) replacements, waterflood and increased water handling capacity at Meseda could more than double existing production (3.4m/d) by year end. Additionally, the company is planning a seven-well campaign in Morocco, focused mainly on increasing reserves at Sebou and discovering new reserves at Lalla Mimouna to increase in production to a supply-constrained market. Finally, the success at South Disouq is anticipated to be followed up, targeting first gas in early 2018. Although this means material capex in H217, it should also produce a meaningful increase in cash flow in 2018, giving high returns on its investment.

South Disouq development in H217

The success at South Disouq opens up further opportunities for SDX as the company has identified four follow-up prospects totalling 165bcf. The company is already in talks with the government to approve a development plan to link the existing discovery to a pipeline only 11km away, and is allowing for future discoveries in planning this necessary (short) pipeline.

Valuation: RENAV of 67p/share

We have adjusted our valuation to account for the success of the South Disouq well and the early development potential. The result is an increase in our core NAV (from 40p/share to 55p/share), but a reduction in our RENAV from 76p/share to 67p/share, as we now account for lower prospective gas resources at South Disouq than before following the July independent reserve report. Importantly for this junior E&P, the vast bulk of the value is backed by production and cash flows that will see imminent increases as the capital programme in H217 bears fruit.

19 July 2017

Price	**48.25p**
Market cap	**£90m**
	£0.8/US$
Estimated net cash ($m) at 30 June 2017	25
Shares in issue	186.9m
Free float	59%
Code	SDX
Primary exchange	AIM
Secondary exchange	TSX Venture

Share price performance

%	1m	3m	12m
Abs	(13.5)	(13.8)	138.3
Rel (local)	(12.6)	(16.4)	113.4
52-week high/low		67.4p	20.2p

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

South Disouq development	H217
Development and exploration well programme in Egypt	H217

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Edison profile page

SDX Energy is a research client of Edison Investment Research Limited

Investment summary

Company description: North African producer

SDX Energy is a North Africa-focused exploration and production company, listed on AIM and TSX Venture. It holds 50% working interests in the oil production fields of Meseda and NW Gemsa, which will benefit from a series of workovers, pump replacements, waterflood and improvements in fluid capacity to boost production by year end 2017. At Meseda, current production could double, while NW Gemsa should see production maintained at around 5m/d. Finally, a gas discovery at South Disouq (55% working interest) in Egypt in mid-2017 can be developed at low cost by early 2018, adding valuable cash flows.

In early 2017, the company also added high-value gas production in Morocco, where it plans to drill seven wells (of which two are exploration and five development) to add reserves and increase production into a supply-constrained market.

SDX remains open to adding to its portfolio and sees Egypt as a natural market for consolidation given the large number of small players. The Circle deal shows that it is able to negotiate and complete transactions efficiently.

Valuation: RENAV of 67p/share

We value SDX using field by field DCFs, applying our standard oil price assumptions and a discount rate of 12.5%. The combination of the production assets of Meseda, NW Gemsa and Sebou and near-term development value in South Disouq ($99m) added to existing cash resources of $25m (estimated at June 2017) arrives at a core NAV of 55p/share (after G&A adjustments). Adding development upside at Meseda (with the impact of the waterflood programme) with upside at Gemsa, Sebou and South Disouq adds 12p/share further. This puts our RENAV at 67p/share.

Our RENAV valuation has been revised downward from previous notes. This is mainly due to the reduction in gas resources we recognise at South Disouq after the independent resource report published by Gaffney Cline and associates in June. We believe the company is confident of more reserves at the SD-1X discovery, and we will be looking to include more as and when further wells at the site de-risk these volumes (and take the field towards production in early 2018).

Financials: Strong financial health and cash flows

The company is in good financial health, with an estimated $25m in cash as of mid-2017 as production cash flows have combined with an expected reduction in receivables. Investment in assets (ex the Circle oil acquisition) has been light so far in 2017, but we expect a far heavier investment programme in H217. Work at NW Gemsa and Meseda to increase production will combine with drilling at Morocco and some development spend in South Disouq to absorb capital. Importantly, the investment will see quick returns with immediate production changes in Egypt and discoveries in South Disouq and Morocco quick to get online.

Sensitivities: Oil prices are key

As an E&P, SDX's cash flows and value are sensitive to commodity (primarily oil) prices. A reduction in our long-term oil price from $70/bbl to $60/bbl would reduce our core NAV from 67p/share to 61p/share. Equally, we apply a discount rate of 12.5%, but are aware that investors look to use different assumptions. A move of discount rate from 12.5% to 10% would move core NAV to 72p/share, while an increase to 15% would reduce the core NAV to 62p/share.

Asset summary

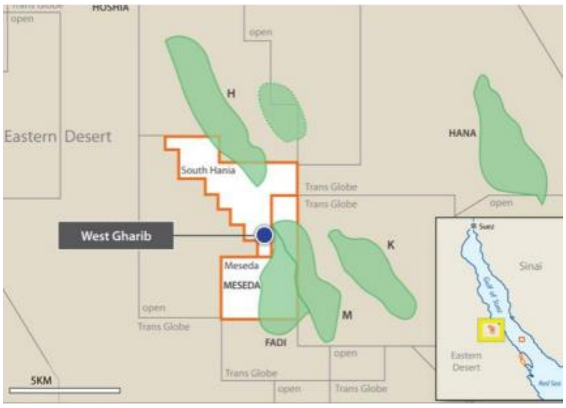
SDX is an AIM and TSX Venture Exchange listed company focused on E&P activities in North Africa. In Egypt, SDX has interests in two fields together producing net 2.99mboe/d (H117). At North West Gemsa (WI 50%), we believe the company will seek to maintain gross production at around 5mb/d average over 2017 by means of well maintenance. At Meseda (WI 50%), we expect that ESP replacement, waterflooding and increased water handling facilities could double gross production from 3.36mb/d (Q117), and help to reduce declines thereafter. Additionally, the company recently discovered gas at South Disouq (WI 55%), which it is hoped can be developed quickly and inexpensively.

In early 2017, the company acquired some assets from Circle Oil for $28.1m, increasing its interest in NW Gemsa (from 10% to 50%) and a material gas field in Morocco, which produced 588boe/d in Q117 (gross). An aggressive series of seven wells is planned in 2017 (two exploration and five development) to increase production to a supply-constrained market.

Meseda

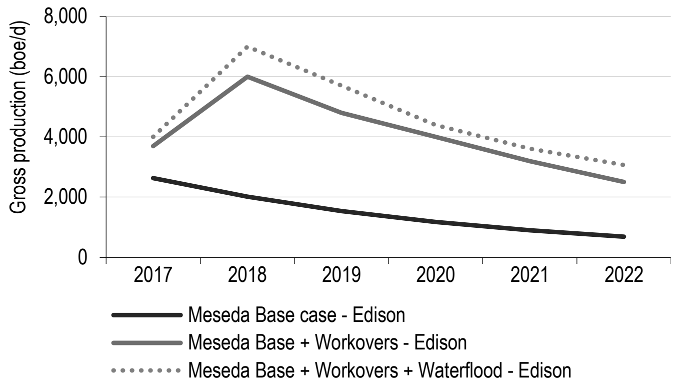
SDX holds 50% WI of the Meseda field, located in the West Gharib area 250km south of Cairo and 10km from the Gulf of Suez. The field came online in November 2011 and held gross 2P reserves of 10.9mmboe as of December 2016. In H117, it was producing around 4mb/d of heavy 17-20° API oil from the Miocene Asl sands, from 13 wells.

Exhibit 1: Meseda location



Source: SDX Energy

Exhibit 2: Meseda – production profile



Source: Edison Investment Research

Fluid production is tied into a central production facility capable of handling 20mb/d. Oil is then trucked to a Government Petroleum Company (GPC) processing centre 18km away. Produced water is re-injected into the field. With high watercuts (c 50%) that will only increase, a key consideration is enlarging liquids processing capability.

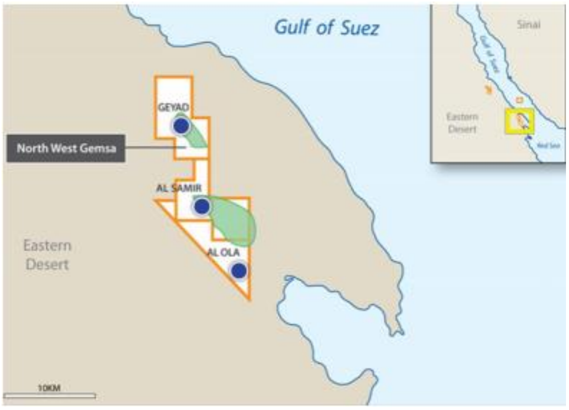
In 2016, the company carried out a number of studies including geological modelling, a well performance review and sub-surface modelling and identified the potential to improve field development through workovers and water flooding.

During 2016 and 2017, many of the required elements for increasing production have been acquired and installed. By June 2017, the increase in fluid treating facilities had been completed (including a two-phase separator), which doubles the gross treating capacity. Tenders for electrical submersible pumps (ESPs) for remaining workovers have been undertaken. SDX expects a production increase in coming months. We have reduced our previous modelling for 2017 production averages, but left 2018 expectations at 7m/d (gross), which would represent more than a doubling of the Q117 production rate.

NW Gemsa

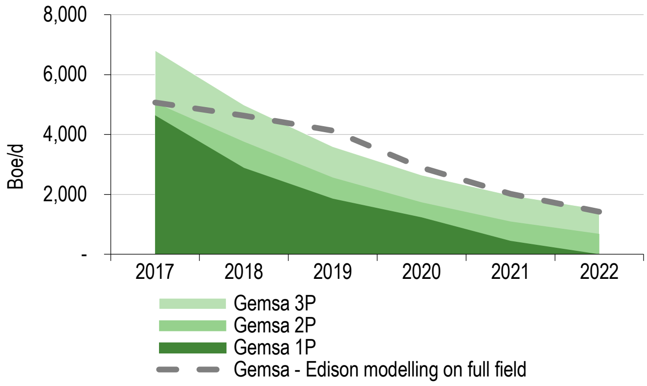
Following the assets acquired from Circle Oil, SDX now holds a 50% WI. The concession consists of three onshore oil fields, Al Amir SE, Geyad and Al Ola, all located in the Eastern Desert close to the Gulf of Suez and around 300km south of Cairo. Together, the fields held gross 2P reserves of 5.58mmboe (as of December 2016). As of Q117, NW Gemsa was producing 4.917b/d.

Exhibit 3: NW Gemsa location



Source: SDX Energy

Exhibit 4: NW Gemsa – production profile



Source: Edison Investment Research

The central processing facility at NW Gemsa is designed to handle up to 15mb/d of fluid and 20mmscf/d of gas. This comprises three 5,000-barrel storage tanks; three-phase production separators with a capacity of 15,000 barrels per day; a three-phase test separator with a capacity of 6,000 barrels per day; a gas boot for oil stabilisation; a gas compression package; a common flare system; oil shipping pumps; a power generation system; an API water separator and lagoon; and a firefighting system. Gas from the separator is dehydrated, compressed and transferred to the Suco gas facility, while NGLs are separated and added to liquids for sale.

Forward plans: the company is seeking to maintain production as long as possible, offsetting declines by installing ESPs in 12 production wells across the field. The company expects to start in July and we believe that this programme will enable production to average 5mb/d (gross) in 2017.

Unitisation: the Gemsa field is not totally within the block boundary. Discussions between SDX and the offset operator are ongoing to unitise the field, after which additional development opportunities can be explored. We do not assume a timeline on the completion of talks (the process has been ongoing for some time), nor any material effect on SDX's reserves at this stage.

Exploration and development at South Disouq

SDX acquired 100% WI in South Disouq as part of the 2013 bid round and subsequently farmed-out 45% to its partner IPR (in return for carried drilling costs). The block sits in the gas prone Central Nile Delta Basin, around 70km north of Cairo. The company had access to legacy 2D seismic at the time of the award and subsequently acquired 300km^2 of 3D seismic on the block. Using this data set, SDX identified a number of targets, before settling on the first exploration well.

The company spudded the SD-1X well in mid-March 2017, with initial results announced in mid-April. The well reached 7,777ft, encountering 65ft of net gas pay with average porosities of 25%. In early May, the well reached TD at 11,068ft exploring the potential of deeper intervals. The well encountered good reservoir and a working petroleum system in the deeper intervals; however, unstable hole conditions prevented a full suite of logs being taken. We believe SDX may seek to test this deeper horizon again as quickly as possible. This could be achieved in conjunction with the drilling of the possible development well(s) in the SD-1X discovery, which could delineate more volumes (possibly increasing the existing 47bcf (plus condensate) resources attributed by GCA).

Subsequent testing of the SD-1X gas intervals in late May 2017 gave updated net gas pay of 82ft and confirmed porosities at 25%. Testing was limited by surface facilities but flowed dry gas at a stabilised rate of 25.8mmscfd, exceeding initial expectations. The well was then shut in for build-up tests.

On 5 July 2017, SDX announced an independent resources update by Gaffney, Cline & Associates (GCA) for the SD-1X well, giving gross 2C resources of 47bcf (and 2.29mmbbls of condensate) and prospective resources of 180bcf (including leads of 16bcf) and 8.73mmbbls of condensate as at 31 May 2017. A full breakdown is given below.

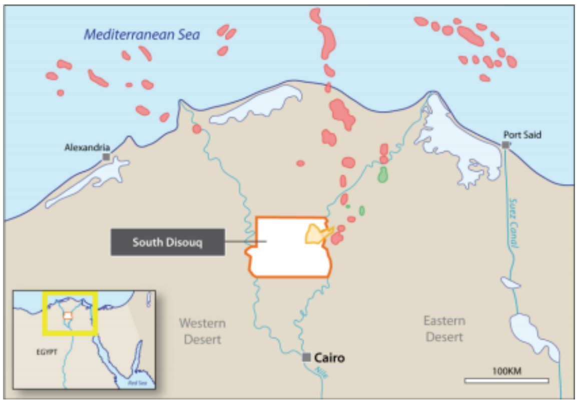
Exhibit 5: Summary of best estimate resources as of 31 May 2017

	Unrisked volumes			Risked volumes			
	Gas	Condensate	Total	Gas	Condensate	Total	Implied CoS
	bscf	mmbbl	mmboe	bscf	mmbbl	mmboe	
2C contingent	**47.13**	**2.29**	**10.15**				
Prospects (four)	164.53	7.97	35.39	66.68	3.23	14.34	40.5%
Lead	15.55	0.76	3.35	7.49	0.37	1.61	48.1%
Total prospective South Disouq	**180.08**	**8.73**	**38.74**	**74.17**	**3.59**	**15.95**	

Source: GCA via SDX. Note: the estimates for prospects are over four prospects, while five leads make up the total for leads. Aggregation was performed by SDX.

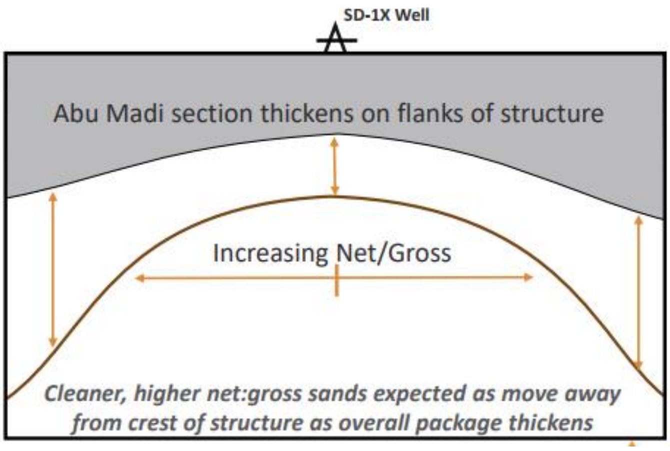
We do not know the assumptions made by GCA in the independent report but as only one well has been drilled on the structure so far, it is possible that GCA is taking a conservative approach on volumes. In particular, we know that SDX sees the structure thickening on the flanks, which we understand will not be fully credited by GCA until further wells are drilled.

Exhibit 6: South Disouq



Source: SDX Energy

Exhibit 7: South Disouq discovery could be larger



Source: SDX Energy

Development and exploration

Following the GCA report, we have remodelled the South Disouq area. For the moment we include the 2C resources estimated in the GCA report for the discovery well, but note that further wells could be drilled in the structure that will help determine/add to the full volumetric potential of the SD-1X discovery. Thereafter, we expect a number of follow-up wells will be drilled in the areas nearby to increase understanding of the full resource potential and convert existing prospective resources (including 165bcf of gas and 8mmbbls of condensate in identified prospects) to contingent resources and reserves.

The block benefits from being close to both gas and liquids infrastructure. A gas pipeline passes within 11km of the block while the condensates can be trucked to a processing facility 16km away. This makes the development timing dependent on: (i) government approvals; (ii) gas sales agreements; (iii) the laying of a gas line (perhaps costing around $11m); and (iv) required site facilities (which can be easily rented). Of these, we believe the latter two are the least likely to encounter delays. We assume initial production in early 2018. As mentioned above, we also believe two follow-up wells on the initial discovery could be drilled (to potentially increase volumes/reserves and the initial gas production).

Follow-up wells will also be required to fully exploit the resources in the area. The resource report points to four prospects that could be drilled totalling 165bcf. Given the value that these could bring if successful and the relatively low drilling costs ($2.5-3m per well), we expect an aggressive drilling campaign in the next 12 months. At the moment, we do not expect all the prospects to be drilled. Our modelling assumes two exploration wells are drilled by mid-2018, targeting c 60% of the 165bcf (plus condensate) estimated. Investors may choose to include more of the 165bcf on a risked basis given the low drilling costs and relatively easy development.

Gas pricing and cash flows

Egyptian gas prices vary depending on field age, status and location as well as gas type. Associated gas is generally priced very poorly, and offshore gas attains higher prices than onshore. The widening gap between supply and demand led the government to increase prices for younger fields and new discoveries in an effort to spur investment (and reduce reliance on expensive LNG imports). As a result, industrial prices vary between US$5.4-7.1/mcf, while national grid prices are lower. We assume a mix between national grid and industrial pricing, arriving at an assumed price of US$4.5/mcf.

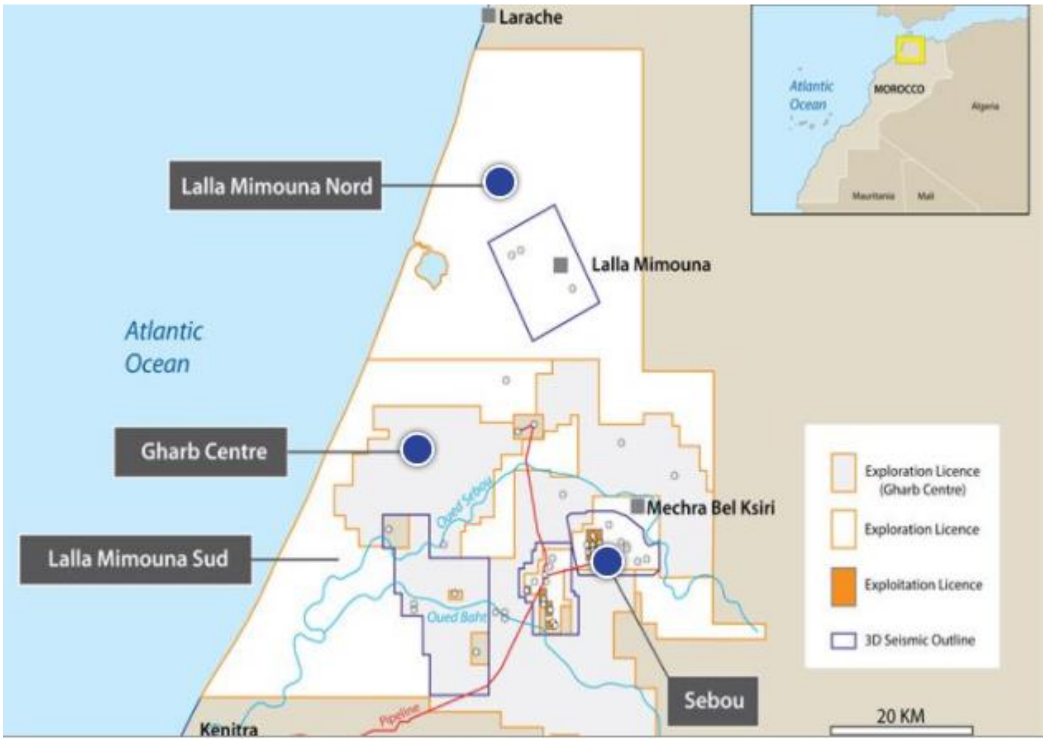
For the development of the initial discovery, we assume 2018 average production of 15mmcfd from one well. We apply a gas price of US$4.5/mcf and a 20% discount to Brent for the c 22% condensates (as we assume at NW Gemsa). Opex of US$0.8m pa is mainly made up of rental of surface facilities. These produce net revenues of US$8m and US$4m in net cash inflows for SDX in 2018. We note, however, that this is based on production from a single well (the SD-1X discovery well has been completed as a producer). Further wells on the structure could increase the resources attributed to the field and increase production in 2018, when drilled.

Morocco

SDX acquired the Moroccan assets of Circle in January, comprising the Sebou and Lalla Mimouna areas. We covered the Moroccan assets in greater detail in a note in January.

The Sebou permit (split between an exploration permit and four approved exploitation concessions) has existing gas production and exploration potential), while the Lalla Mimouna is still in the exploration and appraisal phase. Gas production is piped (75% SDX-owned) to Kenitra, a local industrial free zone offering attractive contracted gas prices out to 2021. The pipeline has a capacity of 23.5mmscfd, although current production is 5.5-6.0mmcfd (gross).

Exhibit 8: Moroccan assets are close to Kenitra



Source: SDX Energy

SDX holds a 75% WI at **Sebou**. The previous owner (Circle Oil) signed a 10-year exploration and exploitation agreement in 2006 – although any commercial discovery can automatically convert to an extendable 30-year exploitation concession, which has been the case. The company has also announced it secured an extension to the permit for a further eight years (subject to the customary approval process).

Under Circle's operatorship, the majority of Sebou was covered by 2D/3D seismic and exploration success is high (13 discovery wells from 16 exploration wells). Production operations continue on the majority of these wells.

Lalla Mimouna is therefore much larger than Sebou (2,211km^2 vs 134km^2) and relatively poorly covered by 3D seismic, with only c 10% of the licence area surveyed. Circle carried out an initial 80km^2 3D survey in 2010, with a further 135km^2 of 3D in 2011. These data are believed to be high quality. The eight-year initial exploration term is due to end in March 2018, so SDX has relatively limited time to explore the area unless an extension can be agreed. Any discoveries extend the current initial eight-year licence to 25 years.

Three wells were drilled in 2015. The first (LAM-1) targeted Miocene gas-bearing sands (as seen in Sebou). The primary target flowed at a stabilised rate of 1.9mmcf/d, while the secondary target flowed at a stabilised rate of 1.1mmcf/d. Two other wells (ANS-2 and NFA-1) were drilled but neither yielded encouraging results (ANS-2 has reservoir but pressure tests were not sufficiently conclusive, NFA-1 was dry).

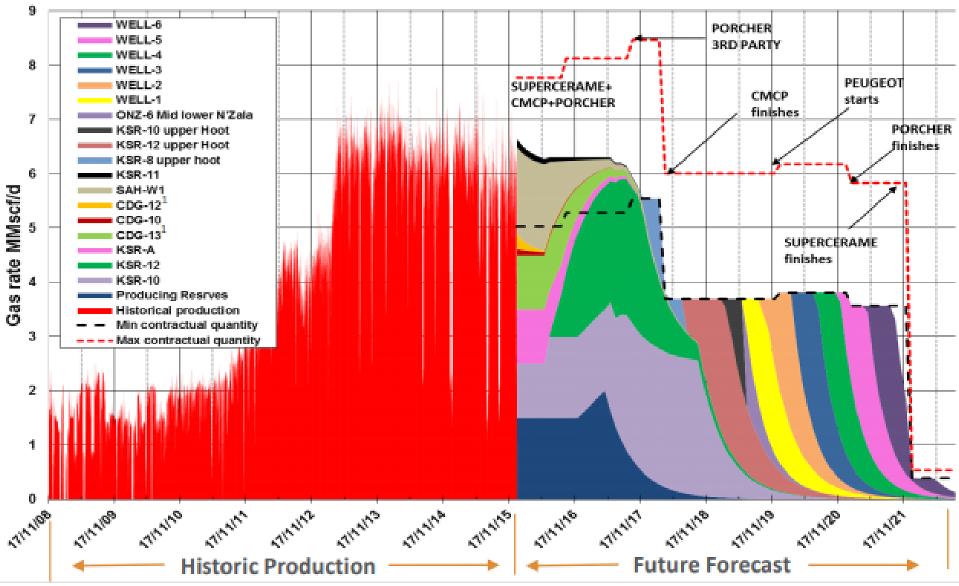
As part of the seven well campaign in Morocco in H217, SDX plans a two-well exploration campaign in Lalla Mimouna. A number of prospects (with amplitude support) have been mapped, totalling 13.2bcf unrisked.

Additionally, in June, SDX was awarded the **Gharb Centre** exploration permit, covering 1,362km^2 for eight years. It already has 2D and 3D seismic coverage, although the company has committed to acquiring a further 200km^2 of 3D and drill two exploration wells in the next four years. Historically, five fields have been developed and are now depleted. SDX has identified 20bcf of unrisked prospects/leads and will continue to work up opportunities as quickly as possible.

Gas pricing

Gas pricing is high (currently averaging just under US$10.00/mcf), driven by the demand from the Atlantic Free Trade Zone (in Kenitra) on the Moroccan coast. Even at these high prices, SDX's piped gas is the lowest cost energy source for its customers (bottled gas sells at c $18/mcf) and SDX's current production only covers a small portion of total demand. As a result, we expect any additional volumes discovered can be sold relatively easily. A MoU signed with Porcher (a ceramics company) prices gas at $12/mcf.

Exhibit 9: Production profile and demand curves



Source: SDX Energy

Reserves and exploration plans

Sebou 2P reserves were estimated to be 7.1bcf in July 2016 (5.3bcf net). With production of c 6mmcfd since then, this leaves approximately 5bcf as of July 2017. This means the company will have to convert some of its existing 3P or contingent resource/reserves to supply the contracts in place. Additionally, current production cannot be sustained with the current well inventory indefinitely, so drilling will be needed to fulfil the contracts. Given the number of wells planned and the historical exploration success, we are not overly concerned about the risk that future wells will not be able to fulfil the reserve estimates/contracts at this time, although this possibility always exists. We note that the 2015 change of auditor (to Senergy) re-categorised 2P reserves to contingent, reducing the 2P number significantly. Including even a portion of these contingent reserves would increase the 2P to above our modelled reserve requirement.

We assume SDX's investment plan over 2017-21 consists of working over existing wells, drilling new development wells, improving facilities and pipeline capacity and finally drilling exploration wells where appropriate. We model that SDX invests over $30m in Morocco in the next five years. This is well within the cash flow generation of the asset, which we estimate to be over $60m in this period.

Management

Non-executive chairman: Michael Doyle is a professional geophysicist with more than 35 years' industry experience and was a founding director and chairman of Madison PetroGas from its inception in 2003. Mr Doyle is a principal of privately held CanPetro International. Mr Doyle was previously a principal and chief executive officer of Petrel Robertson where he was responsible for providing advice and project management to clients throughout the world. Prior to that, he held a variety of exploration positions at Dome Petroleum and Amoco Canada.

CEO: Paul Welch has over 25 years' industry experience and has held positions at Shell, Hunt Oil, Pioneer Natural Resources and most recently he was CEO of AIM-listed explorer Chariot Oil and Gas. Mr Welch graduated from the Colorado School of Mines with a master's degree in petroleum engineering. He also holds an MBA in finance from the Southern Methodist University in Dallas.

CFO: Mark Reid has over 20 years' experience in numerous sectors including financial services, investment banking and oil & gas. He has had significant exposure to M&A transactions and the equity and debt capital markets. Most recently, between 2009 and 2015 he was finance director at AIM-listed Aurelian and Chariot. Prior to this he worked at BNP Paribas Fortis and Ernst & Young Corporate Finance advising on M&A, IPO and other fund-raising transactions. Mr Reid has an MBA and is a member of the Institute of Chartered Accountants of Scotland.

Country manager: Ahmed Farid Moaaz has over 30 years' experience in the industry. Mr Moaaz has held senior positions with international oil companies with operations in Egypt, including Suez Esso, Trident and El Wastani. Mr Moaaz is a former deputy chairman for production of EGPC where he was responsible for supervising and directing drilling production and petroleum engineering of all joint venture companies operating in Egypt.

Sensitivities

Risks of slippage – the company has had plans to increase production at Meseda for some time and in last year's initiation we had expected the fluid handling capacities to have been completed in early 2017; it seems to have been delayed by around six months. The workovers programme at NW Gemsa was planned to have been completed earlier too. We had suggested that a discovery at South Disouq could be put on to production within 60 days of a discovery – this has not been the case and the timeline from discovery to first gas now looks to be over six months. Further delays are possible here, although with most equipment in the country and with SDX as operator, the company has far more control over timelines than at Meseda and NW Gemsa.

Egyptian receivables – many companies in Egypt have had trouble in recent years in collecting receivables, leading to large working capital and cash absorption. SDX does not seem to have issues in collecting payments, we think because they are prepared to accept Egyptian pounds (rather than US$). Egypt has also made payments more of a priority.

Oil prices – SDX is exposed to the overall macro environment and a move in oil prices would have a material impact on Egyptian revenues. Gas and PG prices are less important given the production mix, while Moroccan gas prices are based on locally executed contracts.

Valuation

We value E&P companies using an asset-by-asset NAV derived from detailed DCF modelling. Core value includes production, development and contingent resources that could be developed, while exploration is valued only if wells are planned and funded in the next 18 months.

We apply a 12.5% discount rate given the geographical distribution of the assets and the size of the company. Our long-term oil price assumption (not forecast) is $70/bbl real (inflating at 2.5%), although our near-term assumptions in 2017 and 2018 follow EIA assumptions. We assume Moroccan gas prices of US$9.2/mcf in 2017 and US$10.0/mcf in 2018.

This produces a NAV below our previous valuation (76p/share). This is mainly due to the reduction in the prospective resources we assume at South Disouq following the independent resource report. We note that SDX is confident that resources in the area are larger than estimated by GCA, but we will include these as and when more information becomes available.

Exhibit 10: NAV summary

Asset	Number of shares: 187m			Recoverable reserves			Net risked value @ 12.5% discount rate		
	Country	Diluted WI	CoS	Gross	Net WI	NPV	Absolute	GBp/	C$/
		%	%	mmboe		$/boe	$m	share	share
Net (Debt)/Cash - June 2017e		100%	100%				25	10.7	0.18
SG&A - NPV10 of 4 years		100%	100%				(11)	(4.8)	(0.08)
Receivable for gas and NGLs at Gemsa		100%	100%				8	3.6	0.06
Production									
Meseda Base case - Edison	Egypt	50%	100%	3.4	1.7	6.6	11	4.9	0.08
Meseda Base + Workovers - Edison	Egypt	50%	90%	6.7	3.4	6.1	18	7.9	0.13
Gemsa 1P	Egypt	50%	100%	3.3	1.6	10.6	17	7.4	0.12
Gemsa 2P	Egypt	50%	100%	1.4	0.7	6.4	5	1.9	0.03
Sebou 2P	Morocco	75%	100%	0.8	0.6	40.5	25	10.9	0.18
South Disouq SD-1X well - GCA estimate	Egypt	55%	85%	10.1	5.6	4.5	21	9.0	0.15
Acquired working capital (NPV of 4-year release)	Morocco	100%	100%				9	3.7	0.06
Core NAV				**25.8**	**13.6**		**129**	**55.3**	**0.92**
Development upside									
Meseda Base + Workovers + Waterflood - Edison	Egypt	50%	40%	5.9	3.0	2.7	3	1.4	0.02
Gemsa - Edison modelling on full field	Egypt	50%	75%	1.8	0.9	9.2	6	2.6	0.04
Sebou - Accelerated programme	Morocco	75%	40%	0.9	0.6	7.9	2	0.9	0.01
Exploration (known)									
Exploration wells at South Disouq (2017/2018)	Egypt	55%	35%	20	11	4.1	16	6.9	0.11
Full NAV				**54.5**	**29.2**		**156**	**67.0**	**1.11**

Source: Edison Investment Research. Note: the table is dated from July 2017, so the reserves are estimated after allowing for estimated production in H117. Our valuation includes the 2C contingent reserves reported for the discovery (by GCA) and an estimate of the size of two prospects that we estimate will be drilled in the next 12-18 months. The company may choose to drill more than two, and we would update our valuation as and when this is disclosed.

Sensitivities

As an oil and gas producer, SDX is sensitive to commodity prices. Our analysis indicates that a move in our long-term oil price assumption of $70/bbl to $60/bbl would reduce the NAV to 61p/share. We note that in the event that oil prices are notably different than our assumptions over the long term, we would also expect a movement in costs, reducing the effect of the mechanical calculations shown below.

Equally, if investors were to apply a lower discount rate (10%) than we use (12.5%), the NAV would rise by 7% to 72p/share.

Exhibit 11: Sensitivities to oil price and discount rate (p/share)

		Oil prices, $/bbl			
		50	60	70	80
Discount rate	**10.0%**	61	66	72	80
	12.5%	57	61	67	73
	15.0%	53	57	62	68

Source: Edison Investment Research

Financials

SDX has a good mix of production development and exploration opportunities. As of March 2017, it held US$21m in cash and had no debt. In Q117, the company produced US$3.1m of operating cash flow from net production of 2.99mboe/d. Excluding the US$25m acquisition of the Circle Oil assets (US$28 minus US$3m cash), the company invested US$0.4m. The company raised US$40m minus costs to finance the acquisition.

We anticipate a marked increase in capital investment in H217 as the work programme at Meseda and NW Gemsa complete, South Disouq moves towards development (that will continue in 2018) and exploration drilling gets underway in earnest in Morocco.

In South Disouq, our gross assumptions are that the pipeline costs US$7m with drill costs of US$3m while surface facilities are leased at a cost of around US$0.8m per year, reflecting an initial production assumption of 15mmcfd to produce the 47bcf (and 2.3mmbbsl of condensate) of 2C resource at SD-1X. Assuming two further exploration wells at South Disouq and infrastructure, this implies gross capital investment of US$13m before mid-2018 (net to SDX of US$7.3m). We assume the bulk of this is seen in 2017.

In Morocco, we model net capital investment over 2017 of US$2m with a further US$5m in 2018, covering a number of development and exploration wells.

In total, therefore, we model capex of US$11.5m in 2017 and US$23.5m in 2018. Comparing this to cash in hand of US$21m in Q117 suggests that the company may be stretched financially. However, SDX receives cash receipts from existing production of an estimated c US$3m per month and should have benefited from the programme the Egyptian government has put together to address receivables. As a result, we believe SDX will have seen a marked reduction in receivables, increasing cash (we estimate end-June 2017 of US$25m). Furthermore, the company has absolute discretion on the speed of investment at South Disouq and in Morocco, so can take steps to reduce the need for further equity (if required).

Exhibit 12: Financial summary

Accounts: IFRS, Year-end: 31 December, US$000s	2014	2015	2016	2017e	2018e
Total revenues	**24,533**	**11,372**	**12,914**	**40,324**	**67,068**
Cost of sales	(3,639)	(4,973)	(5,282)	(12,415)	(15,512)
Gross profit	20,894	6,399	7,632	27,909	51,557
SG&A (expenses)	(1,768)	(3,746)	(2,457)	(3,162)	(1,665)
Other income/(expense)	0	(3)	479	0	0
Exceptionals and adjustments	(3,831)	(7,676)	(29,089)	(1,000)	(1,000)
Depreciation and amortisation	(1,602)	(2,057)	(3,266)	(17,476)	(17,062)
Reported EBIT	**13,693**	**(7,083)**	**(26,701)**	**6,271**	**31,829**
Finance income/(expense)	(1,009)	(96)	4	0	0
Other income/(expense)	0	18,289	0	0	0
Reported PBT	**12,684**	**11,110**	**(26,697)**	**6,271**	**31,829**
Income tax expense (includes exceptionals)	(4,328)	(1,063)	(1,503)	(486)	(1,257)
Reported net income	**8,356**	**10,047**	**(28,200)**	**5,785**	**30,572**
Basic average number of shares, m	376	52	72	178	187
Basic EPS (US$/share)	0.1	0.2	(0.4)	0.0	0.2
Balance sheet					
Property, plant and equipment	9,392	18,401	12,605	21,666	25,730
Goodwill	0	0	0	0	0
Intangible assets	16,460	23,473	10,623	7,572	9,919
Other non-current assets	1,999	2,106	2,503	2,962	2,962
Total non-current assets	**27,851**	**43,980**	**25,731**	**32,200**	**38,611**
Cash and equivalents	17,935	8,170	4,725	28,541	57,336
Inventories	0	1,188	1,698	1,698	2,122
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**	**68,702**	**90,228**
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	82,049	113,621
Non-controlling interest	0	0	0	0	0
Cash flow statement					
Profit before tax	12,684	11,110	(26,697)	6,271	31,829
Net finance expenses	0	0	0	0	0
Depreciation and amortisation	1,602	2,057	3,266	17,476	17,062
Share based payments	1,064	761	(47)	1,000	1,000
Other adjustments	1,670	(12,281)	25,742	(1,413)	(2,535)
Movements in working capital	12,941	(2,183)	(3,440)	3,500	3,634
Interest paid / received	0	0	0	0	0
Income taxes paid	(4,430)	(4,678)	(766)	(486)	(1,257)
Cash from operations (CFO)	**25,531**	**(5,214)**	**(1,942)**	**26,348**	**49,734**
Capex	(13,634)	(5,120)	(11,890)	(11,486)	(23,473)
Acquisitions & disposals net	0	0	0	(30,000)	0
Other investing activities	1,110	4,836	825	954	2,535
Cash used in investing activities (CFIA)	**(12,524)**	**(284)**	**(11,065)**	**(40,532)**	**(20,938)**
Net proceeds from issue of shares	0	0	10,127	38,000	0
Movements in debt	0	(3,702)	(96)	0	0
Other financing activities	0	0	0	0	0
Cash from financing activities (CFF)	**0**	**(3,702)**	**10,031**	**38,000**	**0**
Increase/(decrease) in cash and equivalents	13,007	(9,200)	(2,976)	23,816	28,795
Currency translation differences and other	(615)	(565)	(469)	0	0
Cash and equivalents at end of period	**17,935**	**8,170**	**4,725**	**28,541**	**57,336**
Net (debt) cash	15,728	8,170	4,725	28,541	57,336
Movement in net (debt) cash over period	12,392	(7,558)	(3,445)	23,816	28,795

Source: Edison Investment Research, company accounts

EDISON

Contact details	Revenue by geography
38 Welbeck Street London W1G 8DP United Kingdom www.sdxenergy.com	Not available

Management team

CEO: Paul Welch	CFO: Mark Reid
Mr Welch has over 25 years' industry experience and has held positions at Shell, Hunt Oil, Pioneer Natural Resources and most recently as CEO of AIM listed explorer Chariot Oil and Gas. Mr Welch graduated from the Colorado School of Mines with both a Bachelor and Master's degrees in Petroleum Engineering. He also holds an MBA in Finance from the Southern Methodist University in Dallas, Texas.	Mr Reid has over 20 years' experience in numerous sectors including financial services, investment banking and oil & gas. He has had significant exposure to M&A transactions and the equity and debt capital markets. Most recently, between 2009 and 2015 he was finance director at AIM-listed Aurelian and Chariot. Prior to this he worked at BNP Paribas Fortis and Ernst & Young Corporate Finance advising on M&A, IPO and other fund-raising transactions. Mr Reid has an MBA and is a member of the Institute of Chartered Accountants of Scotland.
Country Manager: Ahmed Farid Moaaz	
Mr Moaaz has over 30 years' experience in industry. Mr Moaaz has held senior positions with international oil companies with operations in Egypt, including Suez Esso, Trident and El Wastani. Mr Moaaz is a former deputy chairman for production of EGPC where he was responsible for supervising and directing drilling production and petroleum engineering of all joint venture companies operating in Egypt.	

Principal shareholders	(%)
Ingalls and Snyder	20.7
MEA Energy	14.4
Highclere International	5.1
Miton Group	4.1
City Financial Investment	3.6
Monoyios Nikolaos	3.6
Man Group	3.1