

# SDX Energy

FY20 guidance reflecting increased production

Guidance update

SDX Energy provided new production guidance of 6,750–7,000boepd for 2020, representing an increase of c 70% on 2019 rates as the company expects to see the benefit of full year production from South Disouq. The field continues to deliver at a stabilised rate of c 50mmcsfed. Meanwhile the Moroccan drilling campaign has added 3.3–4.4bcf of management estimated gross reserves from six successful wells, with the remaining wells including a number of higher risk/reward options. SDX will now focus on South Disouq's exploration campaign, with up to three wells to be drilled in 2020 which, if successful, have the potential to increase reserves and be quickly tied into the South Disouq central processing facility (CPF). Our valuation moves from a RENAV of 50.3p/share to 53.9p/share (+7%), while our core NAV increases from 45.7p/share to 49.3p/share (+8%).

Year-end	Revenue (\$m)	PBT* (\$m)	Operating cash flow (\$m)	Net cash (\$m)	Capex** (\$m)	Production (kboed)
12/17	39.2	32.8	21.6	25.8	(24.9)	3.2
12/18	53.7	7.1	36.2	17.3	(44.8)	3.6
12/19e	48.1	14.7	30.3	10.4	(38.5)	4.0
12/20e	53.3	13.3	32.6	12.1	(31.9)	6.9

Note: \*PBT is normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. \*\*Excludes Circle acquisition (\$28.1m).

## Updated guidance for 2019–20

SDX expects production to increase significantly in 2020 with the benefit of full year production from South Disouq. The natural gas field located in Egypt was brought into production in Q419, with the performance of the CPF and wells exceeding expectations and leading to an accelerated ramp-up to a plateau of gross 50mmcsfed in mid-December. SDX's remaining Egyptian fields show a slight decrease in production versus 2019, while Morocco production reflects an assumed increase in consumption from existing gas customers during 2020.

## South Disouq exploration campaign imminent

In Morocco, SDX drilled eight wells in its ongoing 12-well campaign, resulting in six commercial discoveries, with the well OYF-2 being the first to step out of SDX's core productive area and confirming it extends to the north. Drilling in South Disouq is due to commence in February. The first two wells will target prospects in the Kafr El Sheikh, which if successful can be tied back at a low cost to the South Disouq CPF. Depending on partners' discussion, a third well will target the deeper Cretaceous reservoir, high-impact Young prospect.

## Valuation: Core NAV increased to 49.3p/share

Our core NAV increases by 8% to 49.3p/share, driven by rolling forward the discount date, updating production and capital expenditures for FY19 and FY20, and updating the E&A drilling programme, resulting in a RENAV of 53.9p/share, 7% higher than our previous valuation. The current share price appears to be heavily discounting SDX-sanctioned projects, which correspond to c 90% of our RENAV, as well as any future growth potential in Egypt and Morocco.

Oil & gas

29 January 2020

**Price** 25.8p

**Market cap** £53m

US\$1.26/£

Net cash (\$m) at 30 September 2019 12.6

Shares in issue 204.7m

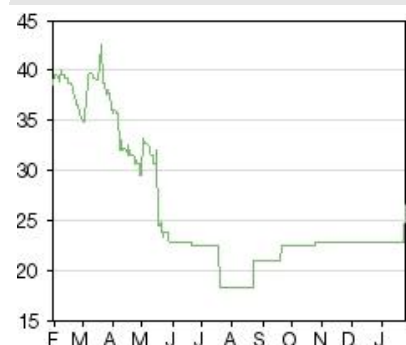
Free float 84%

Code SDX

Primary exchange AIM

Secondary exchange N/A

### Share price performance



% 1m 3m 12m

Abs 19.8 14.4 (35.3)

Rel (local) 22.5 11.2 (42.1)

52-week high/low 42.5p 16.3p

### Business description

SDX Energy is a North African E&P listed in London. SDX produces oil and gas in Egypt and gas in Morocco.

### Next events

FY19 results Q120

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## 2020 activity overview

SDX expects production to increase significantly in 2020 with the benefit of full year production from South Disouq. The company will look to build on its 2019 drilling success as it continues its campaign in Morocco and commences drilling in South Disouq. Eight wells are planned in H120, and cover the risk range from appraisal/development wells close to existing infrastructure to the exploration wells in a potential new play fairway.

## Delivering on production

The company is guiding that production will be 6,750–7,000boepd in 2020, an increase of 68–74% on the announced 2019 rate of 4,020boepd driven by production from South Disouq. Having delivered first gas from the field in November 2019, performance has exceeded management expectations and production was ramped up to 50mmscfd three months ahead of schedule. Continuing strong performance is reflected in the guidance, adjusted for CPF uptime.

**Exhibit 1: SDX Energy updated production and capex guidance**

	Production (boed)		Capex (\$m)	
	2019	2020e	2019	2020e
South Disouq	630	4,300–4,460	20.2	6.5
Meseda	790	610–630	1.5	2
NW Gemsa	1,800	1,000–1,050	1.3	2
South Ramadan	-	-	1.6	-
Morocco	800	840–860	16.1	15
<b>Total</b>	<b>4,020</b>	<b>6,750–7,000</b>	<b>40.7</b>	<b>25.5</b>

Source: SDX Energy

Elsewhere in Egypt, guidance is lower, with production at Meseda affected by delays in drilling new wells due to approvals and permitting taking longer than previously estimated. The late-life NW Gemsa field is also expected to continue its decline due to increased water cut and falling reservoir pressure. SDX may exit the concession this year if sufficient cost savings are not achieved by the operator. Production is also expected to increase in Morocco to meet an assumed increase in consumption from existing gas customers during 2020.

## Morocco drilling targets 15bcf

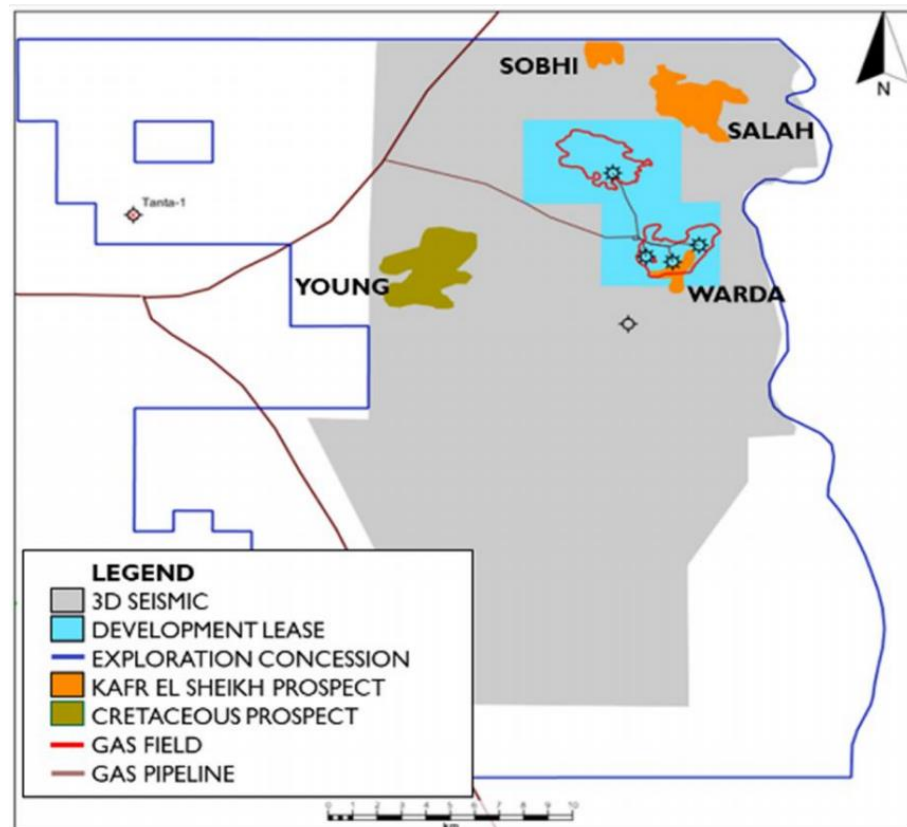
The 12-well Gharb Basin campaign, targeting 15bcf, has been ongoing since October 2019 and the company has drilled eight wells, resulting in six commercial discoveries to date. Seven of these wells have been appraisal/development wells located close to infrastructure and the company estimates that gross gas reserves of 2.0–2.5bcf have been added to its existing gross Moroccan gas reserves. The eighth well of the drilling campaign, OYF-2, is the first one to step out from the company's core productive area and has confirmed it extends to the north. Both the Upper and Lower Guebbas targets in OYF-2 were encountered, and reservoir thickness and quality were better than pre-drill expectations. Management estimates that approximately 1.3–1.9bcf of gas is recoverable from the horizons encountered. The well will be tested in February. This discovery has also de-risked a further 0.5–1.0bcf of prospective resources in the western compartment of the Lower Guebbas target, which the company expects to recover with a single development well in the future. The rig has now moved to the BMK-1 location, approximately 11km to the north of OYF-2, to further test the extent of the northern expansion of the company's core productive area. If successful, this could de-risk a number of similar nearby prospects. After BMK-1, one more close to infrastructure well and two other potentially play-opening wells in Lalla Mimouna will be drilled to complete the campaign in March.

## Drilling imminent in Egypt

Preparations are continuing for two exploration wells in South Disouq and drilling is currently expected to commence in mid/late February 2020. Both wells will target the stratigraphic Kafr El Sheik reservoir, which is already producing successfully from the Ibn Yunus well at South Disouq. SDX estimates that the first well, Salah, is targeting gross P50 resources of 70.6bcfe and the second well, Sobhi is targeting gross P50 resources of 32.7bcfe. The company's share of the exploration wells costs is estimated at \$4.0m. In the event of success, the wells will require short tie-ins (of 8.0km and 5.8km) to the South Disouq CPF, with SDX's share of tie-in cost estimated at \$2.5m and \$1.9m respectively. With these volumes it is anticipated that Salah would require two further development wells and Sobhi would require one more well to fully produce the resources.

A third well, Young, targeting a deeper Cretaceous reservoir, could be drilled later in the year depending on the outcome of partnering discussions.

**Exhibit 2: South Disouq licence map**



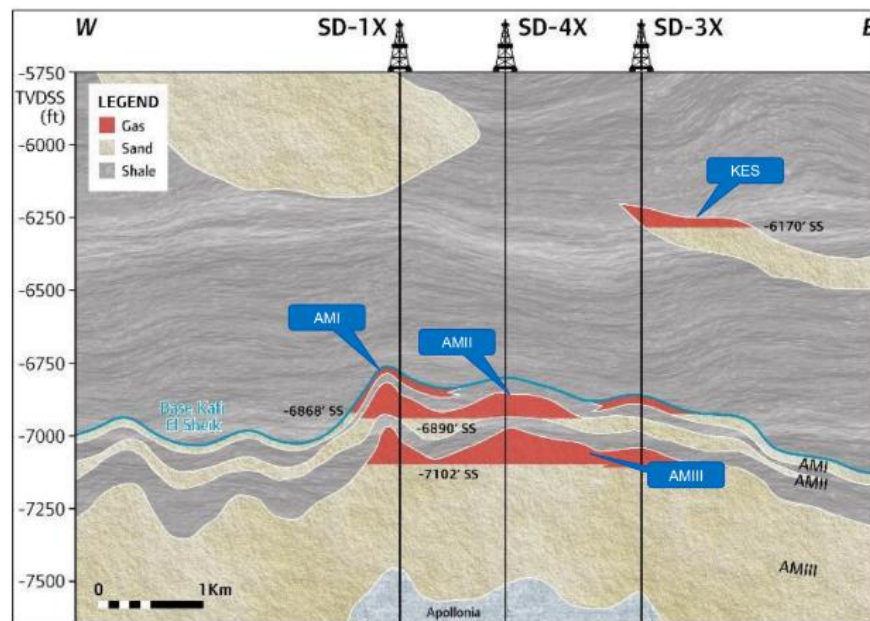
Source: SDX Energy

In early February 2020, SDX plans to spud an appraisal/development well in the Rabul area of West Gharib which, if successful, could add approximately gross 200–300bopd of production.

## South Disouq 2P reserves upgrade

Gaffney, Cline & Associates (GCA) carried out an independent technical and economic audit to assess South Disouq reserves. This was based on a better understanding of the structure and distribution of the reservoir around the production wells provided by the reprocessing of 3D seismic data that was carried out in 2019.

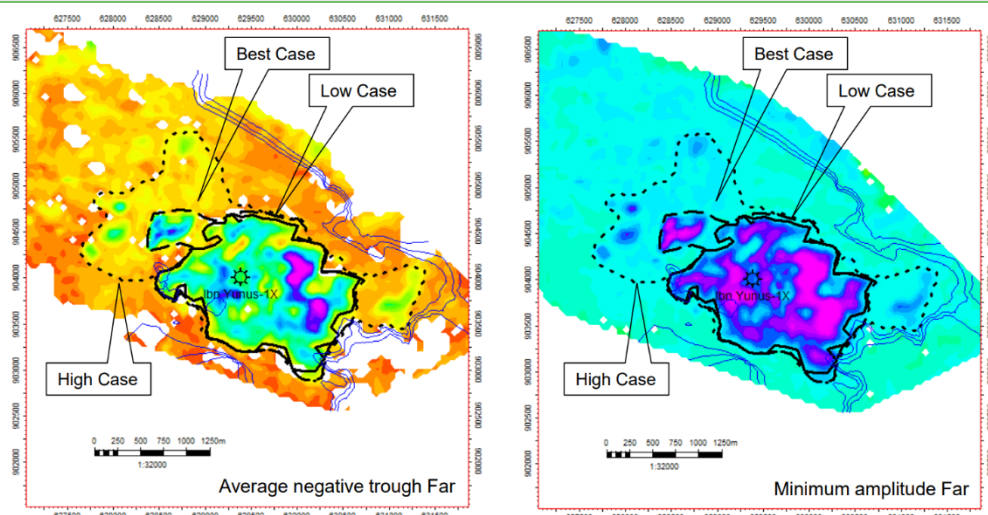
**Exhibit 3: Geoseismic section highlighting the four key reservoirs across South Disouq**



Source: SDX Energy and Gaffney, Cline & Associates

The largest contribution to the increase came from Ibn Yunus, where the 2P gas resources increased from 26.8bcf to 46.8bcf. There was also a slight increase at South Disouq's Abu Madi and Kafr El Sheikh reserves. Together, these resulted in 2P reserves being upgraded to 89bcfe.

**Exhibit 4: Ibn Yunus mapping**



Source: SDX Energy and Gaffney, Cline & Associates

We provide a more detailed description of SDX Energy's assets in our [outlook note](#) published in December 2019.

## Valuation

We value SDX 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 12 months. We apply a 12.5% discount rate given the geographical distribution of the assets and the size of the company. We have updated our short-term commodities prices based on EIA latest estimates. However, our long-term oil price assumption remains \$70/bbl in 2022, inflated at 2.5% onwards. We assume Moroccan gas prices of \$10.85/mcf in 2020 inflating at 2.5%. Key changes include the updated reserve numbers at South Disouq; in our previous note South Disouq was valued on a management estimate of a 100bcfe 2P reserve base. This was now adjusted to the 89bcfe 2P reserves independently audited by GCA. The c 10% decrease in reserves compared to management's estimate was offset by rolling forward the discount date and updating 2019–20 production and capital expenditures guidance in Egypt and Morocco.

**Exhibit 5: Edison updated forecasts**

	New			Old			% change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
Production (kboed)	4.0	6.9	5.9	3.6	7.3	6.0	11%	-6%	-2%
Revenue (\$m)	48.1	53.3	45.3	45.6	55.3	45.7	6%	-4%	-1%
EBITDA (\$m)	27.5	31.6	27.7	19.7	29.2	28.1	40%	8%	-1%
Brent (\$/bbl)	64.36	64.83	67.53	63.59	60.10	64.95	1%	8%	4%
SD gas price (\$/mcf)	2.85	2.85	2.85	2.85	2.85	2.85	0%	0%	0%
Sebou gas price (\$/mcf)	10.59	10.85	11.12	10.59	10.85	11.12	0%	0%	0%

Source: Edison Investment Research

Our updated valuation includes the South Disouq development and drill-ready gas prospects targeting c 275bcf of mean unrisks prospective resource in Egypt. In Morocco, we include our estimates of current discovered resource and we also include Lalla Mimouna discoveries and 12 planned appraisal/development wells in our valuation, targeting 15bcf. Nine of these wells are included in our core valuation, as risks are only around individual wells meeting the minimum threshold for commerciality – we include these at a 75% chance of success for nine of these wells. The remaining three riskier Lalla Mimouna wells step out of SDX's core area and we assume a 30% chance of geological success.

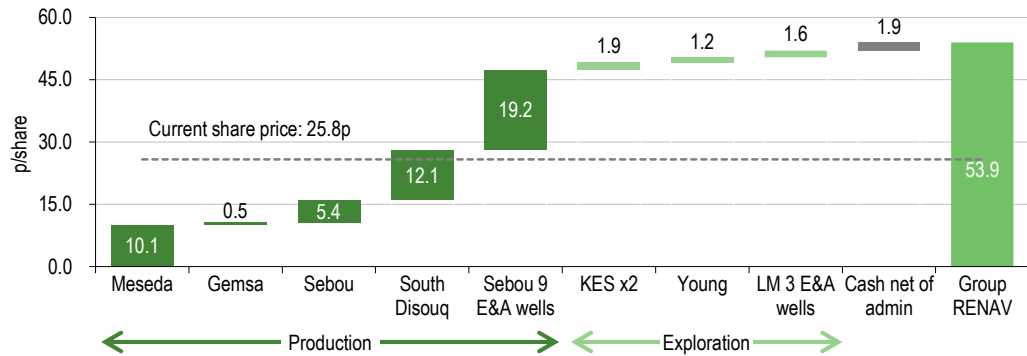
**Exhibit 6: SDX Energy detailed valuation**

Asset	Country	Diluted WI	CoS	Recoverable reserves			Net risk value @ 12.5%		
				Gross	Net WI	Net	NPV	Absolute	Per share
		%	%	mmboe	mmboe	mmboe	\$/boe	\$m	p/share
Net cash at December 2019e								10.4	4.0
SG&A – NPV <sub>12.5</sub> of three years								(19.4)	(7.5)
E&A expense for SD exploration prospects*								(9.2)	(3.6)
NPV of net receivable recovery								13.3	5.2
Sebou pipeline residual value (30% cost)								9.8	3.8
<b>Production</b>									
Meseda base + workovers + Rabul	Egypt	50%	90%	7.6	3.8	1.5	7.6	26.0	10.1
Gemsa – to be abandoned in 2020	Egypt	50%	100%	2.0	1.0	1.0	1.4	1.4	0.5
South Disouq	Egypt	55%	100%	14.4	7.9	7.9	3.9	31.1	12.1
Sebou 2P + Sebou vols to be booked	Morocco	75%	100%	0.9	0.7	0.7	20.5	14.0	5.4
LM discoveries and 2019/2020 shallow wells	Morocco	75%	75%	3.3	2.5	2.5	27.0	49.6	19.2
<b>Core NAV</b>				<b>28.2</b>	<b>15.9</b>	<b>13.5</b>		<b>127.1</b>	<b>49.3</b>
<b>Exploration (known)</b>									
Kafr El Sheik prospects x2	Egypt	55%	32%	17.2	9.5	9.5	1.6	4.8	1.9
Young gas prospect	Egypt	55%	13%	27.0	14.9	14.9	1.6	3.0	1.2
Lalla Mimouna three wells	Morocco	75%	23%	0.9	0.7	0.7	27.0	4.2	1.6
<b>Group RENAV</b>				<b>73.4</b>	<b>40.9</b>	<b>38.5</b>		<b>139.1</b>	<b>53.9</b>

Source: Edison Investment Research. Note: Number of shares = 204.7m; FX = US\$1.26/£. \*Assumes Young prospect drilled in 2020

As a result, our RENAV moves from 50.3p/share to 53.9p/share (+7%), with our core value standing at 49.3p/share. We note that our valuation has a significant core value component at 90% of our RENAV, and only 10% attributed to exploration and appraisal. This is materially different from the current share price of 25.8p/share. As can be seen in Exhibit 7, based on the current share price, the market is not pricing in all of SDX's producing assets, nor its risked prospective resource

**Exhibit 7: SDX Energy valuation waterfall**

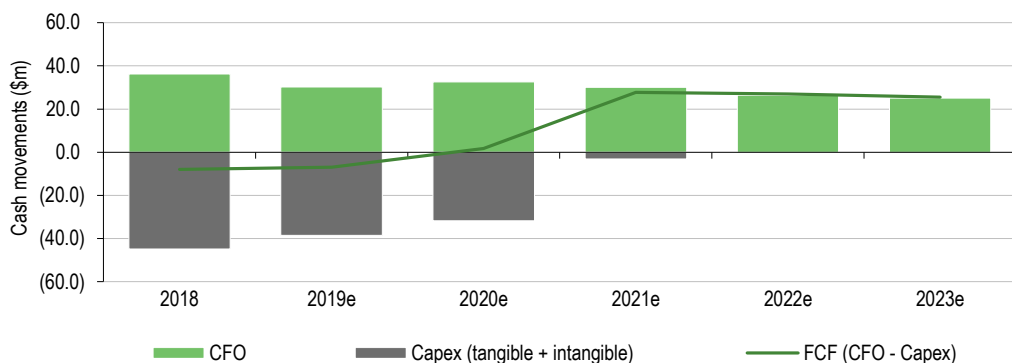


Source: Edison Investment Research. Note: Share price on 22 January 2020.

## Financials

We forecast year-end 2019 net cash of c \$10.4m and, as of end September 2019, SDX's European Bank for Reconstruction and Development (EBRD) loan facility of \$10m remains undrawn. The amount available under the EBRD facility was recently reduced to \$7.5m, in line with the facility's amortisation schedule, and discussions are underway to extend and re-establish the \$10m availability under the facility. Based on the capex projections that underpin our production forecasts and SDX's committed exploration programme, the company is fully funded and we forecast positive free cash flow from 2020. We do not foresee the need for further equity capital at this stage, unless incremental growth capex, over and above our forecasts, is dedicated to new projects or acquisitions.

**Exhibit 8: Capex and cash flow forecasts**



Source: SDX Energy, Edison Investment Research



**Exhibit 9: Financial summary**

Accounts: IFRS, year-end 31 December, US\$000s	2017	2018	2019e	2020e	2021e
<b>INCOME STATEMENT</b>					
Total revenues	39,166	53,679	48,130	53,281	45,322
Cost of sales (direct expense)	(10,254)	(11,934)	(13,164)	(13,472)	(8,742)
Gross profit	28,912	41,745	34,966	39,810	36,580
SG&A (expenses)	(8,793)	(7,270)	(7,634)	(8,015)	(8,416)
Other income/(expense)	1,820	1,025	1,336	984	754
Exceptionals and adjustments	(725)	(10,458)	(1,194)	(1,194)	(1,194)
Depreciation and amortisation	(17,824)	(17,268)	(12,598)	(18,132)	(16,271)
Reported EBIT	3,390	7,774	14,876	13,452	11,454
Finance income/(expense)	(129)	(542)	0	0	0
Other income/(expense)	29,558	(174)	(174)	(174)	(174)
Exceptionals and adjustments	0	0	0	0	0
Reported PBT	32,819	7,058	14,702	13,278	11,280
Income tax expense (includes exceptionals)	(4,541)	(7,021)	(1,591)	(1,432)	(1,559)
Reported net income	28,278	37	13,111	11,846	9,721
Shares at end of period - basic	204	205	205	205	205
<b>BALANCE SHEET</b>					
Property, plant and equipment	54,445	48,680	68,723	77,605	63,979
Goodwill	0	0	0	0	0
Intangible assets	15,231	39,128	44,974	49,813	50,287
Other non-current assets	2,724	3,394	3,394	3,394	3,394
Total non-current assets	72,400	91,202	117,092	130,812	117,659
Cash and equivalents	25,844	17,345	10,444	12,139	39,857
Inventories	5,157	5,236	5,000	5,117	3,320
Trade and other receivables	37,656	24,324	19,459	15,567	12,454
Other current assets	0	0	0	0	0
Total current assets	68,657	46,905	34,903	32,823	55,631
Non-current loans and borrowings	0	0	0	0	0
Other non-current liabilities	4,506	4,572	4,572	4,572	4,572
Total non-current liabilities	4,506	4,572	4,572	4,572	4,572
Trade and other payables	19,459	14,418	14,000	12,600	11,340
Current loans and borrowings	0	0	0	0	0
Other current liabilities	2,473	3,078	3,078	3,078	3,078
Total current liabilities	21,932	17,496	17,078	15,678	14,418
Equity attributable to company	114,619	116,039	130,344	143,385	154,300
Non-controlling interest	0	0	0	0	0
<b>CASH FLOW STATEMENT</b>					
Profit before tax	32,819	7,058	14,702	13,278	11,280
Net finance expenses	0	0	0	0	0
Depreciation and amortisation	17,824	17,268	12,598	18,132	16,271
Share based payments	538	1,194	1,194	1,194	1,194
Other adjustments	(34,613)	3,224	(1,336)	(984)	(754)
Movements in working capital	5,412	8,584	4,683	2,375	3,650
Interest paid / received	0	0	0	0	0
Income taxes paid	(364)	(1,091)	(1,591)	(1,432)	(1,559)
Cash from operations (CFO)	21,616	36,237	30,250	32,564	30,082
Capex	(24,917)	(44,810)	(38,488)	(31,853)	(3,118)
Acquisitions & disposals net	(24,948)	0	0	0	0
Other investing activities	760	525	1,336	984	754
Cash used in investing activities (CFIA)	(49,105)	(44,285)	(37,152)	(30,868)	(2,364)
Net proceeds from issue of shares	48,510	114	0	0	0
Movements in debt	(43)	(197)	0	0	0
Other financing activities	0	0	0	0	0
Cash from financing activities (CFF)	48,467	(83)	0	0	0
Increase/(decrease) in cash and equivalents	20,978	(8,131)	(6,901)	1,695	27,718
Currency translation differences and other	141	(368)	0	0	0
Cash and equivalents at end of period	25,844	17,345	10,444	12,139	39,857
Net (debt)/cash start of period	25,844	17,345	10,444	12,139	39,857
Movement in net (debt) cash over period	21,119	(8,499)	(6,901)	1,695	27,718

Source: SDX Energy, Edison Investment Research

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