Equity Research

Oil & Gas sectors

Dissemination: ##:##, 21 December 2023

Tennyson

Europa Oil & Gas (EOG LN)

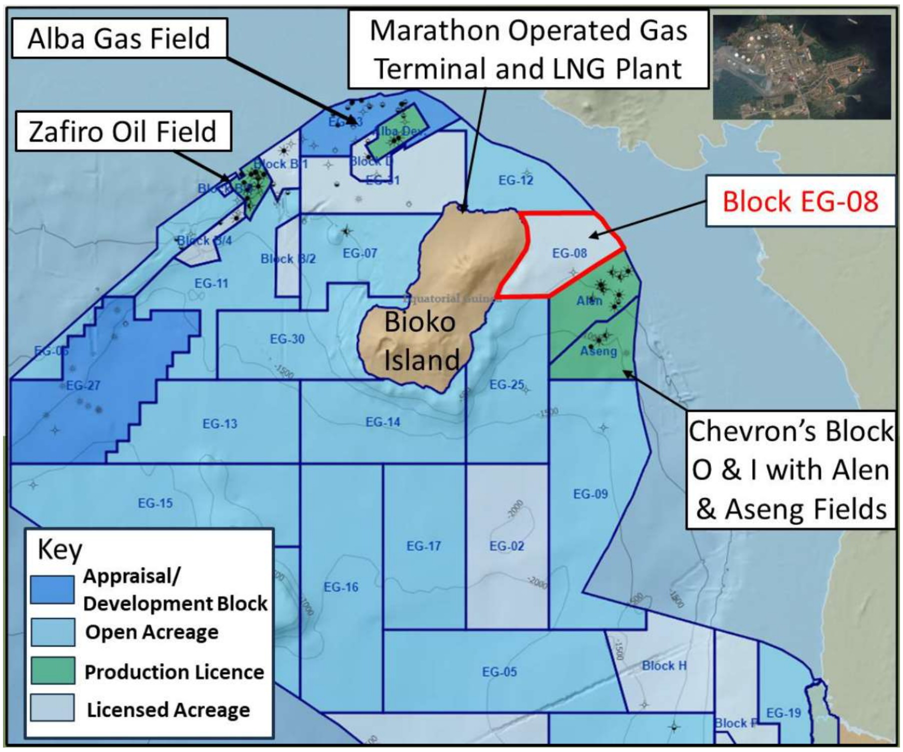
MARKET DATA

Bloomberg	ticker	EOG LN
Share price	p/shr	1.0
Target	p/shr	4.97
TP upside	%	397%
Shares out	Million	959.2
Fd shares	Million	990.0
Mkt cap	US$m	12.1
EV	US$m	8.8

MAKING MOVES

Europa Oil & Gas (EOG LN) has announced that it has secured a new investment in private E&P Antler Global, including an 80% operated stake in the low risk/high impact EG-08 exploration licence, offshore Equatorial Guinea. Europa has invested US$3m in new equity into Antler, securing a 42.9% stake in the company and providing funds to prepare the asset for farm out. The licence contains substantial lookalike structures to commercial developments, less than 10km away, with P50 prospective resources of 206 mmboe (gas condensate expected) across three prospects. Importantly, of the 17 wells that have been drilled in the immediate area, only one was found dry, illustrating the low regional geological risks – with the chance of success estimated by Europa at 60-70% for each individual prospect. With infrastructure nearby available for tiebacks, the economic threshold is relatively low (estimated at 38 mmboe). As such, the chance of an economic development from at least one prospect is as high as 91%. Applying substantial discounts to reflect the risks and dilutive effect of farming down the asset in return for drilling and development finance, we calculate a risked NPV10 of the EG assets of US$70m net to EOG, equivalent to 5.67p/shr. Illustrating the scale of the upside unrisked this rises above US$350m (28p/shr). Aside from the value implications, we see this move as a statement of intent from Europa, shrewdly deploying its cash at an opportunistic time, where equity finance for small projects is hard to find but the industry starting to show signs of renewed appetite for reserve replacement opportunities. We have updated our NAV table, calculating a sum of parts derived risked Core NAV of 3.76p/shr (discovered resources only) and a risked Total NAV 15.83p/shr. Our updated Target price of 4.97p/shr offers almost 5x upside from the current share price.

Figure 1: Regional map, Equatorial Guinea



Source: Europa Oil & Gas

ANALYST

Tim Hurst-Brown
+44 (0) 20 7186 9038
tim.hurst-brown@tennysonsecurities.co.uk

James Midgley
+44 (0) 20 7186 9037
james.midgley@tennysonsecurities.co.uk

SALES

Pav Sanghera
+44 (0) 20 7186 9036
pav.sanghera@tennysonsecurities.co.uk

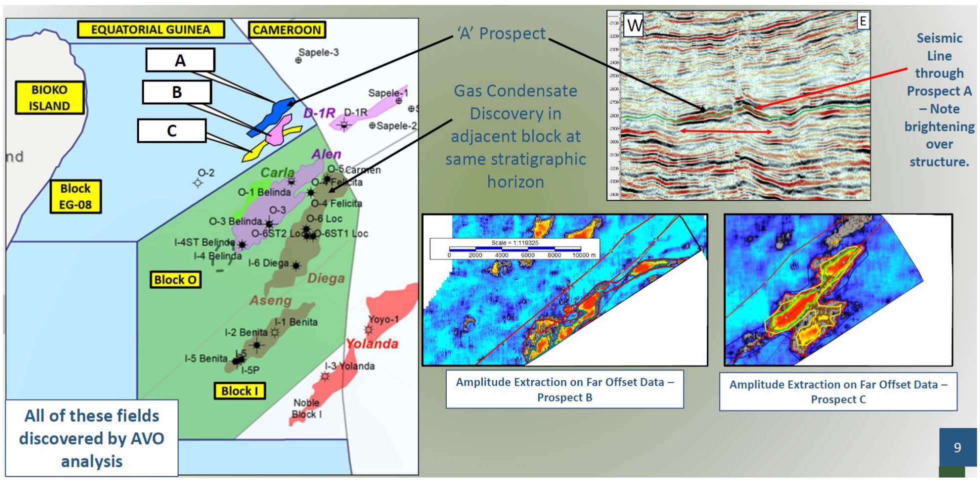
Jason Woollard
+44 (0) 20 7186 9035
jason.woollard@tennysonsecurities.co.uk

Licence EG-08

EG-08 was originally part of a larger permit, Blocks O&I, originally awarded to Noble Energy and later acquired by Chevron following its takeover in 2020. EG-08 was carved out as part of a mandatory relinquishment following the commercial development of the Alen and Aseng fields in the other half of the licence. Current operator Antler acquired the new PSC earlier this year, with state ratification in October. Antler has two years to secure funding and commit to drilling (i.e. farm down the licence), at which point it moves into the second exploration sub period which will see drilling activity. Antler has a 80% interest in the PSC with the state company GEPetrol having a 20% stake.

The neighbouring Chevron licence contains two producing fields – Alen and Aseng – which contain around 700 bcfe of recoverable reserves and has produced just shy of 100,000 boepd (combined) at peak production but is now well into the decline phase. The Aseng field was discovered in 2007 and achieved first production in 2011. Alen followed shortly after, with production beginning in mid-2013. There are also the currently undeveloped discoveries Diega, Yoyo-Yolanda and Carla North, which have tested oil, gas and condensate. A total of 17 wells (exploration, appraisal and development) have been drilled in the area, the gas wells proving flow potential of over 30 mmscf/d gas and 1,500 boepd condensate, and oil wells over 6,000 bopd. Only one well was drilled into EG-08. The O2 well was drilled downdip of prospect "C" (see Figure 2, below), and while it was technically dry, it did prove a thick (55m) porous reservoir with some condensate recovered at the top of the section. This provides optimism for updip potential.

Figure 2: Prospectivity details



Source: Europa Oil & Gas

Wet gas from Alen is produced via a fixed platform to the Aseng FPSO, where it is lifted periodically. Dry gas is sent via a new 24-inch 950 mmscf/d capacity export pipeline to the Alba LNG plant on Bioko Island. Since these facilities are available, with ullage, only around 10km away, production from EG-08 could potentially be tied back to the Alen platform, with a tariff being paid to Chevron for the use of the infrastructure. The LNG terminal on Bioko Island was recently upgraded, with the hope that new finds in the area can backfill supply as Alba, Aseng and Alen naturally decline.

Near term activity

EG-08 is covered with modern 3D seismic which will allow Antler and Europa to rapidly work up drilling targets and start a formal farmout process in early 2024.

It is clear that the regional productive reservoirs have a strong AVO anomaly response, and it is on this basis that all existing discoveries to date have been drilled. With the "A", "B" and "C" prospects all displaying 'classic type 2 anomalies' (see Figure 2, above), the EG-08 partners are carrying high geological chances of success (in the region of 60-70%). The estimated volumetrics for the three prospects is summarised in Figure 3, below. These numbers are on the basis of a gas condensate find, which is considered the most likely phase, however we understand that an oil case is also being considered a possibility.

Figure 3: Volumetric table

	Prospect A		Prospect B	Prospect C
	Low Case	Mid Case	Mid Case	Mid Case
P90	202	290	163	66
P50	426	686	365	186
Mean	446	779	396	211
P10	718	1,297	672	388

Total Pmean mid-case Prospective Resource = 1,386 BCFE
All figures in BCFE (billion cubic feet equivalent)

Source: Europa Oil & Gas

While they are geologically discrete and considered independent (i.e. no conditional probability), the three prospects can be tested from one single wellbore and two sidetracks. This has a number of advantages – it significantly reduces drilling costs per well, improves overall chances of commercial success assuming only one 'mother-bore' is drilled (91% on the basis that at least one of the three prospects exceeds the economic threshold of 38 mmboe), and arguably most importantly makes the farm-in a far more attractive proposition. Preliminary scoping suggests that all three prospects can be drilled for US$50m, versus one vertical well which would cost an estimated US$30m. Assuming a farm out around midyear 2024, we would expect drilling during H1 2025.

Terms of the deal

Europa is investing US$3m of new equity into Antler, acquiring a 42.9% interest in the private company. Antler and Europa will appoint one Board member each, with all Board decisions to be unanimous. The funds from the raise will cover the work programme and budget for the first year, which includes the formal farm out process.

Value proposition and funding

Using DCF we value the prospects on a unit basis at US$6.13/boe (NPV10, US$65/bbl long term Brent oil price, US$6.5/mcf gas price). The "A" prospect is the largest of the three, with 686 bcfe (114 mmboe) gross recoverable in the P50 case. Prospect "B" has some 365 bcf (61 mmboe) recoverable, and "C" 186 bcf (31 mmboe). In total, therefore, there are some 1.24 Tcf (206 mmboe) of recoverable P50 prospective resources to be tested. On an unrisked basis, using our US$6.13/boe valuation, we estimate an NPV10 of up to US$352m (net to EOG on a fully diluted basis). For an initial outlay of just US$3m, therefore, Europa is acquiring exposure to a project which could, on paper at least, deliver almost 120x return.

Naturally this project is very early stage, and despite the confident geological chances of success of 60-70% per project, and low economic threshold of 38 mmboe, we have applied a cautious 20% risking in calculating our Total NAV. This values the three prospects at US$70m risked, or 5.67p/shr. Our risking allows headroom to add substantial value as the project passes major milestones, such as the securing of drilling finance, successful drilling, project sanction etc. Including assets elsewhere across Europa's portfolio (onshore UK, Serenity, Inishkea West) we calculate a Core NAV of 3.76p/shr (which includes discovered resources and corporate items only) and a Total NAV (i.e. including exploration) of 15.83p/shr. Reflecting the current state of the equity markets, our Target Price of 4.97p/shr is set at Core NAV, plus just 10% of the (already risked) exploration NAV.

Finally it is worth adding a short comment on what will remain the company's most important asset (for now at least). At the time of the latest announcement, the Wressle field was flowing at rates equivalent to c.205 bopd net to Europa. At current oil prices, we estimate that this will generate in the region of US$3.5-4m of operating cash flow, which more than covers any capital requirements that the company has elsewhere across the portfolio. We estimate that, following the US$3m investment, Europa will still have over US$3m cash remaining on the balance sheet (debt free), implying a current enterprise value of just US$9m today.

Figure 4: Valuation summary table

NET ASSET VALUE

Asset	Gross mmboe	Interest	Net mmboe	US$/boe	Unrisked US$m	Unrisked p/shr	CoS	Risked US$m	Risked p/shr
Onshore 2P	1.00	52%	0.52	10.3	5	0.43	100%	5	0.43
Onshore 2C	4.63	27%	1.23	10.3	13	1.02	75%	10	0.77
Cloughton	10.77	40%	4.31	18.8	81	6.48	35%	28	2.27
Add: net cash					3.3	0.26		3	0.26
Add: corporate items					0.5	0.04		0	0.04
Core NAV			**6.1**		**103**	**8.23**		**47**	**3.76**
Onshore P50	34.5	33%	11.4	7.74	88	7.08	25%	22	1.77
Prospect A (EG)	114	28%	31.9	6.13	195	15.67	20%	39	3.13
Prospect B (EG)	61	28%	17.0	6.13	104	8.34	20%	21	1.67
Prospect C (EG)	31	28%	8.6	6.13	53	4.25	20%	11	0.85
Serenity	6.7	25%	1.7	15.0	25	2.00	25%	6	0.50
Inishkea (Ireland)	259	50%	129.5	2.00	259	20.76	20%	52	4.15
Total NAV			**206.1**		**827**	**66.32**		**197**	**15.83**

Valuation assumptions:

Brent price: US$93.9/bbl YE Jul 2023, US$82.6/bbl 2024, US$77.5/bbl 2025, US$70.3/bbl 2026, US$65/bbl flat thereafter.
Discount rate 10%.
1.26 US dollar / sterling.
959.2m ordinary shares outstanding. 30.56m options and warrants outstanding with exercise prices 1.23p-6.2p/shr.

Source: Tennyson Securities

DISCLAIMER

RECOMMENDATIONS HISTORY

Market index: **AIM ALL SHARE ENERGY**

Date	Market Index level	Share Price (p)	Target Price (p)	Opinion
09 Jun 2022	1462.2	2.5	7.8	BUY
24 Nov 2022	1005.1	1.125	2.3	BUY
21 Dec 2023	676.45	1.0	4.97	BUY

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HOLD: The stock is expected to generate absolute price performance of between negative 10% and positive 10% during the next 12 months.

SELL: The stock is expected to generate absolute negative price performance of over 10% during the next 12 months.

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