

Deutsche Rohstoff AG

Germany / Raw materials
 Frankfurt
 Bloomberg: DR0 GR
 ISIN: DE000A0XYG76

Update

RATING	ADD
PRICE TARGET	€ 9.50
Return Potential	21.5%
Risk Rating	High

SUBSTANTIAL OPTION VALUE IN KNIGHT AND WYOMING ASSETS

We have made adjustments to the valuation model presented in our most recent note of 15 April to reflect the current oil and gas future curves and also DRAG's acquisition in July of 28,000 net acres in Wyoming (for comparison DRAG's most important subsidiary, Cub Creek, operates net 28 two-mile equivalent lateral wells on 5,000 net acres). The current oil futures curve does not reach the USD50 level required to justify new drilling until the later part of this decade. Management has indicated that production at Cub Creek's Olander pad will resume in January 2021 – but we assume only at 50% capacity. We had previously assumed 100%. Our previous model also assumed a January 2023 production start at the Knight pad, but given the shallow trajectory of the oil futures curve we have taken Knight out of our DCF model. However, the current futures curve indicates that DRAG will be able to service its gross debt of €129m from liquid assets and cashflow from existing wells until the 2024 bond (amount outstanding: €87.0m) matures on 6 December of that year. DRAG's ability to ride out a long period of low commodity prices coupled with the volatility of the oil price mean that the company's Knight and Wyoming assets have substantial option value. The option value of undrilled wells at the Knight pad and in Wyoming account for 27% of our enterprise valuation of DRAG. We maintain our Add recommendation at an unchanged price target of €9.50.

Unwinding of hedging contracts generated revenue of €10.1m in H1/20 DRAG is currently producing oil and gas from ca. 28 net two-mile lateral equivalent wells in Colorado and a further ca. 11 net one-mile lateral equivalent wells in North Dakota, Utah and Wyoming. DRAG produces through two subsidiaries in Colorado - Cub Creek and Elster (see figure 1 for their respective production figures). DRAG is the operator at Cub Creek but is a non-operator at Elster. The SARS-CoV-2-related fall in the oil price in the spring prompted DRAG to reduce production at Cub Creek. (p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2018	2019	2020E	2021E	2022E	2023E
Revenue (€m)	109.05	41.20	36.98	39.98	28.49	27.51
Y-o-y growth	102.9%	-62.2%	-10.3%	8.1%	-28.7%	-3.4%
EBITDA (€m)	97.93	22.73	17.85	27.65	17.19	16.19
EBITDA margin	89.8%	55.2%	48.3%	69.2%	60.3%	58.9%
Net income (€m)	13.87	0.31	-19.60	0.07	-5.13	-4.65
EPS (diluted) (€)	2.81	0.06	-3.96	0.01	-1.03	-0.94
DPS (€)	0.70	0.10	0.10	0.10	0.10	0.10
FCF (€m)	2.47	-21.95	-6.85	15.76	10.53	9.21
Net gearing	42.9%	98.7%	113.8%	94.3%	87.3%	80.4%
Liquid assets (€m)	59.99	66.64	43.75	42.31	52.34	50.35

RISKS

Risks include negative movements in the oil price and other raw materials prices, dry well risk, mechanical failure, loss of key personnel.

COMPANY PROFILE

Deutsche Rohstoff AG (DRAG) is a resources company with a portfolio of properties in oil/gas, so-called high tech metals such as tin and tungsten, base metals and rare earths. The business model is based on production in well explored areas in politically stable countries. DRAG is based in Mannheim, Germany.

MARKET DATA

As of 16 Oct 2020

Closing Price	€ 7.82
Shares outstanding	4.95m
Market Capitalisation	€ 38.74m
52-week Range	€ 6.12 / 16.20
Avg. Volume (12 Months)	8,558

Multiples	2019	2020E	2021E
P/E	125.6	n.a.	n.a.
EV/Sales	3.2	3.6	3.3
EV/EBITDA	5.9	7.5	4.8
Div. Yield	1.3%	1.3%	1.3%

STOCK OVERVIEW



COMPANY DATA

As of 30 Jun 2020

Liquid Assets	€ 33.79m
Current Assets	€ 39.44m
Intangible Assets	€ 20.60m
Total Assets	€ 221.76m
Current Liabilities	€ 15.12m
Shareholders' Equity	€ 58.21m

SHAREHOLDERS

Management	10.0%
Institutional shareholders	30.0%
Free float	60.0%



Production fell from a peak of nearly 10,000 BOED reached in March after the start of production at the Olander drilling pad to around 1,000 BOED in Q3/20. DRAG shut in production at Olander in April and also reduced output from Cub Creek's older legacy drilling pads (Vail, Markham, Haley, Litzenberger) by a third. The decision to suspend oil production at Olander and reduce it at the legacy Cub Creek wells was made easier by hedging contracts whose unwinding generated revenue of €10.1m in H1/20. However, Extraction Oil & Gas, which is the operator at Elster, decided not to reduce production.

Figure 1: 2019 oil and gas output by subsidiary and forecasts for 2020E-2023E

BOE	FY/19A	FY/20E	FY/21E	FY/22E	FY/23E
Cub Creek	806,555	666,383	1,367,054	974,232	1,055,371
change (%)	-52.8%	-17.4%	105.1%	-28.7%	8.3%
of which:					
oil	301,533	336,052	656,186	438,404	443,256
gas	505,022	330,331	710,868	535,828	612,115
gas as % total	62.6%	49.6%	52.0%	55.0%	58.0%
Elster	742,441	519,310	546,806	446,200	378,906
change (%)	-53.6%	-30.1%	5.3%	-18.4%	-15.1%
of which:					
oil	318,136	180,628	180,446	147,246	125,039
gas	424,305	338,682	366,360	298,954	253,867
gas as % total	57.1%	65.2%	67.0%	67.0%	67.0%
Salt Creek	39,798	14,962	8,533	7,253	6,165
change (%)	-78.5%	-62.4%	-43.0%	-15.0%	-15.0%
of which:					
oil	37,140	11,524	6,400	5,440	4,624
gas	2,658	3,438	2,133	1,813	1,541
gas as % total	6.7%	23.0%	25.0%	25.0%	25.0%
Bright Rock	57,024	131,861	136,533	111,957	95,164
change (%)	n.a.	131.2%	3.5%	-18.0%	-15.0%
of which:					
oil	54,588	99,296	102,400	83,968	71,373
gas	2,436	32,565	34,133	27,989	23,791
gas as % total	4.3%	24.7%	25.0%	25.0%	25.0%
Total	1,645,818	1,332,516	2,058,927	1,539,643	1,535,606
change (%)	-52.9%	-19.0%	54.5%	-25.2%	-0.3%
of which:					
oil	711,397	627,500	945,432	675,058	644,292
gas	934,421	705,016	1,113,495	864,584	891,315
gas as % total	56.8%	52.9%	54.1%	56.2%	58.0%

Source: DRAG; First Berlin Equity Research estimates

The breakeven oil price for DRAG's existing oil wells is ca. USD20/barrel which includes transport costs of ca. USD5.25/barrel. With oil (West Texas Intermediate) now trading at over USD40/barrel, DRAG returned production at Cub Creek's legacy wells to full capacity earlier this month.

Four fifths of DRAG's debt is not due until 2024 As figure 2 below shows, DRAG had cash of €13.9m and securities classified as current assets of €19.9m at end H1/20. Three quarters (€87m) of DRAG's €114.4m bond debt does not mature until 2024, €16.8m is repayable in 2021 and nothing in 2022. The average coupon is 5.2%. Meanwhile the main component of the €14.4m in bank liabilities is a €13m term loan maturing in 2024 (variable interest rate currently at 4%).

We estimate value of share/bond portfolio is up by €8m since Q2/20 DRAG exploited the weakness of resource sector share prices in Q2/20 by investing €19.1m in gold exploration/mining and oil & gas shares and bonds. We estimate the current value of this portfolio at €27m implying a total liquid assets position of ca. €41m at end H1/20.



Cash cost of oil production at DRAG is ca. USD20/barrel All of DRAG's H2/20 oil production is hedged at USD57.12/barrel. From January 2021 oil production is unhedged. However, given DRAG's liquid asset position, cash costs of USD20/barrel and investment in new drilling which will likely remain minimal as long as the oil price remains below USD50, the company's debt load looks readily manageable even in the current low commodity price environment.

We expect Olander to return to production in January 2021 at 50% of full capacity CAPEX of ca. USD60m for the Olander wells has already been incurred and so the breakeven oil price for these wells is close to that for the Cub Creek legacy wells. The average age of the Cub Creek legacy wells is 3-4 years. DRAG produces exclusively from horizontal wells in the U.S. The horizontal wells in its portfolio produce ca. 30% of their reserves during their first year and under 10% per year from year three. This means that there is a powerful incentive to time the start of production to coincide with a favourable commodity price environment. The oil futures curve does not indicate any substantial recovery in the oil price over the next two years and so we assume output from Olander at half of full capacity during 2021 and 2022.

H1/20 RESULTS

Figure 2: H1/20 oil and gas output by subsidiary (barrels of oil equivalent)

	H1/19A	H1/20A	Δ %
Cub Creek	453,571	528,179	16.4%
of which:			
oil	170,867	277,172	62.2%
gas	282,704	251,007	-11.2%
Elster	472,074	333,728	-29.3%
of which:			
oil	209,008	121,128	-42.0%
gas	263,066	212,600	-19.2%
Salt Creek	32,467	9,512	-70.7%
of which:			
oil	22,700	7,324	-67.7%
gas	9,767	2,188	-77.6%
Bright Rock	17,560	42,530	142.2%
of which:			
oil	13,352	32,296	141.9%
gas	4,208	10,234	143.2%
Total	975,672	913,949	-6.3%
of which:			
oil	415,927	437,920	5.3%
gas	559,745	476,029	-15.0%

Source: DRAG

Total production on a net working interest basis after royalties fell 6% to 913,949 BOE in H1/20 (H1/19: 975,672 BOE). Without the curtailment of production occasioned by the fall in the oil price from the end of February, we estimate that H1/20 output would have been 30% above the prior year level. As we have seen above, unconventional wells are far more productive in their first year of operation than in subsequent years. The eleven two-mile lateral horizontal wells at the Olander pad were drilled in 2019 and began production at the end of December. We estimate that if the Olander wells had carried on producing as originally budgeted H1/20 production would have been 375,000 BOE higher (300,000 barrels of oil and 75,000 BOE gas).



H1/20 revenues were up 8.1% at €26.1m (H1/19: €24.2m) but included €10.1m in gains on hedging contracts. Stripping out the hedging gains, H1/20 revenue was down 33.7% at €16.0m. This figure equates roughly to the development of the oil price, which averaged USD36.88 in H1/20 - 36% below the comparable H1/19 figure of USD57.33. H1/20 EBITDA rose 3.9% to USD15.8m (H1/19: €15.2m) but depreciation on tangible and intangible assets multiplied more than four-fold to €31.3m (H1/19: €7.7m). The H1/20 number included an impairment of €10.7m on the assets of DRAG's Elster subsidiary due to low oil and gas prices while the H1/19 figure was depressed by the reversal of €6.8m of a €13.2m impairment taken at Cub Creek at the end of 2018. Amortisation of financial assets and securities amounted to €7.2m in H1/20 (H1/19: €-0.4m). The main item here was a €6.5m writedown on DRAG's shareholding in Northern Oil & Gas Inc.

Figure 3: H1/20 results

All figures in € 000s	H1 19A	H1 20A	Δ %
Revenue	24,157	26,121	8.1%
Change in work in progress	20	0	-100.0%
Other operating income	1,154	2,584	124.0%
Cost of materials	-5,955	-6,690	-12.3%
Personnel expenses	-2,067	-1,698	17.8%
Other operating expenses	-2,127	-4,588	-115.7%
EBITDA	15,181	15,769	3.9%
Depreciation on tangible & intangible assets	-7,330	-24,078	-228.5%
Amortisation of financial assets	-380	-7,241	-1803.8%
Total depreciation and amortisation	-7,710	-31,319	-306.2%
EBIT	7,471	-15,550	n.a.
Other interest	268	398	48.4%
Interest expense	-2,894	-3,503	21.1%
Pretax	4,845	-18,655	n.a.
Tax	-1,312	5,292	n.a.
Net profit before minorities	3,533	-13,363	n.a.
Minorities	-517	82	n.a.
Net profit after minorities	3,016	-13,281	n.a.

Source: DRAG

DRAG booked a tax credit of €5.3m in H1/20 (H1/19: a charge of €1.3m). The H1/20 tax credit reflects both deferred tax income of €2.7m in connection with the US tax refund of USD7.5m expected by the end of 2020 and deferred tax income of €2.5m related to the impairment losses at Elster Oil & Gas.

We no longer see near term production from Knight pad Until the fall in the oil price in the spring, DRAG had planned to begin production from 12 2.25 mile lateral wells at Cub Creek's Knight drilling pad by the end of this year. We do not expect drilling at Knight to begin until the oil price looks to have reached USD50 or above on a sustainable basis.

Wyoming land package is over 5x area held by Cub Creek In July DRAG's subsidiary Bright Rock acquired 28,000 net acres (111 km²) in Wyoming. The area acquired is over five times the size of the 5,000 net acre land package held by Cub Creek. Five wells are currently producing on this land at an approximate rate of 300 BO/day. Around 40% of the acreage is held by production which means that it is secured for the longer term without further drilling obligations. In addition, a number of drilling permits have already been issued for the area and others are in the approval process. The purchase price was based almost entirely on the value of production from the five existing wells based on the July futures curve.



We do not expect DRAG to begin producing oil at Knight or drill additional wells in Wyoming while the oil price remains below USD50. However, the oil price is volatile and the current futures curve indicates that DRAG will be able to service debt from liquid assets and cashflow from existing wells until the 2024 bond (current amount outstanding: €87.1m) matures on 6 December of that year. DRAG's Knight and Wyoming assets thus have substantial option value.

If proved up, Wyoming land package could accommodate over 80 two-mile wells The Knight pad is located next to the Olander pad and in close vicinity to the Haley, Litzenberger and Markham pads, all of which have produced oil and gas for DRAG. Providing that the oil price is high enough, the probability of successful production at Knight is thus high. Only five wells are currently producing on the Wyoming land package, most of which still has to be proved up. DRAG's land in Wyoming is located in the Powder River Basin. Major oil and gas companies operating in the Powder River Basin include Devon Energy and EOG Resources. If oil and gas production proves to be viable from large parts of the DRAG's Wyoming land package, the output potential is large. The land package is sufficient for 80 two-mile lateral equivalent horizontal wells. This compares with ca. 39 net two-mile lateral equivalent horizontal wells at Cub Creek in Colorado including both the Olander and Knight pads.

Figure 4: Changes to our forecasts

All figures in € 000s	2020E	2020E	Δ	2021E	2021E	Δ	2022E	2023E
	New	Old		New	Old		New	New
Revenue	36,979	38,306	-3.5%	39,978	57,779	-30.8%	28,491	27,512
EBITDA	17,851	21,958	-18.7%	27,654	33,681	-17.9%	17,193	16,194
Depreciation and amortisation	36,761	18,927	94.2%	22,081	28,235	-21.8%	16,764	16,723
Operating income (EBIT)	-18,909	3,031	-723.9%	5,572	5,446	2.3%	429	-529
Net financial result	-6,105	-6,268	n.a.	-6,111	-4,961	n.a.	-5,643	-5,352
Pre-tax income (EBT)	-25,014	-3,237	n.a.	-538	485	n.a.	-5,214	-5,881
Income taxes	5,292	0	n.a.	0	0	n.a.	0	1,235
Net before minorities	-19,722	-3,237	n.a.	-538	485	-211.0%	-5,214	-4,646
Minority interests	121	-623	n.m.	609	-745	n.a.	87	-8
Net income after mins.	-19,601	-3,860	n.a.	70	-6,824	n.a.	-5,127	-4,653
EPS (€)	-3.96	-0.20	n.a.	0.01	-1.34	n.a.	-1.03	-0.94

Source: First Berlin Equity Research estimates

Figure 4 shows changes to our forecasts since our last note of 15 April. The reduction in our 2020 EBITDA forecasts is a result of the reduction in our revenue forecast and also of a €1.1m loss on the sale of securities and a €0.4m net currency loss reported in the H1/20 P&L statement. The depreciation and amortisation forecast nearly doubles due to the €10.7m impairment at Elster and the €6.5m writedown on DRAG's Northern Oil & Gas shareholding mentioned above. Our previous 2021 revenue assumed a return to full production at Olander from January 2021. We now model production at Olander at 50% capacity in both 2021 and 2022. In this note we present detailed 2022 and 2023 forecasts for the first time. We forecast stable revenue for 2023 relative to 2022 because of the resumption of production at full capacity at Olander. Our forecasts for 2020-23 do not assume any production from yet-to-be-drilled wells at the Knight pad or in Wyoming.

VALUATION

Accumulate rating maintained; price target unchanged at €9.50 Figure 8 shows changes to our valuation model. Our valuation of Cub Creek falls by 21% because we previously assumed the start of production at the Knight pad from 2023. The oil futures curve does not reach USD50 - the level required to justify new drilling - until the end of this decade.



However, as we have pointed out above, the current futures curve indicates that DRAG will be able to service debt from liquid assets and cashflow from existing wells at least until the 2024 bond matures. This time period, coupled with the volatility of the oil price mean that the Knight pad has substantial option value. The same arguments apply to DRAG's Wyoming land package.

We have calculated the option value of Cub Creek's undrilled Knight wells and Bright Rock's undrilled Wyoming wells using the Black-Scholes method (see figure 7). The underlying price is based on the PV10 of cash inflows based on the current oil and gas futures curves while the exercise price is based on the PV10 of cash outflows. We have used the maturity date of DRAG's 2024 bond as the expiry date for the options. Expected volatility corresponds with the volatility implied by the current pricing of options on oil futures. Our updated valuation model produces an unchanged valuation for DRAG of €9.50 per share. We maintain our Add rating.

Figure 5: DCF Valuation of Cub Creek Energy*

USD 000s	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Production (working interest): barrels of oil equivalent (000s)	666	1,367	974	1,055	967	842	667	610	566	529	497
Unhedged average oil price after transport costs (WTI -USD/barrel)	38.56	37.42	38.29	38.91	39.60	40.40	41.37	42.33	43.31	44.35	45.38
No. 2-mile lateral equivalent wells period end (working interest)	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
Net revenue (working interest after royalty and ad valorem tax)	14,189	31,684	21,385	22,171	20,149	17,603	13,990	12,903	12,067	11,411	10,852
Cash operating costs	7,816	15,814	11,077	11,791	10,738	9,298	7,319	6,659	6,132	5,697	5,323
EBITDA	6,373	15,870	10,308	10,381	9,411	8,306	6,672	6,244	5,935	5,715	5,529
Depreciation	7,997	16,405	11,691	12,664	11,603	10,106	8,003	7,326	6,787	6,344	5,964
EBIT	-1,624	-535	-1,383	-2,284	-2,191	-1,801	-1,332	-1,082	-851	-629	-435
NOPLAT	-1,624	-535	-1,383	-2,284	-2,191	-1,801	-1,332	-1,082	-851	-629	-435
Tax Rate (%)	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
CAPEX	0	0	0	0	0	0	0	0	0	0	0
Working capital expenditure	1,082	-2,624	1,545	-118	303	382	542	163	125	98	84
Free cashflow	7,455	13,246	11,853	10,263	9,715	8,688	7,213	6,407	6,061	5,813	5,613
PV free cashflow (10% discount rate)	7,314	11,814	9,611	7,565	6,510	5,292	3,995	3,226	2,774	2,419	2,123
Sum PV free cashflows	71,209										

Source: DRAG; First Berlin Equity Research estimates

Figure 6: DCF Valuation of Elster Oil & Gas*

USD 000s	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Production (working interest): barrels of oil equivalent (000s)	519	547	446	379	336	303	277	256	238	222	49
Unhedged average oil price after transport costs (WTI -USD/barrel)	38.56	37.42	38.29	38.91	39.60	40.40	41.37	42.33	43.31	44.35	45.38
No. 2 mile lateral equivalent wells period end (working interest)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Net revenue (working interest after royalty and ad valorem tax)	8,822	11,017	8,576	7,136	6,277	5,705	5,258	4,917	4,636	4,402	985
Cash operating costs	5,554	5,784	4,720	4,008	3,538	3,183	2,903	2,672	2,474	2,300	504
EBITDA	3,267	5,233	3,856	3,128	2,739	2,522	2,355	2,245	2,162	2,102	481
Depreciation	6,232	6,562	5,354	4,547	4,026	3,634	3,324	3,070	2,851	2,659	584
EBIT	-2,964	-1,329	-1,498	-1,419	-1,288	-1,112	-970	-825	-688	-557	-103
NOPLAT	-2,964	-1,329	-1,498	-1,419	-1,288	-1,112	-970	-825	-688	-557	-103
Tax Rate (%)	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
CAPEX	0	0	0	0	0	0	0	0	0	0	0
Working capital expenditure	1,804	-329	366	216	129	86	67	51	42	35	513
Free cashflow	5,071	4,904	4,222	3,344	2,868	2,608	2,422	2,296	2,205	2,137	994
PV free cashflow (10% discount rate)	4,975	4,374	3,424	2,465	1,922	1,589	1,341	1,156	1,009	889	376
Sum PV free cashflows	24,117										

Source: DRAG; First Berlin Equity Research estimates

* our valuation models for CCE and EOG extend to 2039 but for reasons of space we show numbers only out to 2025

**Figure 7: option value of undrilled Knight and Wyoming wells (USDm)**

	Cub Creek Knight wells*	Bright Rock Wyoming wells**
Underlying price (PV10 of cash inflows based on current futures curve)	7.57	6.73
Exercise price (PV10 of cash outflows)	9.79	10.64
Expiry date	6 Dec 2024	6 Dec 2024
Expected volatility	40.00%	40.00%
Risk free rate	0.50%	0.50%
Call option per well	1.80	1.21
Total call option value	16.45	29.44

* assumes 76% working interest in 12 2.25-mile laterals wells with 100% probability of success

** assumes 100% working interest in 80 2-mile lateral wells with 30% probability of success

Source: First Berlin Equity Research estimates

Figure 8: Changes to our valuation model

€m	New	Old	% Δ
DCF valuation Cub Creek Energy (DRAG's stake 88.5%)	66.1	84.2	-21.4%
of which: option value of production from Knight pad	12.4	0.0	
DCF valuation Elster Oil & Gas (DRAG's stake: 93.0%)	19.1	19.7	-2.9%
DCF valuation Salt Creek Oil & Gas/Bright Rock Energy (DRAG's stakes: 100.0%/ 98.4%)	35.9	7.3	391.8%
of which: option value of production from Wyoming wells	24.7	0.0	
Subtotal: US oil and gas activities	121.2	111.2	9.0%
Almonty (12.8% equity stake plus promissory notes and debentures)	16.4	12.0	
Northern Oil and Gas	2.8	4.5	
Tin International (DRAG's stake: 75.4%)	1.0	1.0	
Rhein Petroleum (DRAG's stake: 10%)	3.0	3.0	
Hammer Metals (DRAG's stake: 4.7%)	1.1	0.3	
Holding company costs	-10.0	-10.0	
Total enterprise value	135.4	121.9	11.1%
Cash and securities held in current assets	40.4	48.6	
Bonds	114.4	114.5	
Other debt	14.4	7.8	
Net debt	88.4	73.7	
Total equity value	47.1	48.3	-2.6%
No shares (m)	4.95	5.08	-2.5%
Equity value per share (€)	9.50	9.50	0.0%

Source: First Berlin Equity Research estimates



INCOME STATEMENT

All figures in € 000s	2018A	2019A	2020E	2021E	2022E	2023E
Revenues	109,052	41,204	36,979	39,978	28,491	27,512
Cost of purchased services	19,019	11,342	10,179	11,005	7,843	7,573
Personnel expenses	3,919	4,489	4,624	4,762	4,905	5,052
Net other operating income	11,819	-2,648	-4,325	3,443	1,450	1,307
EBITDA	97,933	22,725	17,851	27,654	17,193	16,194
Depreciation and amortisation	58,037	17,095	36,761	22,081	16,764	16,723
Operating income (EBIT)	39,896	5,630	-18,909	5,572	429	-529
Net financial result	-13,432	-5,368	-6,105	-6,111	-5,643	-5,352
Other financial items	0	0	0	0	0	0
Pre-tax income (EBT)	26,464	262	-25,014	-538	-5,214	-5,881
Taxes	-8,520	-76	5,292	0	0	1,235
Profit before minorities	17,944	186	-19,722	-538	-5,214	-4,646
Minority interests	-4,072	122	121	609	87	-8
Net income / loss	13,872	308	-19,601	70	-5,127	-4,653
EPS (in €)	2.81	0.06	-3.96	0.01	-1.03	-0.94
Ratios						
EBITDA margin on revenues	89.8%	55.2%	48.3%	69.2%	60.3%	58.9%
EBIT margin on revenues	36.6%	13.7%	-51.1%	13.9%	1.5%	-1.9%
Net margin on revenues	12.7%	0.7%	-53.0%	0.2%	-18.0%	-16.9%
Tax rate	32.2%	29.1%	21.2%	0.0%	0.0%	21.0%
Y-Y Growth						
Revenues	102.9%	-62.2%	-10.3%	8.1%	-28.7%	-3.4%
Operating income	652.2%	-85.9%	n.m.	n.m.	-92.3%	n.m.
Net income/ loss	150.0%	-97.8%	n.m.	n.m.	n.m.	n.m.



BALANCE SHEET

All figures in € 000s	2018A	2019A	2020E	2021E	2022E	2023E
Assets						
Current assets, total	75,860	80,455	51,748	55,432	61,693	59,381
Cash and cash equivalents	59,990	66,637	43,747	42,309	52,340	50,350
Inventories	156	165	106	174	124	120
Receivables	13,443	9,935	6,402	10,500	7,483	7,226
Prepayments	711	1,156	745	1,222	871	841
Other current assets	337	1,161	748	1,227	874	844
Deferred tax assets	1,223	1,401	0	0	0	0
Non-current assets, total	148,985	198,470	164,709	145,628	131,864	118,141
Intangible assets	16,932	22,136	21,136	20,136	19,136	18,136
Land and buildings	0	0	0	0	0	0
Producing oil plants	107,878	138,433	105,936	88,000	75,338	62,718
Exploration and evaluation	2,048	648	496	412	353	294
Plant and machinery	36	143	109	91	78	65
Other equipment	91	331	253	210	180	150
Equity investments	14,385	16,688	16,688	16,688	16,688	16,688
Loans to other investors	1,724	1,902	1,902	1,902	1,902	1,902
Securities classified as fixed assets	5,891	18,189	18,189	18,189	18,189	18,189
Total assets	224,845	278,925	216,458	201,060	193,557	177,522
Shareholders' equity & debt						
Current liabilities, total	38,912	26,927	18,303	3,939	12,844	103,408
Bank debt	16,086	22	0	0	0	14,357
Bond debt	0	0	16,700	0	10,700	87,100
Accounts payable	6,840	17,114	1,019	2,505	1,364	1,241
Other current liabilities	15,986	9,791	583	1,433	780	710
Long-term liabilities, total	77,299	139,089	112,157	112,157	101,457	0
Bond debt	66,599	131,077	97,800	97,800	87,100	0
Bank debt	10,700	8,012	14,357	14,357	14,357	0
Other long term liabilities	0	0	0	0	0	0
Provisions	19,312	25,222	2,000	2,000	2,000	2,000
Difference from capital consolidation	0	0	0	0	0	0
Minority interests	8,087	7,184	7,063	6,454	6,367	6,375
Shareholders' equity	65,750	64,317	66,041	65,616	59,994	54,846
Consolidated equity	73,837	71,501	73,104	72,071	66,361	61,220
Deferred tax liabilities	15,485	16,186	10,894	10,894	10,894	10,894
Total consolidated equity and debt	224,845	278,925	216,458	201,060	193,557	177,522
Ratios						
Current ratio (x)	1.95	2.99	2.83	14.07	4.80	0.57
Quick ratio (x)	1.95	2.98	2.82	14.03	4.79	0.57
Financial leverage	42.9%	98.7%	113.8%	94.3%	87.3%	80.4%
Book value per share (€)	13.32	12.98	13.33	13.25	12.11	11.07
Net cash (debt)	-31,671	-70,572	-83,208	-67,946	-57,915	-49,205
Return on equity (ROE)	27.5%	0.3%	-27.3%	0.0%	0.0%	0.0%



CASH FLOW STATEMENT

All figures in € 000s	2018A	2019A	2020E	2021E	2022E	2023E
Net profit before minorities	17,944	186	-19,722	-538	-5,214	-4,646
Writedowns/writeups of fixed assets	59,637	17,095	36,761	22,081	16,764	16,723
Increase/decrease in provisions	7,316	0	0	0	0	0
Changes in working capital	-889	6,309	-20,887	-2,785	1,976	128
Gains/losses from disposal of fixed assets	-15,132	0	0	0	0	0
Interest expense/income	6,227	0	0	0	0	0
Tax paid/received	8,519	0	0	0	0	0
Income tax payments	218	0	0	0	0	0
Other	-15,166	0	0	0	0	0
Operating cash flow	68,674	23,590	-3,849	18,758	13,527	12,205
Investment in property, plant equipment	-63,754	-45,537	-3,000	-3,000	-3,000	-3,000
Investment in intangible assets	-2,454	0	0	0	0	0
Free cash flow	2,466	-21,947	-6,849	15,758	10,527	9,205
Proceeds from disposal of intangible assets	38,391	0	0	0	0	0
Management of short term financial assets, other	-451	0	0	0	0	0
Investing cash flow	-28,268	-45,537	-3,000	-3,000	-3,000	-3,000
Equity financing	-493	0	0	0	0	0
Debt financing	15,241	64,478	0	0	0	0
Debt repayment	-30,239	-18,752	16,678	-16,700	0	-10,700
Interest paid	-6,925	0	0	0	0	0
Dividends, share buybacks	-6,210	-3,544	-495	-495	-495	-495
Other	0	0	0	0	0	0
Financing cash flow	-28,626	42,182	16,183	-17,195	-495	-11,195
Other	18,511	-13,588	-32,224	0	0	0
Change in cash and equivalents	30,291	6,647	-22,890	-1,438	10,031	-1,990
FX/consolidation effects	0	0	0	0	0	0
Cash and cash equivalents, start of the year	29,699	59,990	66,637	43,747	42,309	52,340
Cash and cash equivalents, end of the year	59,990	66,637	43,747	42,309	52,340	50,350
EBITDA/share (in €)	19.84	4.60	3.60	5.58	3.47	3.27
Y-Y Growth						
Operating cash flow	81.4%	-65.6%	n.m.	n.m.	-27.9%	-9.8%
Free cash flow	n.m.	n.m.	n.m.	n.m.	-33.2%	-12.6%
EBITDA/share	177.9%	-76.8%	-21.6%	54.9%	-37.8%	-5.8%

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Category		1	2
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy ¹	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

¹ The expected price trend is in combination with sizable confidence in the quality and forecast security of management.

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of €0 – €2 billion, and Category 2 companies have a market capitalisation of > €2 billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

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Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	22 July 2010	€7.45	Buy	€13.20
2...30	↓	↓	↓	↓
31	30 September 2019	€13.85	Buy	€18.10
32	24 March 2020	€6.66	Buy	€8.70
33	15 April 2020	€8.36	Add	€9.50
34	Today	€7.82	Add	€9.50

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