Deutsche Rohstoff AG

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

Comprehensive Update

RATING	**BUY**
PRICE TARGET	**€24.00**
Return Potential	52.7%
Risk Rating	High

180 WELL DRILLING PROGRAMME WILL NOT STRETCH BALANCE SHEET

DRAG's two US subsidiaries Cub Creek Energy (CCE) and Elster Oil and Gas (Elster) are currently drilling 25 horizontal wells in the Wattenberg field in Colorado. Elster completed 5 horizontal wells last autumn which have so far delivered excellent production figures. Provided that the oil price remains at or around current levels, we expect DRAG and its partners to complete over 150 additional wells in the Wattenberg field over the next four years. A reserve report published in early June by the well-known consultant, Ryder Scott, showed a net present value for the combined net acreage of CCE and Elster of USD116.6m (€105m). Our valuation of CCE and Elster at €102.4m is close to this figure and accounts for 86% of our enterprise valuation of DRAG. The company is currently proceeding with early repayment of the outstanding €51.4m of the €62m 2013/18 bond it issued in 2013. The repayment will be made from existing liquidity. DRAG plans to refinance the old bond by issuing up to €75m of a new five year bond with a coupon of 5.625% later this month. Although we expect DRAG to invest over €200m at Wattenberg by the end of 2019, we see net gearing peaking at a modest 58.7% at the end of 2017. Our oil price forecasts are based on the NYMEX futures strip featured in the Ryder Scott report mentioned above. We now see fair value for the DRAG share at €24.00. (previously: €23.00). The increase in our share price target is attributable to the inclusion of a higher number of wells in our model (in line with the latest Ryder Scott reserve report, which updates a report published in December) and recent falls in drilling and maintenance costs. The sensitivity of our share price target to a given percentage rise in the oil price is about 2.4x. We maintain our Buy recommendation.

Success of previous project bodes well for current drilling programme DRAG sold the Windsor Oil and Gas Project located in the Wattenberg Field in Colorado in mid-2014 - when the oil price was over USD100. Total proceeds were USD220m and the profit before minorities (27.85%) on the sale was USD130m.

FINANCIAL HISTORY & PROJECTIONS

	2013	2014	2015	2016E	2017E	2018E
Revenue (€m)	17.76	22.87	1.90	19.09	86.81	117.58
Y-o-y growth	473.9%	28.8%	-91.7%	906.1%	354.8%	516.0%
EBIT (€m)	-5.40	88.73	3.36	2.90	52.76	67.70
EBIT margin	-30.4%	387.9%	176.9%	15.2%	60.8%	n.a.
Net income (€m)	-8.31	25.17	1.16	8.30	26.62	34.28
EPS (diluted) (€)	-1.56	4.80	0.23	1.64	5.26	6.77
DPS (€)	0.00	0.50	0.55	0.60	1.00	1.00
FCF (€m)	-39.05	70.61	-13.91	-29.32	-28.45	0.73
Net gearing	54.1%	-63.7%	-40.5%	16.4%	58.7%	47.3%
Liquid assets (€m)	46.06	92.82	71.04	57.75	11.96	5.59

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 Heidelberg, Germany.

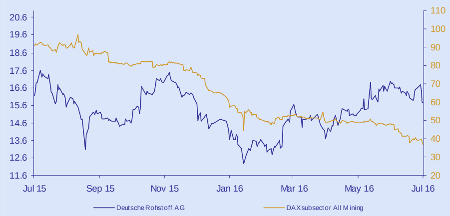
MARKET DATA

As of 07 Jul 2016

Closing Price	€ 15.72
Shares outstanding	5.06m
Market Capitalisation	€ 79.60m
52-week Range	€ 12.29 / 17.58
Avg. Volume (12 Months)	4,377

Multiples	2015	2016E	2017E
P/E	68.9	9.6	3.0
EV/Sales	28.7	2.8	0.6
EV/EBIT	11.0	6.9	0.7
Div. Yield	3.5%	3.8%	6.4%

STOCK OVERVIEW



COMPANY DATA

As of 31 Dec 2015

Liquid Assets	€ 71.04m
Current Assets	€ 78.73m
Intangible Assets	€ 17.50m
Total Assets	€ 128.05m
Current Liabilities	€ 4.23m
Shareholders' Equity	€ 59.27m

SHAREHOLDERS

Management	9.7%
BASF-VC	6.3%
Free float	84.0%

Analyst: Simon Scholes, Tel. +49 (0)30 - 80 93 96 94

Following this disposal and the September 2014 transfer of the tungsten mine, Wolfram Camp Mining, to Almonty Industries, DRAG no longer had any consolidated revenue generating businesses.

Low oil price helped DRAG to structure land deals favourably Development of oil and gas projects remains DRAG's core business. During 2015 the company acquired 2,300 acres in the north eastern part of the Wattenberg field through its 80%-owned subsidiary, Cub Creek Energy (CCE). The declining oil price meant that CCE was able to avoid making high initial one-off payments to the owners of oil rights. Instead, the deals were structured so that oil rights owners receive a share of revenues from the start of oil extraction. The contracts also stipulated that the timing and extent of drilling activities should be linked to the oil price.

By contrast with CCE, at Elster a partner determines drilling schedule DRAG also owns 93% in Elster Oil & Gas (Elster) which holds 800 acres in the Wattenberg Field. DRAG originally acquired the Elster land as part of the Windsor Project in 2013 but these tenements were not sold along with the rest of that asset in mid-2014. 62 wells can be drilled on the Elster tenements, all of which have already been fully approved. Elster's average working interest in these wells is 35%. By contrast with CCE, the wells at Elster are operated by a partner, who determines the drilling schedule. In December 2014, Elster, by agreement with its partner, announced plans to drill its first 9 horizontal wells at Elster during the spring and early summer of 2015. In the event, only five of the planned nine wells were drilled but Elster stated in late September that each of these wells would generate its required return on capital at an oil price of USD40/barrel.

Wattenberg horizontal wells generate required return on capital at USD40 oil price Horizontal wells in the Wattenberg field are currently able to cover capital costs at an oil price of only USD40 because drilling costs are now much lower than they were two years ago. Declining utilisation of drilling rigs and teams has caused the average cost of drilling a well in the Wattenberg field to fall from USD4.5m in mid-2014 (when the West Texas Intermediate oil price was over USD100/barrel) to USD2.5-2.7m currently.

Strong production numbers from first five Elster wells In October 2015 DRAG announced numbers for the first month of production from the first five horizontal wells drilled at Elster. Daily per well production amounted to 686 BOE. In the past, we have modelled initial production rates of 350 BOE/day for wells in the Wattenberg field and so the numbers from Elster were well above our expectations. In February, DRAG published numbers indicating continued strong production at the first five Elster wells. Daily per well production amounted to 483 BOE/day in January.

We now expect 15 additional wells at Elster in both 2017 and 2018, 21 during 2019 The first five wells drilled at Elster last year were commitment wells, which means that the partner was obliged to drill them. The partner was required to drill a further four commitment wells by mid-2016. Elster completed drilling six new horizontal wells in mid-June thereby fulfilling this commitment. These wells are scheduled to enter production during the current quarter. The very positive results from the first five horizontal wells drilled at Elster may encourage the partner to accelerate drilling. 62 wells are permitted at Elster but lack of visibility with regard to the partner's intentions causes us to push back our estimate of the schedule for the drilling of the non-commitment wells once again. 6 wells at Elster for 2016 are in line with the forecast we published in our most recent note in November 2015, but in that study we had forecast 24 additional wells for 2017, and another 24 in 2018. We now think these numbers for the next two years are too optimistic and instead pencil in 15 additional wells in both 2017 and 2018 with the remaining 21 wells to be drilled during 2019.

CCE is currently drilling 19 horizontal wells CCE is the operator at its projects and so is responsible for their drilling schedule. In June CCE began drilling 19 horizontal wells in the Wattenberg field. CCE has a working interest of nearly 100% in the first nine of these wells and a working interest of at least 75% in the remaining 10. The wells are located in an area of which CCE has detailed geological knowledge and extensive drilling experience and are only a few miles south of both the Elster project and the former Windsor Oil and Gas Project. The production start is scheduled for September and October.

We expect CCE/Elster's share of 2016-19 drilling programme to reach USD274m Current drilling costs suggest a total investment volume for the 19 CCE wells of around USD50m. Given that CCE's working interest in the first 19 wells averages 90%, its share of this figure is around USD45m. CCE now has an inventory of 100 possible gross wells of which 40 have been approved. CCE's average working interest in these wells is 80%. Following discussions with DRAG's management, we model drilling of an additional 40 wells in 2017 and the remaining 41 wells in 2018. We expect CCE/Elster's share in the capital costs of the 177 well 2016-19 drilling programme to reach USD274m.

Successful Windsor Oil and Gas Project team remains largely in place The co-founders of CCE are Tekton Energy's previous Vice President Engineering, Robert Gardner and the Vice President Land and Business Development, Scott Bailey. Robert Gardner is President and CEO of CCE. Tekton Energy was responsible for the Windsor Oil and Gas Project.

VALUATION

We have valued CCE and Elster using DCF methodology. We have used a discount rate of 10% to value after tax cash flows from the two subsidiaries. The same figure is used by Ryder Scott in its latest valuation report.

We base our current forecasts on the NYMEX futures strip featured in the Ryder Scott report on CCE/Elster's reserves published in early June. Changes to our oil and gas price forecasts as well as our assumptions for capital and maintenance costs per well and the pace of the drilling programmes at CCE and Elster since our most recent study of 16 November are summarised in figure 1 below.

Figure 1: Changes in oil price, capital/maintenance cost, drilling programme assumptions

	2016E			2017E			2018E		
	New	Old	% Δ	New	Old	% Δ	New	Old	% Δ
WTI Oil price (USD/barrel)	47.16	50.00	-5.7%	49.00	60.00	-18.3%	50.22	60.00	-16.3%
Henry Hub gas price (USD/MMBTU)	2.32	2.45	-5.3%	3.01	2.90	3.8%	3.04	2.90	4.8%
USDm capital cost per horizontal well (100%)	2.70	3.00	-10.0%	2.70	3.50	-22.9%	2.70	3.80	-28.9%
USD monthly maintenance cost per horizontal well (100%)	5,000	7,000	-28.6%	5,000	7,000	-28.6%	5,000	7,000	-28.6%
No. wells at year end at CCE	19	36	-47.2%	59	70	-15.7%	100	100	0.0%
No. wells at year end at Elster	11	12	-4.3%	26	36	-26.8%	41	60	-31.1%
USDm total capital cost (working interest)	-50.7	-81.0	-37.4%	-96.1	-131.3	-26.8%	-77.8	-131.2	-40.7%
USDm total annual maintenance cost (working interest)	-0.4	-1.2	-69.5%	-2.1	-4.0	-47.3%	-3.8	-7.0	-46.3%

	2019E			2020E			2021E and later		
	New	Old	% Δ	New	Old	% Δ	New	Old	% Δ
WTI Oil price (USD/barrel)	51.53	60.00	-14.1%	52.50	60.00	-12.5%	53.09	60.00	-11.5%
Henry Hub gas price (USD/MMBTU)	3.04	2.90	4.8%	3.11	2.90	7.2%	3.44	2.90	18.6%
USDm capital cost per horizontal well (100%)	2.70	3.80	-28.9%	2.70	3.80	-28.9%	2.70	3.80	-28.9%
USD monthly maintenance cost per horizontal well (100%)	5,000	7,000	-28.6%	5,000	7,000	-28.6%	5,000	7,000	-28.6%
No. wells at year end at CCE	120	100	20.0%	120	100	20.0%	120	100	20.0%
No. wells at year end at Elster	62	60	4.2%	62	60	4.2%	62	60	4.2%
USDm total capital cost (working interest)	-49.2	0.0	n.m.	0.0	0.0	n.m.	0.0	0.0	n.m.
USDm total annual maintenance cost (working interest)	-8.1	-8.6	-5.3%	-8.8	-8.6	2.6%	-10.3	-8.6	20.0%

Source: Ryder Scott, DRAG; First Berlin Equity Research assumptions

Oil and gas assets now account for 86% of our enterprise valuation (previously: 82%)
The explicit forecast period in our DCF valuations of CCE and Elster extends to 2034 but for reasons of space, we have not shown all years. We assume that both projects will be largely depleted beyond 2034 and so we do not model a terminal period.

As figures 2 and 3 below show, our valuation of the CCE and Elster produces net present values of USD99.0m (previously: USD 78.9m) and USD14.1m (previously: USD 24.2m) respectively. Besides the changes in commodity price and cost forecasts detailed above, another main driver of the changes in our valuations of CCE and Elster are our assumptions as to the subsidiaries' average working interest in their wells over the lifetime of their projects. We previously assumed working interests of 50% at both CCE and Elster. Following discussions with management, we have now changed this to 71% for CCE and 34% for Elster.

Figure 2: DCF Valuation of CCE

USD 000s	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Oil production (000 barrels)	693	3,570	5,357	5,884	3,770	2,905	2,419	2,090	1,848	1,662	1,511
Oil price period end (WTI -USD/barrel)	47	49	50	52	53	53	53	53	53	53	53
No. 1 mile-lateral equivalent wells period end	19.0	59.0	100.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
Gross revenue	21,711	120,506	185,696	209,328	137,137	108,496	90,313	78,037	69,002	62,055	56,435
EBITDA	12,331	70,195	93,908	100,624	60,887	46,426	37,246	31,048	26,486	22,978	20,141
Depreciation	-3,972	-20,446	-30,685	-33,699	-21,594	-16,641	-13,852	-11,969	-10,584	-9,518	-8,656
EBIT	8,359	49,748	63,223	66,926	39,293	29,785	23,393	19,079	15,903	13,460	11,485
NOPLAT	5,434	32,336	41,095	43,502	25,541	19,360	15,206	12,401	10,337	8,749	7,465
Tax Rate (%)	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Depreciation	3,972	20,446	30,685	33,699	21,594	16,641	13,852	11,969	10,584	9,518	8,656
CAPEX	-46,170	-84,688	-66,420	-32,400	0	0	0	0	0	0	0
Working capital expenditure	-2,307	-9,950	-4,346	-1,440	6,504	2,410	1,530	1,033	760	585	473
Tax refund	10,619	0	0	0	0	0	0	0	0	0	0
Free cashflow	-28,453	-41,856	1,014	43,361	53,638	38,412	30,588	25,403	21,681	18,852	16,594
PV free cashflow (10% discount rate)	-27,168	-36,332	800	31,106	34,981	22,773	16,486	12,447	9,657	7,634	6,109
Sum PV free cashflows	99,027										

Source: DRAG; First Berlin Equity Research estimates

Figure 3: DCF Valuation of Elster Oil and Gas

USD 000s	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Oil production (000 barrels)	637	1,499	2,013	2,842	2,197	1,715	1,406	1,204	1,059	949	860
Oil price period end (WTI -USD/barrel)	47	49	50	52	53	53	53	53	53	53	53
No. 1 mile-lateral equivalent wells period end	11.0	26.0	41.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
Gross revenue	18,859	50,610	69,777	101,111	79,926	64,034	52,518	44,957	39,538	35,425	32,097
EBITDA	4,289	12,056	16,296	20,443	14,219	8,825	5,995	4,137	2,805	1,794	977
Depreciation	-1,486	-3,494	-4,691	-6,622	-5,120	-3,996	-3,277	-2,805	-2,467	-2,211	-2,003
EBIT	2,803	8,562	11,605	13,821	9,099	4,829	2,718	1,332	338	-416	-1,026
NOPLAT	1,822	5,565	7,543	8,984	5,914	3,139	1,767	866	220	-271	-667
Tax Rate (%)	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Depreciation	1,486	3,494	4,691	6,622	5,120	3,996	3,277	2,805	2,467	2,211	2,003
CAPEX	-4,568	-11,421	-11,421	-16,751	0	0	0	0	0	0	0
Working capital expenditure	-437	-1,278	-754	-1,261	877	651	472	310	222	168	136
Tax refund	1,051	0									
Free cashflow	-647	-3,640	59	-2,406	11,912	7,786	5,516	3,981	2,909	2,109	1,472
PV free cashflow (10% discount rate)	-617	-3,160	47	-1,726	7,768	4,616	2,973	1,950	1,296	854	542
Sum PV free cashflows	14,142										

Source: DRAG; First Berlin Equity Research estimates

Additional royalty income from Diamond Valley Besides the two principal US oil and gas projects housed within CCE and Elster, DRAG retains the mineral rights to a piece of land near Windsor, Colorado it sold in September 2014. These mineral rights are held by Diamond Valley Energy Park, which is 100% owned by Elster. In June production began at nine horizontal wells on this land. We expect these wells to generate royalties of around USD250K in their first year of production. DRAG/Elster did not contribute to the capital cost of these wells and also does not bear the operating costs. Using a discount rate of 10% and assuming the usual rate of production degression, we value Diamond Valley at USD390K.

SALT CREEK OIL & GAS (DRAG'S STAKE: 60%)

In June 2015 DRAG USA founded Salt Creek Oil & Gas (Salt Creek) together with the founders of Tekton Energy, Jerry Sommer and Earl Norris. Tekton Energy was responsible for developing the Windsor Project which DRAG sold in May 2014 for USD200m. Salt Creek is currently evaluating acquisitions of oil and gas projects. We have not included Salt Creek in our valuation.

RHEIN PETROLEUM (DRAG'S STAKE: 10%)

DRAG co-founded Rhein Petroleum (RP) in late 2007. The business concept is to apply modern exploration and drilling technology in order to restart production at former oil fields in southern Germany.

RP is exploring the Mindelheim licensing area in the Lower Allgäu area of Bavaria together with a 50% consortium partner, Wintershall GmbH, the oil and gas subsidiary of BASF. In August 2014 the consortium drilled a well near Lauben and in September 2014 drilled a further well at Bedernau. Test production was carried out at Bedernau until April 2016 and continues at Lauben. RP is also carrying out test production at another well in its North Upper Rhine license area and on 23 June began drilling an exploration well near Graben-Neudorf in Baden-Württemberg.

Our valuation of DRAG's 10% stake in RP is based on our estimate of the real option value of RP's exploration efforts. In view of DRAG's recent decision to make no further investment in RP, we have lowered our valuation for this asset from €3.0m to €2.0m.

ALMONTY INDUSTRIES (DRAG'S STAKE: 12.58% PLUS CAD10.0M CONVERTIBLE)

DRAG acquired the Australian tungsten mining operation, Wolfram Camp Mining (WCM) in 2011, but experienced difficulties in producing profitably on a sustained basis. At the end of June 2014 DRAG announced the transfer of WCM to the Canadian tungsten mine turnaround specialist, Almonty Industries. Under the final terms of the deal, DRAG received a 24.9% stake in Almonty Industries (12.21m shares) and CAD6.0m in the form of a 2.5 year 4% coupon bond convertible into Almonty shares at CAD 1.45 per share (the Almonty share price is currently CAD0.305).The total value of this deal was CAD16.5m. In late April 2016 Almonty announced the sale of WCM to the Vietnamese ferrotungsten producer, ATC Alloys Ltd. The consideration was a 53% stake in ATC worth AUD6.0m (CAD5.9m). At the end of May 2016, Almonty made an offer to acquire the outstanding ATC shares. The Almonty offer values ATC at AUD4.3m (CAD4.2m).

In September 2015 Almonty merged with Vancouver-based Woulfe Mining Corp. Woulfe's main asset is the 100%-owned Sangdong Tungsten/Molybdenum Project located in South Korea 187km southeast of Seoul. The resource estimate for Woulfe's main asset, Sangdong, at 58m tonnes indicated and inferred grading 0.44% (255,000 tonnes of tungsten trioxide) is substantially larger than the combined resource estimate for Almonty's other projects at Los Santos (Spain), Panasqueira (Portugal), Valtreixal (Spain) and Wolfram Camp of 39.2m tonnes measured, indicated and inferred grading 0.22% (87,000 tonnes of tungsten trioxide). Both Wolfram Camp and Los Santos are currently in production. Production at Sangdong is scheduled to start in late 2018 subject to the successful conclusion of project financing. The feasibility study published in January 2016 puts the required investment in the project at CAD70m. With production from Sangdong, Almonty has the potential to become the leading tungsten producer outside China. China currently accounts for around 80% of global production of the metal.

In the course of the transaction, Woulfe shares were exchanged for Almonty shares. At the same time DRAG subscribed CAD4m to a further Almonty convertible bond issue. The new bond has a two year maturity, a 5% coupon and a conversion price of CAD0.81. It is secured against the shares in Woulfe Mining. Our valuation of DRAG's stake in Almonty is based on the combined value of the share and convertible bonds holding, which is currently €9.0m.

HAMMER METALS (DRAG'S STAKE: 15.5%)

DRAG holds a 15.5% stake in the Australian exploration company, Hammer Metals (HM). In addition DRAG holds an AUD650k convertible bond. The bond matures in July 2017, has a coupon of 10% and converts at AUD0.06. On a fully diluted basis; DRAG's stake in HM is 22.88%.

Hammer has exploration licenses in several regions of Australia. The most important of these are for 2,000 km^2 in the Mount Isa region of North West Queensland. There are several world class mines in the Mount Isa area including Glencore's Mount Isa, Ernest Henry and George Fisher properties as well as BHP Billiton's Cannington mine.

DRAG's management believe that geophysical and drilling results show great similarities between Hammer's Mount Isa licenses and producing mines in the area. In August, Hammer released a new JORC compliant resource estimate for its Overlander deposit which showed an inferred 1.77 million tonnes of ore grading 1.2% Cu at a cut-off grade of 0.7% Cu. The exploration programme which produced these results was largely financed by DRAG. In the view of DRAG's management, the results enabled HM to conclude a joint venture with the US firm, Newmont Mining, which is the second largest gold producer in the world. Under the terms of the joint venture, which encompasses 250km^2 or 12.5% of the area HM has under license - including the Overlander, Even Steven and Dronfield tenements - Newmont has the option of acquiring 75% in the JV by investing USD10.5m in exploration and project development. All costs up to USD4.5m will be borne by Newmont but the JV will be managed by HM. Fieldwork on the JV began in January 2016.

HM is the sole owner of the other 87.5% of the license area which includes the Kalman tenement. In March 2014, HM published a JORC compliant resource estimate for Kalman showing an inferred 30m tonnes of ore grading 1.3% Cu at cut-off grades of 0.3% to a depth of 100m and 1% below 100m.

DRAG's stake in HM is an investment with the usual risks associated with mining exploration. In our view however, the location of the license areas in a well known mining district, the company's experienced management and interest shown by large mining companies in joint ventures with HM indicate that the probability of success is above average. DRAG's management nevertheless intends to invest only a small part of the company's cash position in exploration projects. DRAG has so far invested AUD1.43m in HM. We value DRAG's 15.5% equity stake in Hammer and the AUD650k convertible bond at EUR1.6m using the current share price of AUD0.070 and the nominal value of the convertible bond.

CERITECH (DRAG'S STAKE: 67.86%)

Ceritech is now focused solely on the development of rare earth extraction from mineral dumps. The company is negotiating with two global mining companies with a view to rare earth extraction from mineral dumps in South America. Ceritech is currently analysing bulk samples from Brazil. According to Ceritech's management, preconcentrates produced so far from the bulk samples have been of high quality. If the economic parameters of the project prove to be favourable, Ceritech plans to conclude long term cooperation agreements with its South American partners. The cost of rare earths production from mineral waste dumps would be far below the cost level of hard rock miners such as Lynas and Molycorp. Pending further news of the South American project, we continue to see fair enterprise value for Ceritech at €1m.

TIN INTERNATIONAL (DRAG'S STAKE: 61.5%)

Tin International AG (TIN), which is located in Leipzig, Germany, has exploration rights to three tin deposits in Saxony - at Geyer, Gottesberg and Sadisdorf. DRAG published a JORC-compliant resource estimate for its Geyer and Gottesberg deposits in May 2012. In September 2014, a maiden resource estimate for Sadisdorf was published showing an inferred 3.36m tonnes grading 0.44% (15,000 tonnes of metal). The addition of Sadisdorf takes the combined resource estimate for all three deposits to 57.1 tonnes of ore grading 0.29% equating to 173,000 tonnes of metal.

The tin price has fallen 21.6% to around USD17,500 since the beginning of 2014 but has rallied by 18.9% since our last update of 16 November. The decline in the tin price during 2014 prompted DRAG's management to write capitalised exploration costs of €2m for the Geyer and Gottesberg projects down to zero in the 2014 annual report. We therefore exclude these projects' resource estimates from our valuation. Sadisdorf has not been written down because the resource is nearer to the surface than at either Geyer and Gottesberg and hence potentially less costly to mine.

Our valuation of Tin International is based on comparison of the company's Sadisdorf project resource estimate with the resource estimates for three tin exploration companies listed in Australia - Consolidated Tin Mines, Kasbah Resources and Stellar Resources.

Figure 4: Tin International Peer Group*

USD m	EV*	EV/Tonnes Resource (USD)	Ore (mt)	Grade (%)	Tin Content (t 000s)	Location	Status
Consolidated Tin Mines Ltd	16.3	311.1	13.1	0.40%	52.5	Queensland	preliminary feasibility study completed
Kasbah Resources	6.9	35.3	23.9	0.82%	195.6	Morocco	definitive feasibility study completed
Stellar Resources Limited	5.0	69.6	6.3	1.14%	71.5	Tasmania	preliminary feasibility study completed
Tin International	**0.4**	**25**	**3.4**	**0.44%**	14.8	**Germany**	**exploration**

** For Tin International our estimates; market valuations for other companies*

Source: Company data; First Berlin Equity Research estimates

The share prices of these companies have on average fallen by 15% since our last update of 16 November. Against this background we lower our EV/tonne estimate for TIN from USD35 to USD25. Our enterprise valuation of DRAG's 60% stake in TIN is now €0.2m (previously €0.3m).

DEVONIAN METALS (DRAG'S STAKE: 47%)

DRAG holds a 47% stake in Devonian Metals of New Westminster British Columbia, which in turn holds 49% in MacKenzie Mountain Metals (MMMI), a joint venture between Devonian and Glencore-Xstrata. MMMI is developing a zinc-lead-silver project at Wrigley in Canada's North West Territories province. In July 2010, DRAG concluded a farm-out agreement with Glencore which stipulated that the Swiss company invest CAD10m in exploration at Wrigley in return for a 51% stake. In June 2011, the sum to be invested for the 51% stake was adjusted downward to CAD6.5m. In December 2013, DRAG stated that no exploration had taken place over the preceding year and that it intended to sell its own share. DRAG has since been unable to find a buyer. In view of the clear difficulty in finding a buyer for the asset, DRAG wrote its stake in Devonian down to €0 in its 2015 accounts. We have also adjusted our enterprise valuation down to €0 (previously €1.3m).

Figure 5 summarises the changes to our sum of the parts model explained in the text above.

Figure 5: Sum of the parts model

€m	New	Old
Elster Oil and Gas (DRAG's stake: 93%)	12.3	23.2
Cub Creek Energy (DRAG's stake 80%)	71.7	54.3
Almonty (DRAG's stake: 13.75% plus CAD 10.0m in convertibles)	9.0	10.5
Tin International (DRAG's stake: 61.5%)	0.2	0.3
Rhein Petroleum (DRAG's stake: 10%)	2.0	3.0
Ceritech (DRAG's stake: 67.9%)	1.0	1.0
Devonian Metals (DRAG's stake: 47%)	0.0	1.3
Hammer Metals (DRAG's stake: 16.4% plus AUD650k convertible)	1.6	1.0
Total enterprise value	**97.8**	**94.6**
Cash and financial assets	83.0	78.2
Debt	57.8	58.0
Net cash and financial assets	25.2	20.2
Total equity value	**123.0**	**114.8**
No shares (m)	5.06	5.06
Equity value per share (€)	**24.3**	**22.7**

Source: DRAG; First Berlin Equity Research estimates

FULL YEAR RESULTS AND P&L FORECAST

Revenue in 2015 stemmed from oil and gas production at the first five horizontal wells drilled by Elster. EBIT was boosted by other operating income of €8.5m which derived chiefly from exchange rate gains due to the appreciation of the US Dollar against the Euro. 2014 revenues included the Windsor Oil & Gas project until May and Wolfram Camp Mining until September. 2014 EBIT benefited from a €104m gain on the sale of the Windsor Oil & Gas Project.

Figure 6: FY results

in €m	FY-15A	FY-15E	Δ vs. FY-15E	FY-14A	Δ vs. FY-14A
Revenue	1.9	2.7	-30.3%	22.9	-91.7%
EBIT	3.4	-0.2	n.m.	88.7	-96.2%
Net profit	1.2	-2.4	n.m.	25.2	-95.4%
EPS (€)	0.23	-0.47	n.m.	4.80	-95.3%

Source: DRAG

Figure 7 shows changes to our forecasts in comparison with our previous report of 16 November. Revenues and EBIT are lower than in our previous report because of the reduction in our oil price projections and also because the total number of wells is lower at year end. Our combined net EV estimate for CCE and Elster rises by 8.4% to €84.0m (previously: €77.5m) because of the reduction in our capital and maintenance cost assumptions and also because we assume 182 wells over most of the projects' lives (previously:160).

Figure 7: Changes to forecasts

All figures in € 000s	2016E New	2016E Old	Δ	2017E New	2017E Old	Δ	2018E New	2018E Old	Δ
Revenues	**19,086**	**38,955**	**-51.0%**	**86,811**	**126,093**	**-31.2%**	**117,576**	**165,154**	**-28.8%**
EBITDA	7,837	28,773		74,415	94,195		99,705	121,574	
Depreciation and amortisation	4,937	12,711		21,659	32,147		32,006	43,368	
Operating income (EBIT)	**2,899**	**16,062**	**-81.9%**	**52,755**	**61,778**	**-14.6%**	**67,699**	**78,206**	**-13.4%**
Net financial result	-3,488	-2,684		-2,752	-3,506		-3,391	-6,201	
Pre-tax income (EBT)	-588	13,397		50,004	58,272		64,308	72,005	
Income taxes	10,558	10,393		-17,501	-20,395		-22,508	-25,202	
Net before minorities	**9,970**	**23,791**		**32,502**	**37,877**		**41,800**	**46,803**	
Minority interests	-1,668	-4,685		-5,880	-8,230		-7,517	-9,379	
Net income after mins.	**8,301**	**19,106**		**26,622**	**29,646**		**34,283**	**37,424**	
EPS (€)	**1.64**	**3.77**	**-56.5%**	**5.26**	**5.86**	**-10.3%**	**6.77**	**7.30**	**-7.2%**

Source: DRAG; First Berlin Equity Research estimates

INCOME STATEMENT

All figures in € 000s	2013A	2014A	2015A	2016E	2017E	2018E
Revenues	**17,762**	**22,871**	**1,897**	**19,086**	**86,811**	**117,576**
EBITDA	1,907	114,160	4,933	7,837	74,415	99,705
Depreciation and amortisation	7,302	25,434	1,578	4,937	21,659	32,006
Operating income (EBIT)	**-5,395**	**88,726**	**3,355**	**2,899**	**52,755**	**67,699**
Net financial result	-2,414	-4,065	-3,912	-3,488	-2,752	-3,391
Non-operating expenses	0	0	0	0	0	0
Pre-tax income (EBT)	**-7,809**	**84,661**	**-557**	**-588**	**50,004**	**64,308**
Taxes	154	-30,645	1,086	10,558	-17,501	-22,508
Minority interests	-650	-28,845	626	-1,668	-5,880	-7,517
Net income / loss	**-8,305**	**25,171**	**1,155**	**8,301**	**26,622**	**34,283**
EPS (in €)	**-1.56**	**4.80**	**0.23**	**1.64**	**5.26**	**6.77**
Ratios						
EBIT margin on revenues	-30.4%	387.9%	176.9%	15.2%	60.8%	57.6%
EBITDA margin on revenues	10.7%	499.1%	260.0%	41.1%	85.7%	84.8%
Net margin on revenues	-46.8%	110.1%	60.9%	43.5%	30.7%	29.2%
Tax rate	2.0%	36.2%	195.0%	1794.7%	35.0%	35.0%
Y-Y Growth						
Revenues	473.9%	28.8%	-91.7%	906.1%	354.8%	35.4%
Operating income	n.m.	n.m.	-96.2%	-13.6%	1719.6%	28.3%
Net income/ loss	n.m.	n.m.	-95.4%	618.7%	220.7%	28.8%

BALANCE SHEET

All figures in € 000s	2013A	2014A	2015A	2016E	2017E	2018E
Assets						
Current assets, total	**56,752**	**93,881**	**78,734**	**68,731**	**37,011**	**35,841**
Cash and cash equivalents	46,063	92,821	71,042	57,753	11,956	5,595
Inventories	3,763	38	55	3,293	7,516	9,074
Receivables	1,319	106	2,831	4,391	10,022	12,098
Prepayments	137	190	276	2,195	5,011	6,049
Other current assets	5,470	726	4,530	1,098	2,505	3,025
Deferred tax assets	**4,157**	**4,322**	**534**	**0**	**0**	**0**
Non-current assets, total	**70,534**	**36,493**	**48,786**	**89,753**	**155,047**	**193,466**
Intangible assets	4,541	12,279	17,501	17,501	17,501	17,501
Land and buildings	1,856	0	5,314	1,500	1,500	1,500
Producing oil plants	32,802	0	0	0	0	0
Mines under construction	0	0	0	0	0	0
Exploration and evaluation	20,153	1,647	1,596	34,700	82,967	111,367
Plant and machinery	2,873	513	444	9,653	23,081	30,982
Other equipment	209	94	119	2,587	6,186	8,304
Equity investments	3,702	11,456	11,822	11,822	11,822	11,822
Securities classified as fixed assets	4,398	10,504	11,990	11,990	11,990	11,990
Total assets	**131,443**	**134,696**	**128,054**	**158,484**	**192,058**	**229,307**
Shareholders' equity & debt						
Current liabilities, total	**18,221**	**4,675**	**4,230**	**4,467**	**7,938**	**8,399**
Bank debt	3,256	414	7	0	0	0
Accounts payable	13,928	217	957	2,978	5,292	5,599
Other current liabilities	1,037	4,044	3,266	1,489	2,646	2,800
Long-term liabilities, total	**72,021**	**63,147**	**57,955**	**81,496**	**81,882**	**81,933**
Bond debt	62,237	57,111	51,555	75,000	75,000	75,000
Bank debt	5,993	5,993	6,400	6,000	6,000	6,000
Other long term liabilities	3,791	43	0	496	882	933
Provisions	1,993	1,540	1,089	2,000	2,000	2,000
Minority interests	9,723	2,331	2,566	4,235	10,114	17,633
Shareholders' equity	29,171	60,157	59,274	64,285	87,122	116,342
Consolidated equity	**38,894**	**62,488**	**61,840**	**68,520**	**97,237**	**133,975**
Deferred tax liabilities	404	2,846	2,939	2,000	3,000	3,000
Total consolidated equity and debt	**131,533**	**134,696**	**128,054**	**158,484**	**192,058**	**229,307**
Ratios						
Current ratio (x)	3.11	20.08	18.61	15.38	4.66	4.27
Quick ratio (x)	2.91	20.07	18.60	14.65	3.72	3.19
Financial leverage	54.1%	-63.7%	-40.5%	16.4%	58.7%	47.3%
Book value per share (€)	5.48	11.94	11.77	12.76	17.30	23.10
Net cash (debt)	-21,025	39,807	25,070	-11,257	-57,054	-63,415
Return on equity (ROE)	-17.4%	106.6%	0.9%	15.3%	39.2%	36.2%

CASH FLOW STATEMENT

All figures in € 000s	2013A	2014A	2015A	2016E	2017E	2018E
EBIT	**-5,395**	**88,726**	**3,355**	**2,899**	**52,755**	**67,699**
Depreciation and amortisation	7,302	25,434	1,578	4,937	21,659	32,006
EBITDA	**1,907**	**114,160**	**4,933**	**7,837**	**74,415**	**99,705**
Changes in working capital	-2,546	1,524	-4,625	-2,544	-10,222	-4,679
Interest paid	-35	-4,263	-3,912	-3,488	-2,752	-3,391
Tax	154	-29,091	1,086	10,558	-17,501	-22,508
Profit/loss from sale of Tekton Energy	0	-103,605	0	0	0	0
Other adjustments	-1,248	2,299	3,712	0	0	0
Operating cash flow	**-1,768**	**-18,976**	**1,194**	**12,363**	**43,940**	**69,127**
Investing cash flow	**-37,277**	**89,588**	**-15,100**	**-41,678**	**-72,386**	**-68,402**
Free cash flow	**-39,045**	**70,612**	**-13,906**	**-29,315**	**-28,446**	**725**
Dividends, share buybacks	-2,661	-38,929	-4,403	-2,785	-2,785	-5,063
Equity financing	4,558	0	0	0	0	0
Debt financing	67,600	0	0	23,038	0	0
Debt repayment	-2,749	-8,540	-6,182	0	0	0
Other	2,129	0	-3,481	0	0	0
Financing cash flow	**68,877**	**-47,469**	**-14,066**	**20,253**	**-2,785**	**-5,063**
Change in cash and equivalents	**29,831**	**23,143**	**-27,972**	**-9,062**	**-31,230**	**-4,338**
Other	0	11,132	2,327	0	0	0
Cash and cash equivalents, start of the year	9,984	39,815	74,090	48,445	39,383	8,153
Cash and cash equivalents, end of the year	**39,815**	**74,090**	**48,445**	**39,383**	**8,153**	**3,815**
EBITDA/share (in €)	**0.36**	**21.70**	**0.97**	**1.55**	**14.71**	**19.70**
Y-Y Growth						
Operating cash flow	n.m.	n.m.	n.m.	935.4%	255.4%	57.3%
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EBITDA/share	-19.4%	5954.7%	-95.5%	58.9%	849.6%	34.0%

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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...20	↓	↓	↓	↓
21	29 January 2015	€15.05	Buy	€21.00
22	9 June 2015	€17.94	Buy	€25.00
23	16 November 2015	€17.01	Buy	€23.00
24	Today	€15.72	Buy	€24.00

Authored by: Simon Scholes, Analyst

Company responsible for preparation:

First Berlin Equity Research GmbH
Mohrenstraße 34
10117 Berlin

Tel. +49 (0)30 - 80 93 96 94 Fax +49 (0)30 - 80 93 96 87

info@firstberlin.com
www.firstberlin.com

Person responsible for forwarding or distributing this financial analysis: Martin Bailey

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