



# CRITICAL MATERIALS FOR A SUSTAINABLE PLANET

Investor Presentation | First Quarter 2023



AMG ADVANCED METALLURGICAL GROUP N.V.



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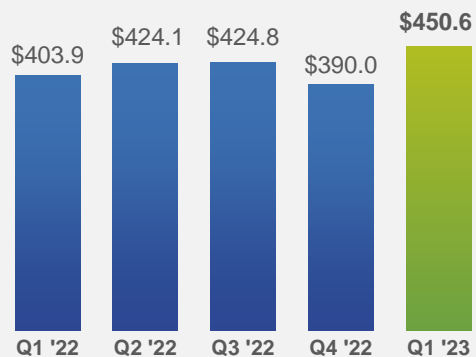
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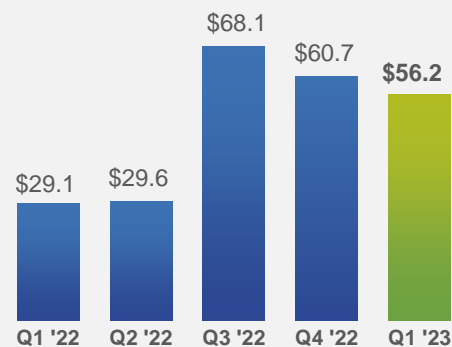
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# FINANCIAL HIGHLIGHTS

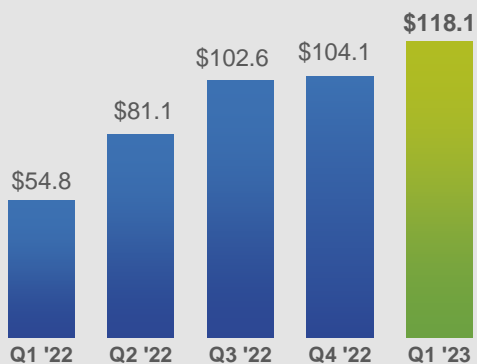
## REVENUE (IN MILLIONS OF US DOLLARS)



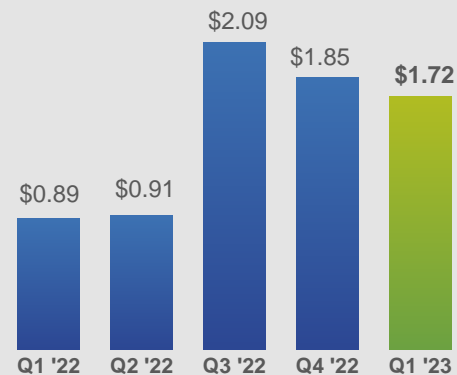
## NET INCOME ATTRIBUTABLE TO SHAREHOLDERS (IN MILLIONS OF US DOLLARS)



## EBITDA (IN MILLIONS OF US DOLLARS)

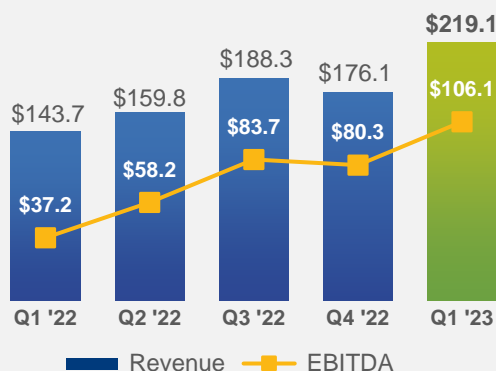


## EARNINGS PER SHARE



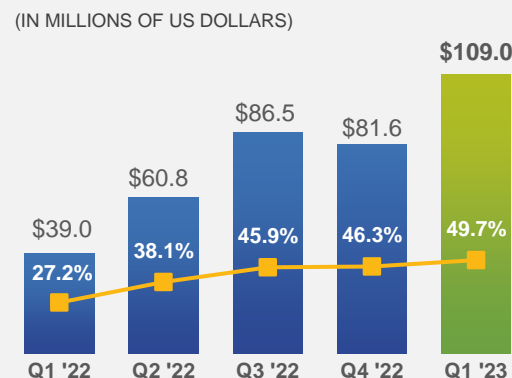
# AMG CLEAN ENERGY MATERIALS FINANCIAL HIGHLIGHTS

## REVENUE & EBITDA (IN MILLIONS OF US DOLLARS)



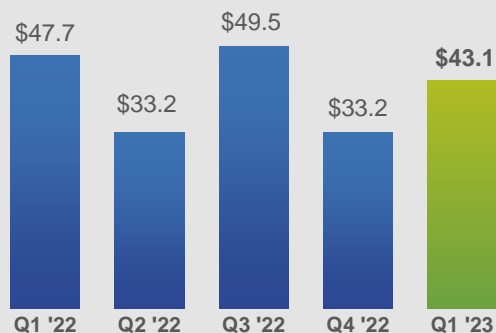
EBITDA increased \$69 million vs. Q1 '22

## GROSS PROFIT (IN MILLIONS OF US DOLLARS)



Gross profit increased \$70 million vs. Q1 '22

## CAPITAL EXPENDITURES (IN MILLIONS OF US DOLLARS)



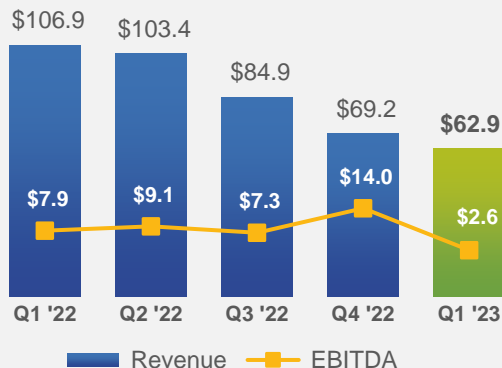
10% YoY

## KEY HIGHLIGHTS

- Revenue increased \$75 million versus Q1 2022, to \$219 million, driven mainly by higher prices in tantalum and lithium concentrates, as well as increased sales volumes of vanadium and tantalum concentrate
- SG&A expenses in Q1 2023 were 23% higher than in Q1 2022, mainly driven by the increase in headcount related to the lithium and vanadium expansion projects
- In Q1 2023, AMG sold 20,509 dry metric tons ("dmt") of lithium concentrates, with an average realized sales price of \$4,846/dmt CIF China; the exceptional average cost per ton of \$338/dmt CIF China was driven by high sales volumes of tantalum concentrate, and drove AMG Brazil to \$92 million in EBITDA in the quarter

# AMG CRITICAL MINERALS FINANCIAL HIGHLIGHTS

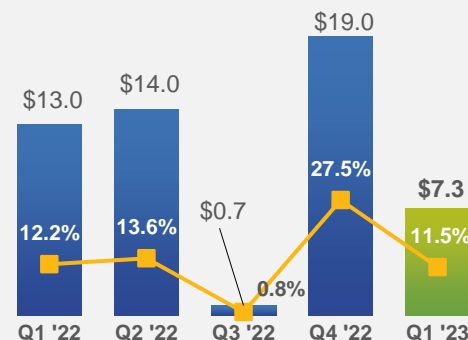
## REVENUE & EBITDA (IN MILLIONS OF US DOLLARS)



Revenue decreased vs. Q1 '22 largely due to lower volumes

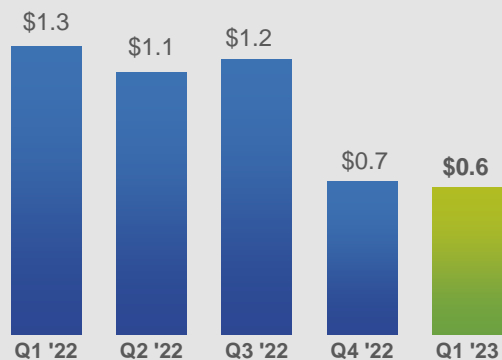
## GROSS PROFIT (IN MILLIONS OF US DOLLARS)

(IN MILLIONS OF US DOLLARS)



Gross profit decreased \$6M due to lower volumes

## CAPITAL EXPENDITURES (IN MILLIONS OF US DOLLARS)



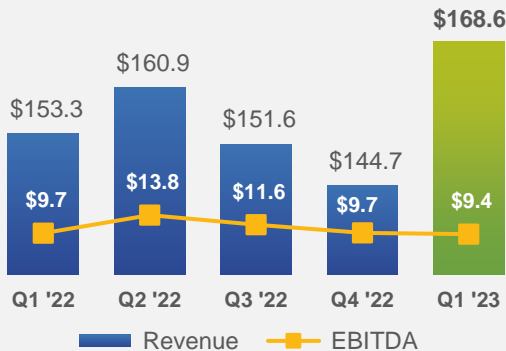
54% YoY

## KEY HIGHLIGHTS

- Revenue decreased by \$44 million, to \$63 million, in Q1 2023 mainly due to lower volumes across the segment primarily driven by the silicon metal plant care and maintenance plan for the first two months of 2023 prior to restarting and operating one furnace in March
- Gross profit of \$7 million was \$6 million lower than Q1 2022, largely due to the lower volumes
- SG&A expenses in Q1 2023 decreased by 3% compared to Q1 2022, driven by lower personnel costs and variable compensation expense due to the interruptions in AMG Silicon's operations earlier this quarter

# AMG CRITICAL MATERIALS TECHNOLOGIES FINANCIAL HIGHLIGHTS

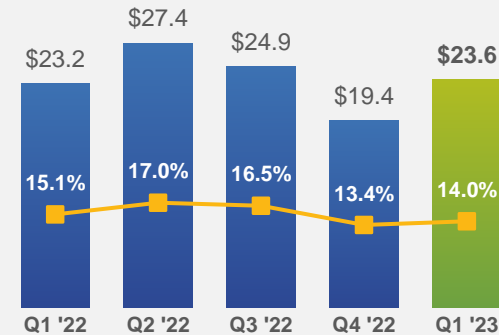
## REVENUE & EBITDA (IN MILLIONS OF US DOLLARS)



Revenue increased 10% vs. Q1 '22

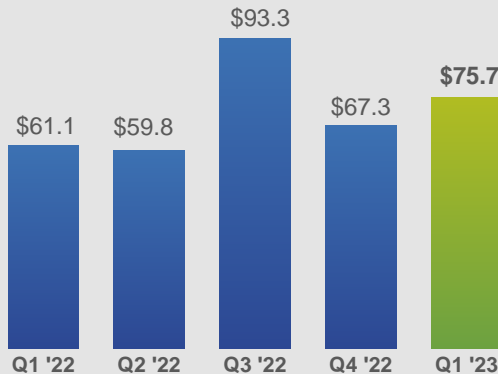
## GROSS PROFIT (IN MILLIONS OF US DOLLARS)

(IN MILLIONS OF US DOLLARS)



Gross profit for Q1 '23 in line with Q1 '22

## ORDER INTAKE (IN MILLIONS OF US DOLLARS)



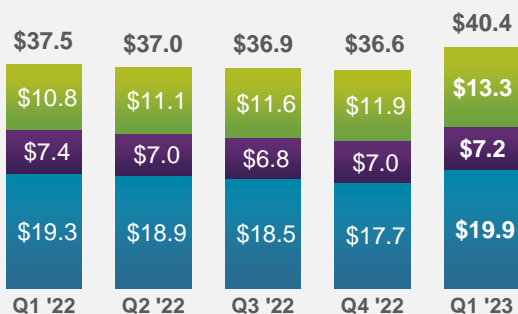
Book to bill ratio of 1.21x in Q1 '23

## KEY HIGHLIGHTS

- Q1 2023 revenue increased by 10% vs. Q1 2022, driven by higher sales volumes of titanium alloys and chrome metal
- EBITDA was \$9 million in Q1 2023 vs. \$10 million in Q1 2022; this slight decrease was due to the lower chrome prices, partially offset by stronger profitability from our Engineering business
- The Company signed \$76 million in new orders during Q1 2023, representing a 1.21x book to bill ratio, driven by strong orders of remelting, turbine blade and heat treatment furnaces
- Order backlog was \$237 million as of March 31, 2023, the highest since March 31, 2020

# KEY CORPORATE INCOME STATEMENT ITEMS

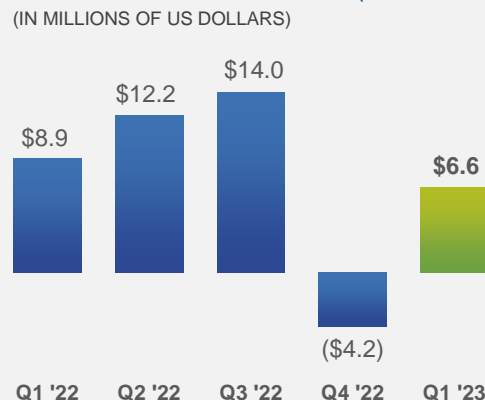
## SG&A EXPENSES (IN MILLIONS OF US DOLLARS)



■ Clean Energy Materials  
■ Critical Minerals  
■ Critical Materials Technologies

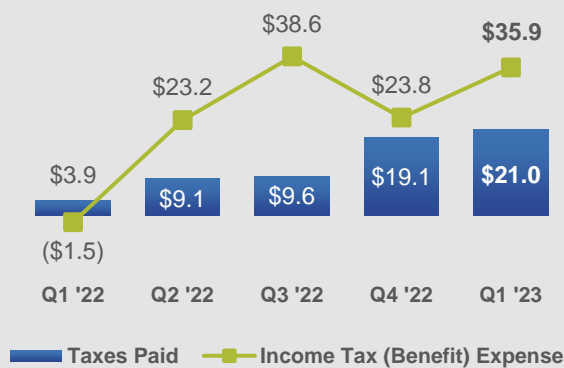
SG&A increased 8% vs. Q1 '22

## NET FINANCE COSTS (INCOME) (IN MILLIONS OF US DOLLARS)



Variance driven by FX gains of \$2 million primarily due to non-cash intergroup balances

## TAXES (IN MILLIONS OF US DOLLARS)



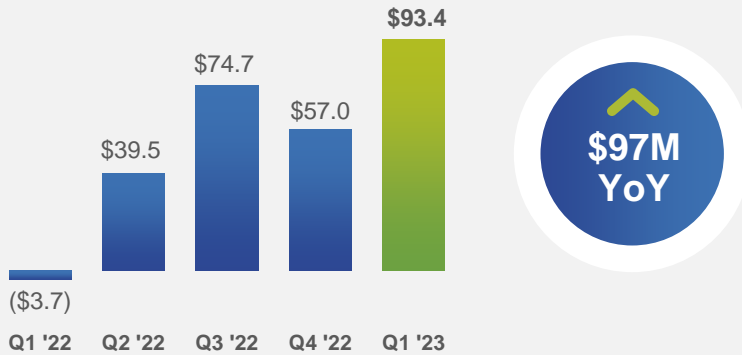
Income tax expense variance vs. Q1 '22 due to higher profitability in AMG Lithium & movements in the Brazilian real

## KEY HIGHLIGHTS

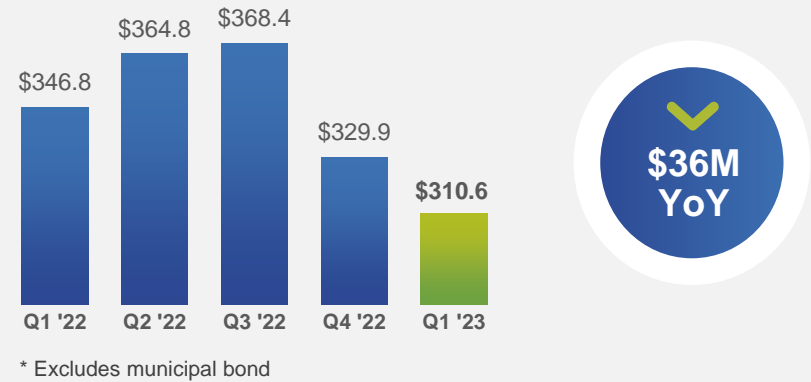
- SG&A expenses were \$40 million in Q1 2023, 8% higher than Q1 2022, with the variance largely due to higher personnel costs and variable compensation expense driven by the increase in headcount related to the lithium and vanadium expansion projects
- AMG's net finance cost in Q1 2023 was \$7 million vs. \$9 million in Q1 2022; this variance was mainly driven by foreign exchange gains of \$2 million due to non-cash intergroup balances
- AMG recorded an income tax expense of \$36 million in Q1 2023, compared to a tax benefit of \$1 million in Q1 2022; this variance was mainly driven by higher profitability in AMG Lithium at its Brazil operation coupled with movements in the Brazilian real

# CASH FLOW AND WORKING CAPITAL

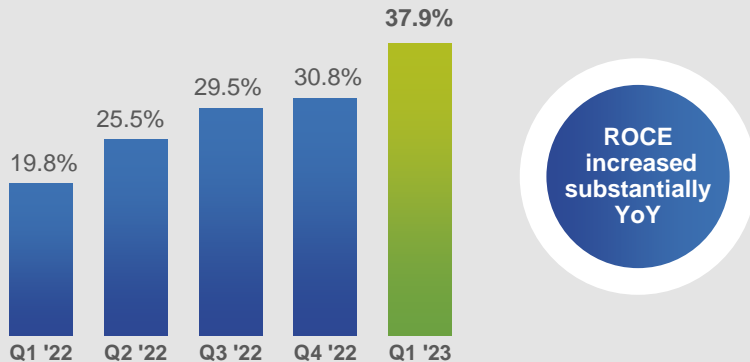
## OPERATING CASH FLOW (IN MILLIONS OF US DOLLARS)



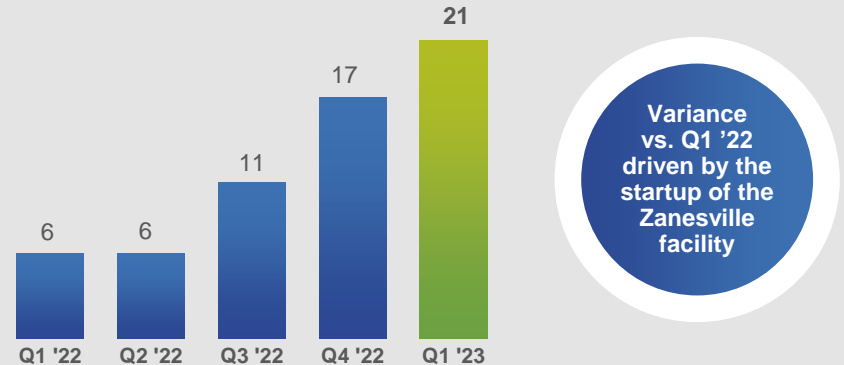
## NET DEBT \* (IN MILLIONS OF US DOLLARS)



## ANNUALIZED ROCE



## WORKING CAPITAL DAYS





# APPENDIX



# AMG PROVIDES CRITICAL MATERIALS AND RELATED PROCESS TECHNOLOGIES TO ADVANCE A LESS CARBON-INTENSIVE WORLD

## A GLOBAL IMPERATIVE FOR THE 21<sup>ST</sup> CENTURY

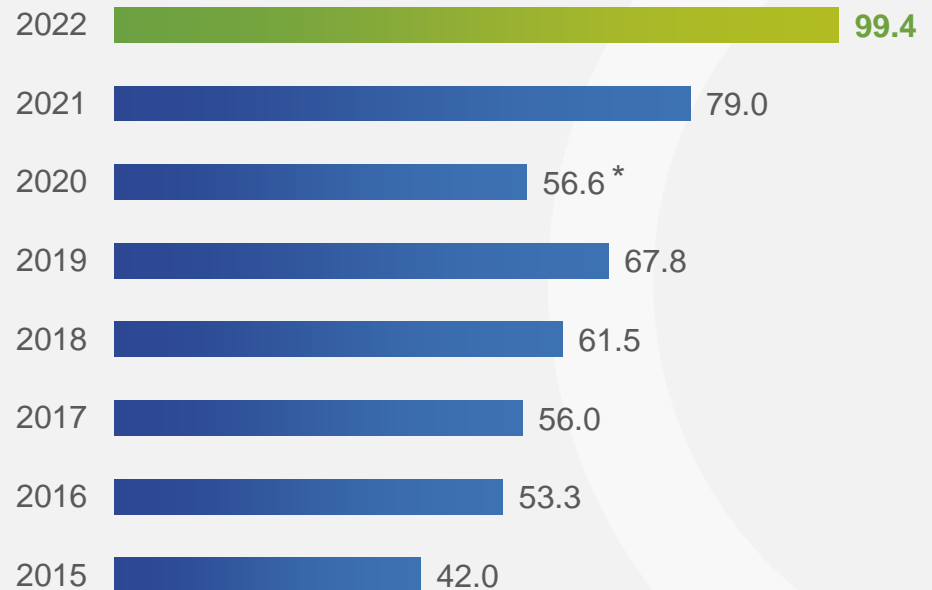
### AMG: ENABLING TECHNOLOGIES

Products and processes saving CO<sub>2</sub> emissions during use (e.g., light-weighting and fuel efficiency in the aerospace and automotive industries)

### AMG: MITIGATING TECHNOLOGIES

Products and processes saving raw minerals, energy and CO<sub>2</sub> emissions during manufacturing (e.g., recycling of ferrovandium)

## AMG'S ENABLED CO<sub>2</sub> EMISSION REDUCTIONS (Million MT)



\* 2020 decrease due to the global pandemic significantly impacting volumes in our aerospace exposed businesses

# QUARTERLY REVENUE DRIVERS

## CLEAN ENERGY MATERIALS

SEGMENT RESULTS		
	<u>Q1 2023</u>	<u>Q1 2022</u>
Revenue	\$219.1	\$143.7
Gross Profit	\$109.0	\$39.0

KEY DRIVERS		
	Price	Volume
Vanadium		
Spodumene		
Tantalum		

## CRITICAL MINERALS

SEGMENT RESULTS		
	<u>Q1 2023</u>	<u>Q1 2022</u>
Revenue	\$62.9	\$106.9
Gross Profit	\$7.3	\$13.0

KEY DRIVERS		
	Price	Volume
Graphite		
Silicon		
Antimony		

## CRITICAL MATERIALS TECHNOLOGIES

SEGMENT RESULTS		
	<u>Q1 2023</u>	<u>Q1 2022</u>
Revenue	\$168.6	\$153.3
Gross Profit	\$23.6	\$23.2

KEY DRIVERS		
	Price	Volume
Chrome		
Titanium Alloys		
Engineering Book to Bill		*

\* AMG Engineering variance arrow represents total change in book to bill, not volume or price

## CRITICAL MATERIALS — AVERAGE QUARTERLY MARKET PRICES

MATERIALS	Q1 2022	Q1 2023	APR 26, 2023 SPOT	Q1 '23 VS. Q1 '22 % CHANGE	SPOT VS. Q1 '23 % CHANGE
Ferrovandium (\$/lb) <i>CRU</i>	\$22.49	\$19.35	\$19.25	(14%)	(1%)
Molybdenum (\$/lb) <i>S&amp;P Global Platts</i>	\$19.09	\$32.41	\$22.00	70%	(32%)
Nickel (\$/MT) <i>Fastmarkets</i>	\$27,944	\$25,968	\$23,625	(7%)	(9%)
Chrome Metal (\$/lb) <i>CRU</i>	\$6.23	\$5.65	\$5.55	(9%)	(2%)
Tantalum (\$/lb) <i>Argus Metals</i>	\$87.48	\$102.65	\$90.50	17%	(12%)
Spodumene (\$/MT) <i>Asian Metal</i>	\$2,716	\$5,600	\$4,090	106%	(27%)
Lithium Carbonate (\$/MT) <i>Asian Metal</i>	\$66,500	\$57,864	\$24,193	(13%)	(58%)
Lithium Hydroxide (\$/MT) <i>Fastmarkets</i>	\$48,083	\$74,833	\$45,000	56%	(40%)
Antimony (\$/MT) <i>Fastmarkets</i>	\$13,865	\$12,673	\$11,950	(9%)	(6%)
Graphite (\$/MT) <i>Benchmark Minerals</i>	\$1,205	\$1,146	\$1,145	(5%)	—
Silicon Metal (€/MT) <i>CRU</i>	€4,785	€3,517	€3,200	(26%)	(9%)

## CRITICAL MATERIALS — FULL YEAR AND CURRENT SPOT PRICES

MATERIALS	AVG 2021	AVG 2022	APR 26, 2023 SPOT	AVG '22 VS. AVG '21 % CHANGE	SPOT VS. AVG '22 % CHANGE
Ferrovandium (\$/lb) <i>CRU</i>	\$15.81	\$23.89	\$19.25	51%	(19%)
Molybdenum (\$/lb) <i>S&amp;P Global Platts</i>	\$15.98	\$18.91	\$22.00	18%	16%
Nickel (\$/MT) <i>Fastmarkets</i>	\$18,500	\$25,993	\$23,625	41%	(9%)
Chrome Metal (\$/lb) <i>CRU</i>	\$4.37	\$7.13	\$5.55	63%	(22%)
Tantalum (\$/lb) <i>Argus Metals</i>	\$76.01	\$99.17	\$90.50	30%	(9%)
Spodumene (\$/MT) <i>Asian Metal</i>	\$971	\$4,386	\$4,090	352%	(7%)
Lithium Carbonate (\$/MT) <i>Asian Metal</i>	\$18,882	\$72,457	\$24,193	284%	(67%)
Lithium Hydroxide (\$/MT) <i>Fastmarkets</i>	\$16,560	\$68,000	\$45,000	311%	(34%)
Antimony (\$/MT) <i>Fastmarkets</i>	\$11,752	\$13,367	\$11,950	14%	(11%)
Graphite (\$/MT) <i>Benchmark Minerals</i>	\$1,030	\$1,185	\$1,145	15%	(3%)
Silicon Metal (€/MT) <i>CRU</i>	€3,825	€4,428	€3,200	16%	(28%)



# PROFIT FOR THE PERIOD TO ADJUSTED EBITDA RECONCILIATION

(000's USD)	Q1 2023	Q1 2022
Profit for the period	\$56,447	\$29,884
Income tax expense (benefit)	35,927	(1,489)
Net finance cost	6,617	8,919
Equity-settled share-based payment transactions	1,469	1,380
Restructuring (reversal) expense	(263)	141
Silicon's partial closure	547	—
Inventory cost adjustment	510	—
Asset impairment reversal	(767)	—
Strategic project expense <sup>(1)</sup>	3,625	4,796
Share of loss of associates	1,032	500
Others	—	102
<b>EBIT</b>	<b>105,144</b>	<b>44,233</b>
Depreciation and amortization	12,967	10,527
<b>EBITDA</b>	<b>118,111</b>	<b>54,760</b>

Notes:

- (1) The Company is in the initial development and ramp-up phases for several strategic expansion projects, including AMG Vanadium's expansion project, the joint venture with Shell, Hybrid Lithium Vanadium Redox Flow Battery System, and the lithium expansion in Germany, which incurred project expenses during the quarter but are not yet operational. AMG is adjusting EBITDA for these exceptional charges



LITHIUM LAB



LITHIUM HYDROXIDE - BITTERFELD, GERMANY



LIVA BATTERY



LI PROCESSING, AMG BRAZIL



TITANIUM



PLUTONIUM



TANTALUM, NIOBIUM, AND HAFNIUM

This announcement appears as a matter of record.



AMG's LAW:

"Everything that  
can be recycled  
will be recycled."

AMG ADVANCED METALLURGICAL GROUP N.V.

[amg-nv.com](http://amg-nv.com)



LITHIUM TAILINGS



ENGINEERING - HANAU, GERMANY



MELTSHOP - ZANESVILLE, OHIO



V<sub>2</sub>O<sub>5</sub>



VANADIUM, MOLYBDENUM AND NICKEL - CAMBRIDGE, OHIO



VANADIUM, MOLYBDENUM AND NICKEL - ZANESVILLE, OHIO