

# ACCELERATING THE ENERGY TRANSITION

Investor Presentation | Fourth Quarter 2022



AMG Lithium  
Bitterfeld, Germany



AMG ADVANCED METALLURGICAL GROUP N.V.

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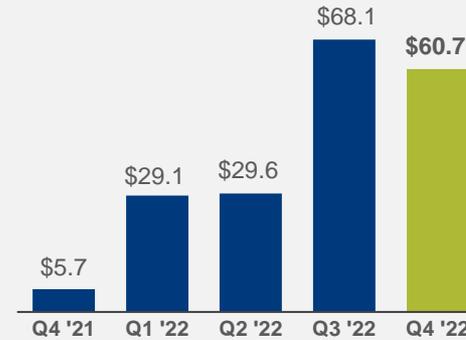
# FINANCIAL HIGHLIGHTS

## 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 (IN US DOLLARS)



# AMG CLEAN ENERGY MATERIALS FINANCIAL HIGHLIGHTS

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



**EBITDA increased \$55 million vs. Q4 '21**

## GROSS PROFIT EXCLUDING EXCEPTIONAL ITEMS (IN MILLIONS OF US DOLLARS)



**Gross profit increased \$54 million vs. Q4 '21**

## CAPITAL EXPENDITURES (IN MILLIONS OF US DOLLARS)



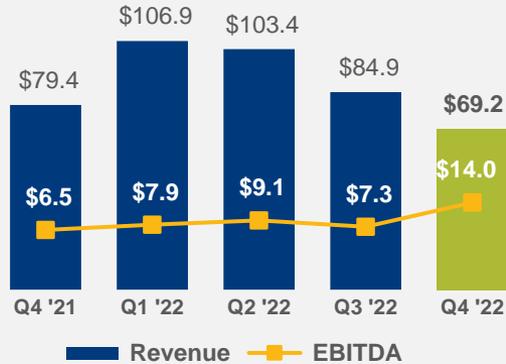
**Q4 '22 spending in line with Q4 '21**

## KEY HIGHLIGHTS

- Revenue increased 53% vs Q4 2021, to \$176 million, driven mainly by higher prices in vanadium, tantalum and lithium concentrates, as well as increased sales volumes of vanadium and tantalum concentrate
- Gross profit before non-recurring items in Q4 2022 increased \$54 million compared to Q4 2021 primarily due to the increased price environment
- SG&A expenses in Q4 2022 were in line with Q4 2021 at \$12 million
- EBITDA increased to \$80 million from \$26 million due to the improved gross profit

# AMG CRITICAL MINERALS FINANCIAL HIGHLIGHTS

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



EBITDA more than doubled vs. Q4 '21

## GROSS PROFIT EXCLUDING EXCEPTIONAL ITEMS (IN MILLIONS OF US DOLLARS)



Gross profit increased \$7.3 million vs. Q4 '21

## CAPITAL EXPENDITURES (IN MILLIONS OF US DOLLARS)



50% YoY

## KEY HIGHLIGHTS

- Revenue decreased by \$10 million, to \$69 million, in Q4 2022 mainly due to lower volumes across the segment
- Gross profit before non-recurring items of \$19 million was largely driven by the improved price environment and favorable energy contracts for silicon production in Q4 2022
- SG&A expenses in Q4 2022 decreased by 20% compared to Q4 2021 due to lower share-based compensation expense in Q4 2022 associated with a reversal recorded in the prior year
- EBITDA in Q4 2022 more than doubled YoY, to \$14 million, because of the improved gross profit and favorable energy contracts at AMG Silicon in the current quarter

# AMG CRITICAL MATERIALS TECHNOLOGIES FINANCIAL HIGHLIGHTS

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



Revenue increased 7% vs. Q4 '21

## GROSS PROFIT EXCLUDING EXCEPTIONAL ITEMS (IN MILLIONS OF US DOLLARS)



Gross profit decreased due to chrome margins that were impacted by market disruptions

## ORDER INTAKE (IN MILLIONS OF US DOLLARS)



Book to bill ratio of 1.28x in Q4 '22

## KEY HIGHLIGHTS

- Q4 2022 revenue increased by \$9 million vs. Q4 2021, driven by higher sales volumes of titanium aluminides and higher prices for chrome metal
- EBITDA was \$10 million in Q4 2022 vs. \$12 million in Q4 2021 with the decrease due to the chrome market dislocation offset by stronger profitability from the Engineering business
- The Company signed \$67 million in new orders during Q4 2022, representing a 1.28x book to bill ratio, driven by strong orders of turbine blade and induction furnaces
- Order backlog was \$220 million as of December 31, 2022, the highest since March 31, 2020

# KEY CORPORATE INCOME STATEMENT ITEMS

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

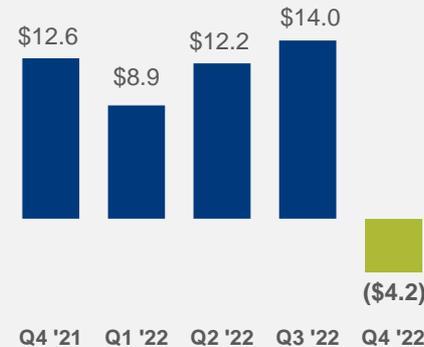


- Clean Energy Materials
- Critical Minerals
- Critical Materials Technologies

SG&A decreased 7% vs. Q4 '21

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

(IN MILLIONS OF US DOLLARS)



Variance driven by FX gains of \$10 million primarily due to non-cash intergroup balances

## TAXES (IN MILLIONS OF US DOLLARS)



- Taxes Paid
- Income Tax Expense (Benefit)

Income tax expense variance vs. Q4 '21 driven by enhanced operating results in AMG Lithium & movements in the Brazilian real

## KEY HIGHLIGHTS

- SG&A expenses were \$37 million in Q4 2022 vs. \$40 million in Q4 2021, with the decrease due to lower share-based compensation expense associated with a reversal in the prior year
- AMG had \$4 million in net finance income in Q4 2022 vs. a cost of \$13 million in Q4 2021; this variance was mainly driven by foreign exchange gains of \$10 million due to non-cash intergroup balances
- AMG recorded an income tax expense of \$24 million in Q4 2022, compared to \$5 million in Q4 2021; this variance was mainly driven by enhanced operating results 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)



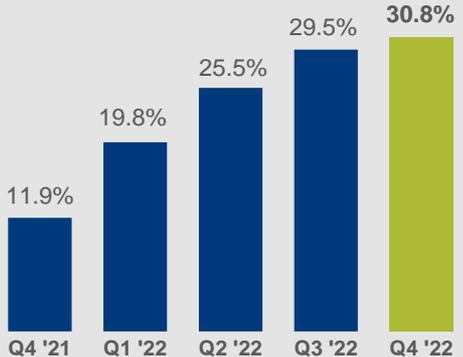
89%  
YoY

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



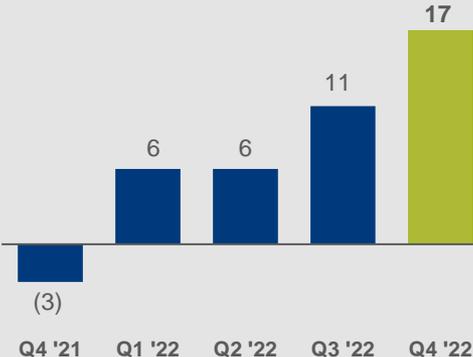
Increase  
vs. YE 2021  
mainly due to  
the significant  
investment in  
growth  
initiatives

**ANNUALIZED ROCE**



ROCE  
was more  
than double  
vs. Q4 '21

**WORKING CAPITAL DAYS**



Variance  
vs. Q4 '21  
driven by the  
startup of the  
Zanesville  
facility

# APPENDIX



*AMG Engineering  
Hanau, Germany*

# LEADER IN ADVANCED TECHNOLOGIES TO ADDRESS CO<sub>2</sub> REDUCTION

## CO<sub>2</sub> REDUCTION

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

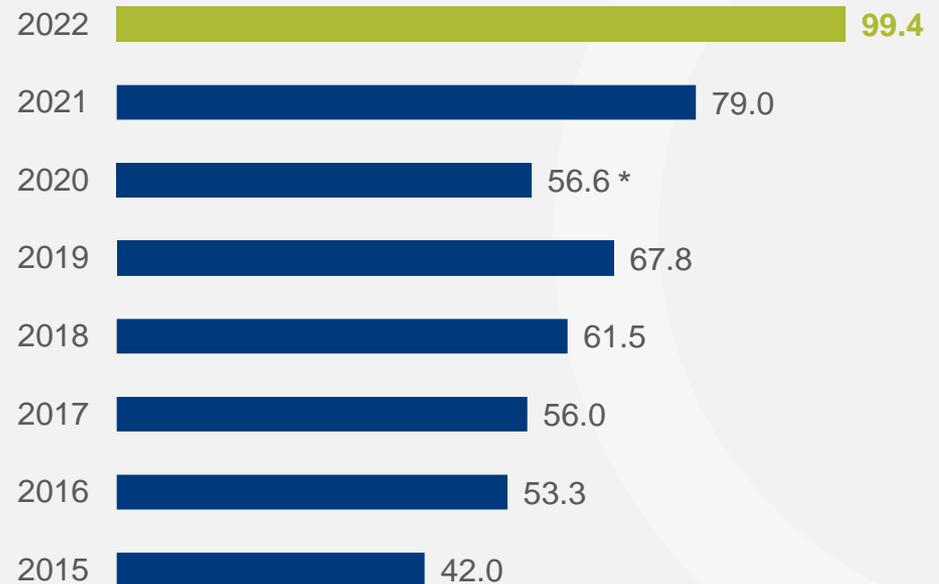
#### AMG: ENABLING TECHNOLOGIES

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 ferrovanadium)

### 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		KEY DRIVERS	
	<u>Q4 2022</u>	<u>Q4 2021</u>	Price	Volume
Revenue	\$176.1	\$115.4	Vanadium	
Gross Profit *	\$82.8	\$29.0	Spodumene	
			Tantalum	

## CRITICAL MINERALS

	SEGMENT RESULTS		KEY DRIVERS	
	<u>Q4 2022</u>	<u>Q4 2021</u>	Price	Volume
Revenue	\$69.2	\$79.4	Graphite	
Gross Profit *	\$18.6	\$11.4	Silicon	
			Antimony	

## CRITICAL MATERIALS TECHNOLOGIES

	SEGMENT RESULTS		KEY DRIVERS	
	<u>Q4 2022</u>	<u>Q4 2021</u>	Price	Volume
Revenue	\$144.7	\$135.5	Chrome	
Gross Profit *	\$20.7	\$22.4	Titanium Alloys	
			Engineering Book to Bill	**

\* Gross Profit excluding exceptional items

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

## CRITICAL MATERIALS — AVERAGE QUARTERLY MARKET PRICES

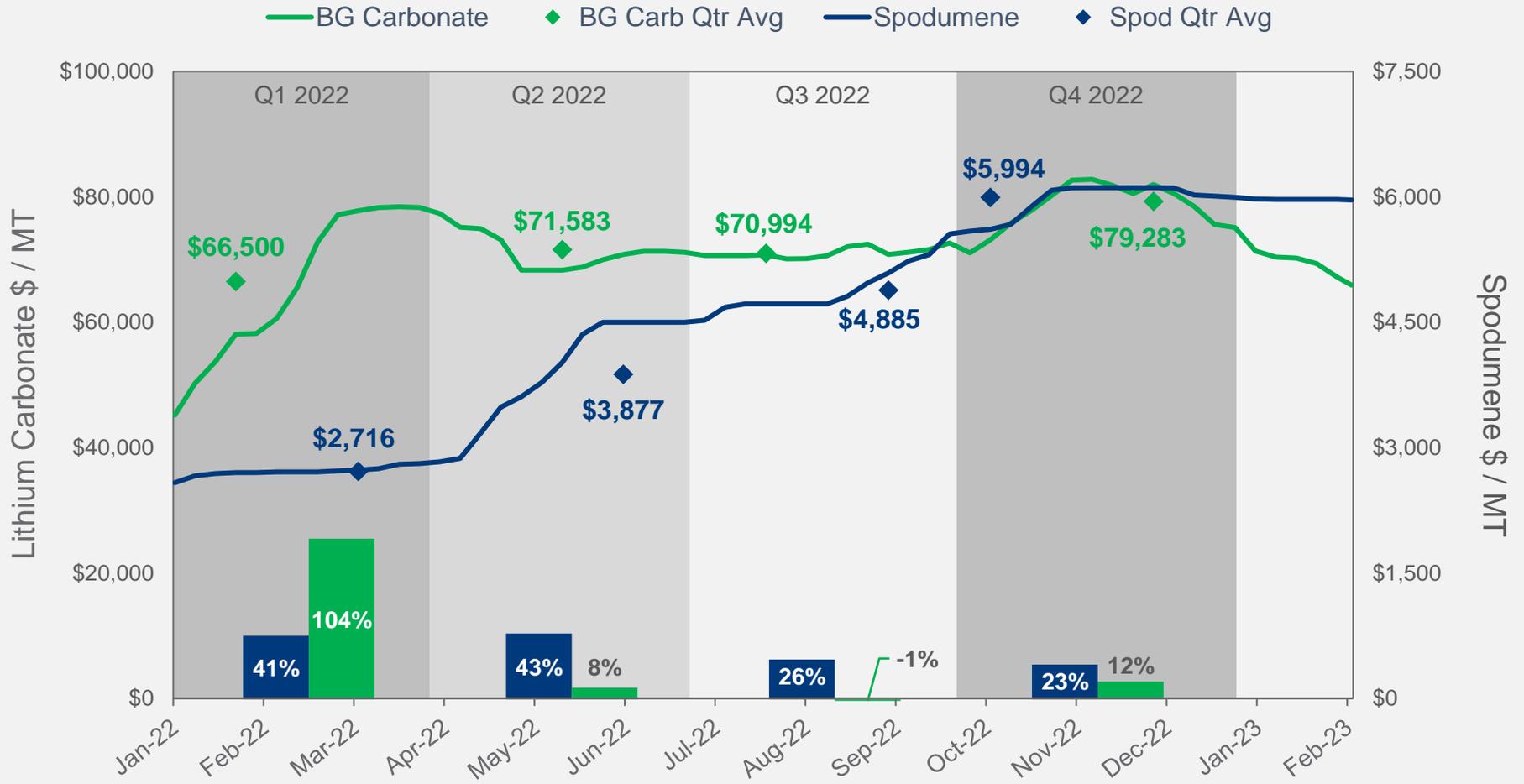
MATERIALS	Q4 2021	Q4 2022	FEB 15, 2023 SPOT	Q4 '22 VS. Q4 '21 % CHANGE	SPOT VS. Q4 '22 % CHANGE
Ferrovandium (\$/lb) <i>CRU</i>	\$15.14	\$19.48	\$19.00	29%	(2%)
Molybdenum (\$/lb) <i>S&amp;P Global Platts</i>	\$18.87	\$22.07	\$35.40	17%	60%
Nickel (\$/MT) <i>Fastmarkets</i>	\$19,830	\$25,279	\$26,895	27%	6%
Chrome Metal (\$/lb) <i>CRU</i>	\$5.58	\$5.92	\$5.53	6%	(7%)
Tantalum (\$/lb) <i>Argus Metals</i>	\$76.43	\$86.40	\$103.50	13%	20%
Spodumene (\$/MT) <i>Asian Metal</i>	\$1,922	\$5,994	\$5,950	212%	(1%)
Lithium Carbonate (\$/MT) <i>Asian Metal</i>	\$32,577	\$79,283	\$64,578	143%	(19%)
Lithium Hydroxide (\$/MT) <i>Fastmarkets</i>	\$27,420	\$79,920	\$81,500	191%	2%
Antimony (\$/MT) <i>Fastmarkets</i>	\$13,223	\$11,423	\$13,200	(14%)	16%
Graphite (\$/MT) <i>Benchmark Minerals</i>	\$1,133	\$1,145	\$1,148	1%	0%
Silicon Metal (€/MT) <i>CRU</i>	€7,485	€3,720	€3,650	(50%)	(2%)

# CRITICAL MATERIALS — FULL YEAR AND CURRENT SPOT PRICES

MATERIALS	AVG 2021	AVG 2022	FEB 15, 2023 SPOT	AVG '22 VS. AVG '21 % CHANGE	SPOT VS. AVG '22 % CHANGE
Ferrovandium (\$/lb) <i>CRU</i>	\$15.81	\$23.89	\$19.00	51%	(20%)
Molybdenum (\$/lb) <i>S&amp;P Global Platts</i>	\$15.98	\$18.91	\$35.40	18%	87%
Nickel (\$/MT) <i>Fastmarkets</i>	\$18,500	\$25,993	\$26,895	41%	3%
Chrome Metal (\$/lb) <i>CRU</i>	\$4.37	\$7.13	\$5.53	63%	(22%)
Tantalum (\$/lb) <i>Argus Metals</i>	\$76.01	\$99.17	\$103.50	30%	4%
Spodumene (\$/MT) <i>Asian Metal</i>	\$971	\$4,386	\$5,950	352%	36%
Lithium Carbonate (\$/MT) <i>Asian Metal</i>	\$18,882	\$72,457	\$64,578	284%	(11%)
Lithium Hydroxide (\$/MT) <i>Fastmarkets</i>	\$16,560	\$68,000	\$81,500	311%	20%
Antimony (\$/MT) <i>Fastmarkets</i>	\$11,752	\$13,367	\$13,200	14%	(1%)
Graphite (\$/MT) <i>Benchmark Minerals</i>	\$1,030	\$1,185	\$1,148	15%	(3%)
Silicon Metal (€/MT) <i>CRU</i>	€3,825	€4,428	€3,650	16%	(18%)

# LITHIUM CARBONATE VS SPODUMENE PRICES

(ASIAN METAL MARKET SPOT)



**Notes**

- Prices are shown as weekly averages taken over the period January 1, 2022, through February 15, 2023.
- Pricing Indexes: Asian Metal's Spodumene Li<sub>2</sub>O 6%min CIF China USD/mt; and Asian Metal's Lithium Carbonate 99.5%min China RMB/mt, converted to \$/mt.



## PROFIT FOR THE PERIOD TO EBITDA RECONCILIATION

(000's USD)	Q4 2022	Q4 2021	FY 2022	FY 2021
Profit for the period	\$62,669	\$4,139	\$190,771	\$13,779
Income tax expense	23,827	5,293	84,097	8,707
Net finance (income) cost	(4,177)	12,644	30,941	33,602
Equity-settled share-based payment transactions	1,414	6,883	5,552	10,206
Restructuring expense (reversal)	389	(140)	582	522
Net contract settlements <sup>(1)</sup>	971	–	(45,436)	–
Inventory cost adjustment	1,589	–	1,589	1,164
Asset impairment (reversal) expense <sup>(1)</sup>	(990)	153	10,597	(711)
Environmental provision	143	230	133	11,941
Strategic project expense <sup>(2)</sup>	5,885	3,769	17,070	12,157
Share of loss of associates	–	219	1,250	1,053
Others	(1)	(512)	105	571
<b>EBIT</b>	<b>91,719</b>	<b>32,678</b>	<b>297,251</b>	<b>92,991</b>
Depreciation and amortization	12,342	11,207	45,299	43,685
<b>EBITDA</b>	<b>104,061</b>	<b>43,885</b>	<b>342,550</b>	<b>136,676</b>

Notes:

- (1) Associated with the silicon metal shutdown, AMG recorded income from the sale of an existing supply contract which positively impacted operating profit for the year. This income was offset by a settlement with a major customer and an impairment of existing assets.
- (2) 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



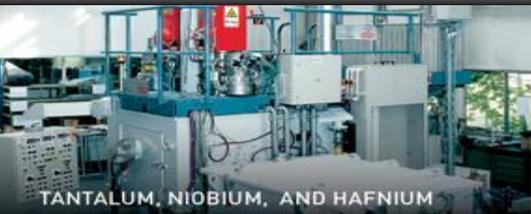
LI PROCESSING, AMG BRAZIL



TITANIUM



PLUTONIUM



TANTALUM, NIOBIUM, AND HAFNIUM



VANADIUM, MOLYBDENUM AND NICKEL – CAMBRIDGE, OHIO



VANADIUM, MOLYBDENUM AND NICKEL – ZANESVILLE, OHIO



LITHIUM TAILINGS



ENGINEERING – HANAU, GERMANY



MELTSHOP – ZANESVILLE, OHIO



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

This announcement appears as a matter of record.



AMG's LAW:

“Everything that can be recycled will be recycled.”

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