## THE TECHNOLOGY OF ENERGY TRANSITION

Investor Presentation | November 2025



AMG CRITICAL MATERIALS N.V.

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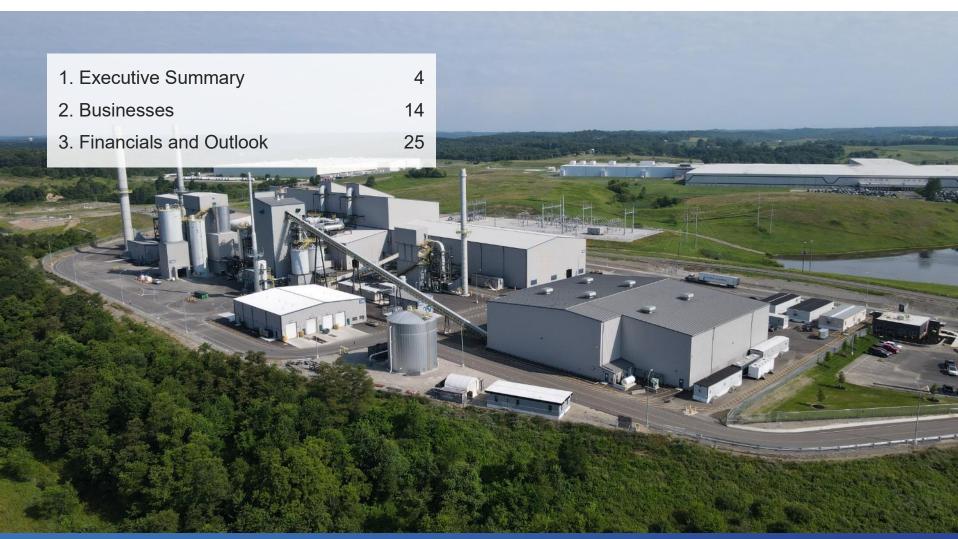
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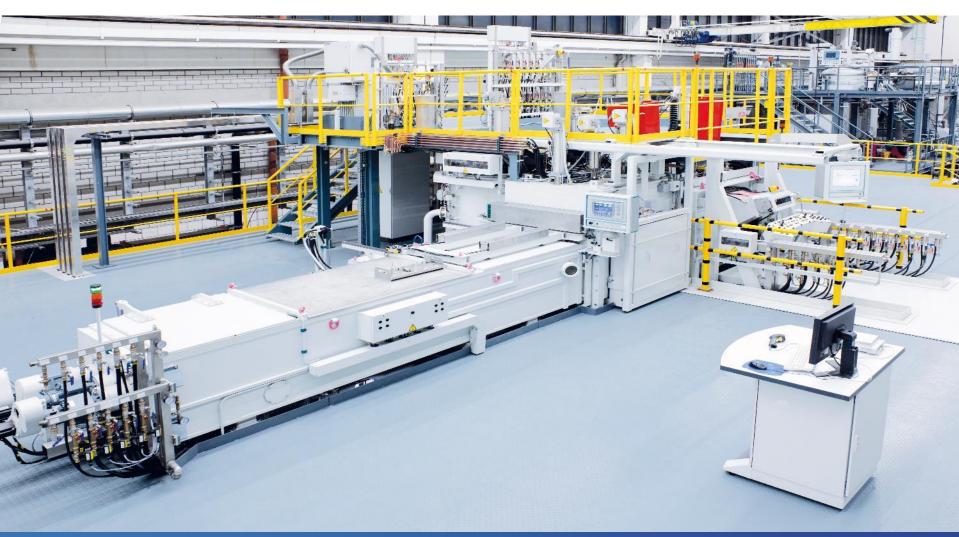
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AMG Vanadium: Zanesville, Ohio, USA

## 1. EXECUTIVE SUMMARY



AMG Engineering: ALD Vacuum Technologies' Thermal Barrier Coating for turbine blades (Hanau, Germany)

## **INVESTMENT CASE HIGHLIGHTS**

- 1 Unique Portfolio of Conflict Free Critical Materials and Technologies
- 2 10-11 Critical Materials for the Energy Transition in the EU and the US
- 3 Market Leader in Key Jet Engine and Nuclear Fuel Rejuvenation Technologies
- 4 Focus on Substitution of Imports and Recycling
- 5 Resilient Financial Performance Despite Depressed Lithium and Vanadium Prices
- 6 Growth Capex Cycle Largely Completed
- 7 Healthy mix of experienced managers and "next generation leaders"

## CRITICAL MATERIALS AND TECHNOLOGY FOR ENERGY TRANSITION

#### WHAT AMG DOES

- Independently sources, upgrades and purifies critical, conflict free materials for energy transition and CO<sub>2</sub> reduction
- Produces market leading vacuum furnaces for specialized alloying applications incl. aerospace engines, nuclear fuel rejuvenation

#### AMG CORF PRINCIPLES

- Leading producer in all our markets
- Low-cost producer in all our markets
- Innovation driven
- · Intensive risk management system and control structure

#### GLOBAL TRENDS DRIVING CRITICAL MATERIALS DEMAND

#### **GLOBAL TRENDS**

Need to contain CO<sub>2</sub> emissions; improve supply security and preserve technological supremacy

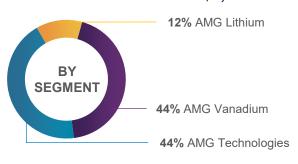
#### **DEMAND**

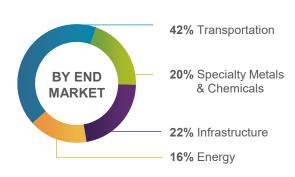
Science-based, conflict free and geopolitically autarchic materials and solutions for energy transformation

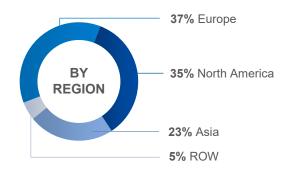
#### **SUPPLY**

Critical materials supply is dominated by China and Russia; AMG is focused on import substitution

#### FY 2024 REVENUE OF ~\$1,4 BILLION

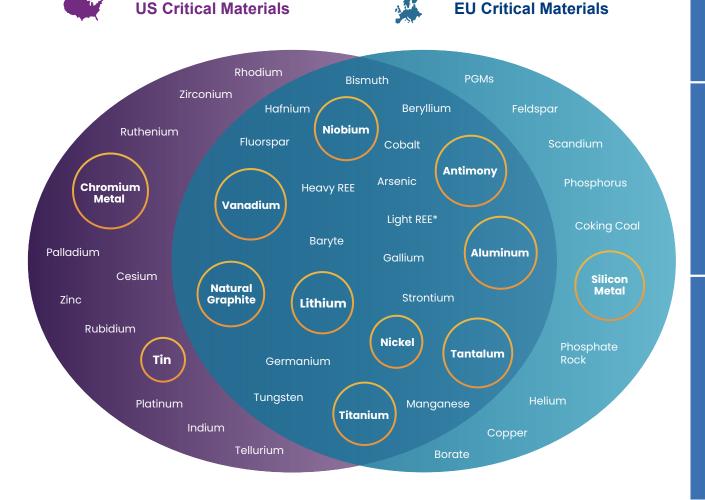






Market leading producer of specialty metals and vacuum furnace systems

## UNIQUE PORTFOLIO OF CONFLICT FREE CRITICAL MATERIALS



- AMG has a
  unique critical
  materials portfolio
  comprised of
  10 EU critical
  materials and
  11 US critical
  materials
- The EU identifies 34 total critical raw materials, the US 50\*

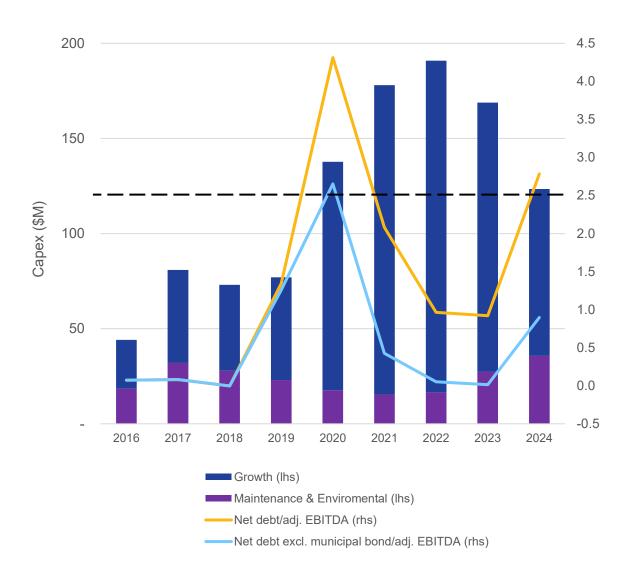
## THE TECHNOLOGY OF ENERGY TRANSITION





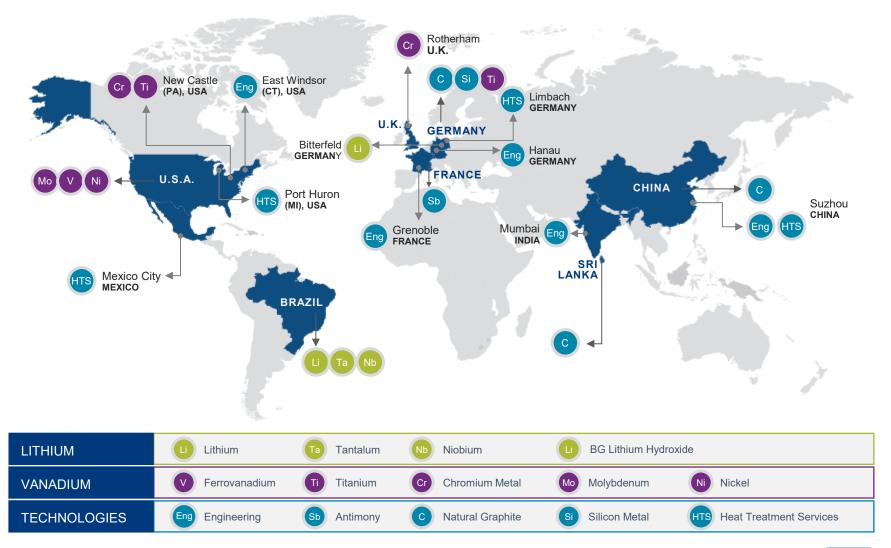
- AMG Engineering is a global leader in vacuum metallurgy incl. thermal barrier coaters for jet engine blades enabling CO<sub>2</sub> emission reduction
- offers individual vacuum melting and refining solutions for the purification of critical metals such as titanium, superalloys and rare earth metals enhancing AMG's critical materials strategy

## END OF HEAVY CAPITAL EXPANSION PHASE

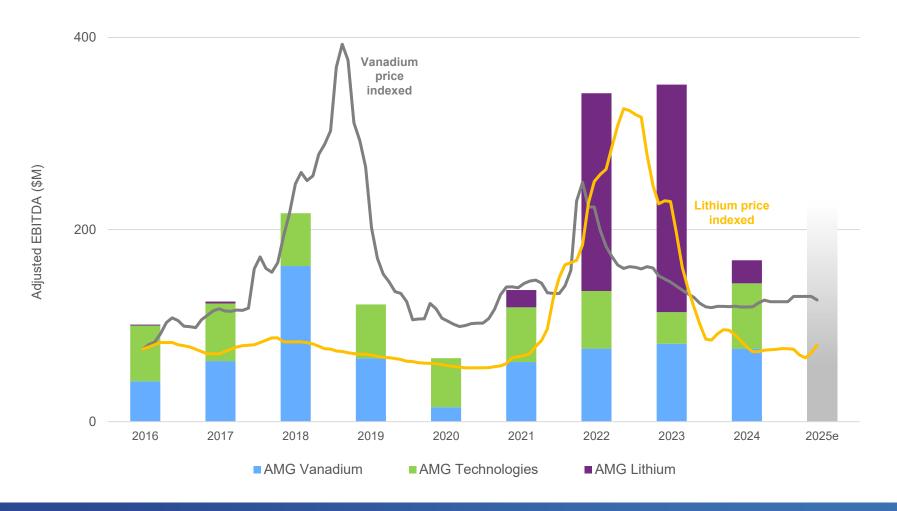


- ◆ AMG has invested >\$650 million in capital expenditures since 2020 for its lithium and vanadium expansion projects
- Denefit of a longdated, unsecured, low-cost, covenant free municipal bond, which only requires \$15 million per year of interest to maintain through 2049
- Capex guidance of \$75-100m in 2025
- ── Target max net debt/adj. EBITDA of <2.5x</p>

## FOCUS ON SUBSTITUTION OF IMPORTS AND RECYCLING



## RESILIENT PERFORMANCE DESPITE REDUCED PRICES



Diversified portfolio offers support – tailwind from Antimony since H2 2024

## **HEALTHY MANAGEMENT MIX**

#### **MANAGEMENT BOARD**

Heinz Schimmelbusch

Jackson Dunckel (CFO)

Mike Connor

#### **EXECUTIVE VICE PRESIDENTS**

**Michele Fischer** 

(Human Resources)

**Ludo Mees** 

(Legal, Compliance & Governance)

Juri Abbatantuono

(Strategic projects & Engineering)

#### **DIVISIONAL LEADERSHIP**

Stefan Scherer
(AMG Lithium)

Fabiano Costa (AMG Lithium)

Tom Centa (AMG Vanadium)

**Michael Hohmann** 

(AMG Technologies)

## AMG BUSINESS SEGMENTS

#### **AMG VANADIUM**

Market leader in recycling vanadium from oil refining residues

- Vanadium
- Titanium
- Chrome
- Shell & AMG Recycling B.V.

#### **AMG TECHNOLOGIES**

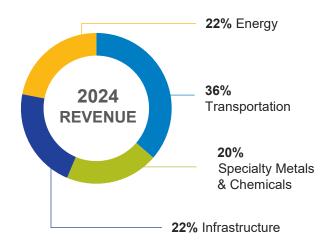
Established world market leader in advanced metallurgy & engineering

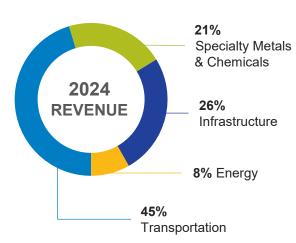
- Vacuum furnaces
- Heat treatment services
- LIVA batteries
- Silicon Metal
- Antimony

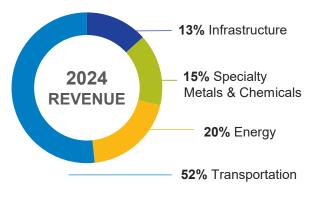
### **AMG LITHIUM**

Value chain spanning the lithium industry, from mining to solid-state lithium batteries

- Brazil (Tantalum & Lithium)
- Lithium GmbH in Germany
- Savannah
- Zinnwald









## 2. BUSINESSES



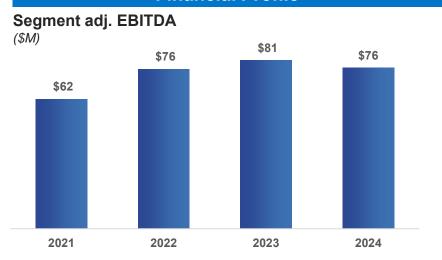
AMG Titanium plant, Nürnberg, Germany

## AMG VANADIUM – CREATING #1 VANADIUM CIRCULAR COMPANY

### **Overview and Recent Developments**

- Spans the company's vanadium, titanium and chrome businesses.
   All three materials are deemed critical in the USA, vanadium and titanium in the EU as well.
- World's market leader in recycling vanadium from oil refining residues and it is a low-cost producer.
- Manages the sole ferrovanadium production operation in the United States
- Expanding into the Middle East via its Shell & AMG Recycling
  JV. Groundbreaking for its Supercenter project partnering with
  Aramco in Sudi Arabia planned for this year.
- Investing to become the only chrome metal producer in the USA from early 2026.

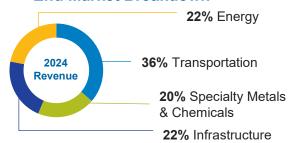
#### **Financial Profile**



#### **Demand Characteristics and End Markets**

- Demand driven by:
  - · Global expansion in vanadium recycling from refinery residues
  - Global steel infrastructure demand
  - Increased demand from vanadium redox flow batteries
  - Increased demand for high value titanium and chrome alloys

#### **End Market Breakdown**



#### **Assets**



AMG Vanadium - Zanesville, OH



AMG Titanium - Nürnberg, Germany



AMG Vanadium - Cambridge, OH

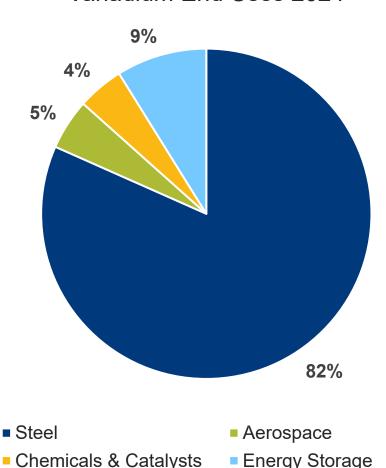


AMG Chrome – United Kingdom



## END USE MARKETS FOR VANADIUM

## Vanadium End Uses 2024



#### Steel

- In 2024 it is estimated that 82% of vanadium was consumed in steel
- Vanadium has a high strength to weight ratio which increases strength and toughness of steel
- Vanadium containing steel is used in tool steels, construction steel (rebar, beams, HSLA, etc.), and automotive steels and components

## **Energy Storage**

- Vanadium readily forms several stable oxidation states, where it can be indefinitely reused as both the anode and cathode in vanadium flow batteries (called Vanadium Electrolyte, or VEL)
- These batteries are forecast to play a key role in the grid storage sector which is necessary for the transition to renewable energy sources

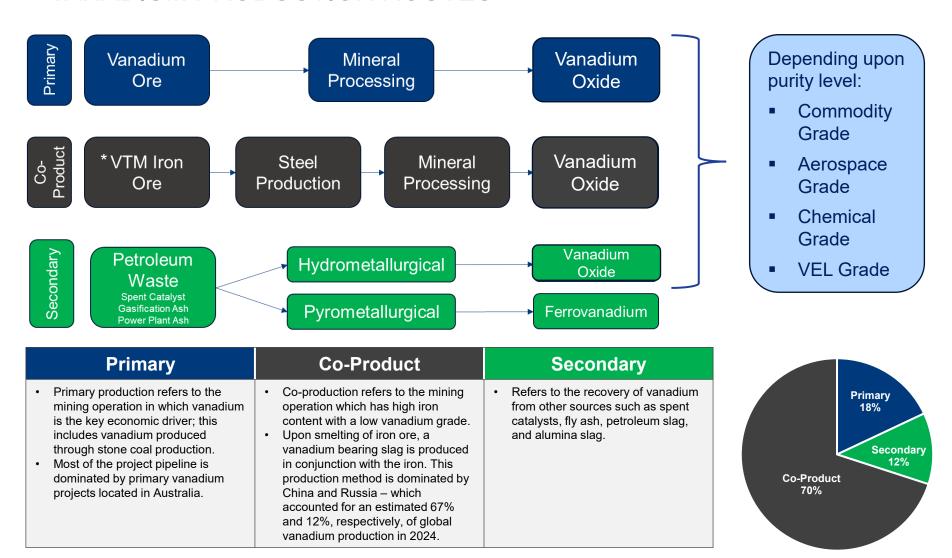
### **Aerospace**

 Titanium master alloys (V-AI) are used in jet engine components, airframes, and landing gear components as these alloys have a high strength to weight ratio and can withstand sustained high temperatures

#### Chemical

 Vanadium based compounds are used throughout the chemical industry, particularly in the production of sulfuric acid, maleic anhydride, rubber synthesis, pigments and ceramics

## VANADIUM PRODUCTION ROUTES



# AMG VANADIUM'S CONTRACT STRUCTURE UNDERPINS ITS GLOBAL LOW-COST POSITION



- Because of the income the refineries receive from the sale of finished products, utilizing AMG is the cheapest and most environmentally-sound way to dispose of their hazardous spent catalyst waste
- The tipping fee AMG Vanadium receives makes its operation significantly lower cost than primary mining
- AMG Vanadium at Cambridge and Zanesville are profitable at all ferrovanadium prices

AMG Vanadium business model ensures long-term profitability

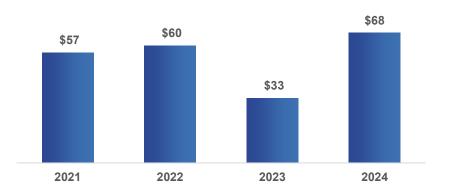
## AMG TECHNOLOGIES – THE TECHNOLOGICAL BACKBONE

### **Overview and Recent Developments**

- Spans mineral processing operations in graphite, antimony and silicon metal
- Global leader in advanced metallurgy engineering and equipment; provides **critical technologies**, **equipment and services** to the aerospace engine sector, the nuclear and critical materials/rare earths industry
- Houses engineering for fast-growing LIVA redox flow batteries and its nuclear fuel recycling service development company NewMOX

#### **Financial Profile**

## Segment adj. EBITDA (\$M)

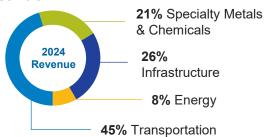


#### **Demand Characteristics and End Markets**

Demand driven primarily by:

- · Increased demand for aerospace engines in civil and military sectors
- Increased onshoring of advanced alloy manufacturing
- Demand for internal and external Project Engineering and Procurement

#### **End Market Breakdown**



#### **Assets**



**AMG Engineering** Hanau, Germany



AMG Antimony Chauny, France



AMG Graphite
Hauzenberg, Germany



AMG Silicon
Pocking, Germany



AMG LIVA Frankfurt, Germany



## AMG ENGINEERING – A CRITICAL MATERIALS TECHNOLOGY LEADER



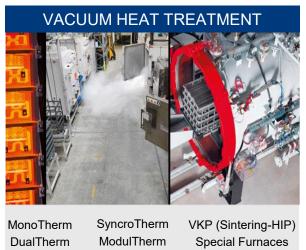




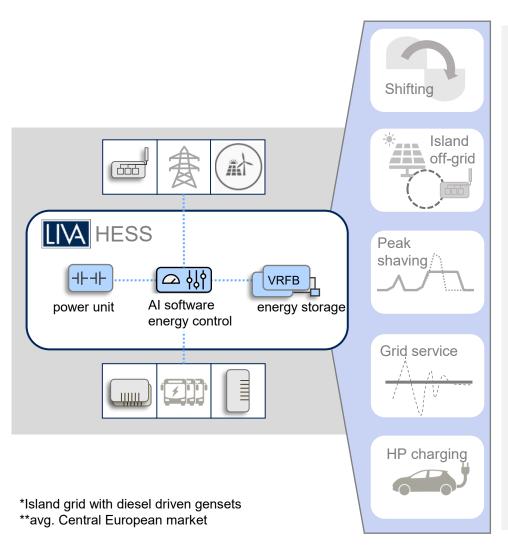
**Smart Coater** 







# THE LIVA BATTERY IS A KEY PIECE OF TECHNOLOGIES' GROWTH



## **Energy applications**

- Prosumer: Optimized self consumption and self-sufficiency with solar & wind
- Efficient off-grid & island solutions
- Reducing CO<sub>2</sub> emission up to 80% vs. Diesel gensets. Reduce electricity costs up to 55%\*

## **Power applications**

- Reduce power peaks (peak shaving) and power grid cost up to 80%\*\*
- Grid stabilization & power quality improvement: frequency containment reserve, grid peak load management
- Emergency/uninterrupted power supply with black starting capabilities

## New applications

- Electric vehicle infrastructure: Integrate renewable energies & high-power charging
- Opportunity charging & discharging: Arbitrage spot market of electricity

## AMG LITHIUM – CREATING A TRANSATLANTIC LITHIUM COMPANY

#### **Overview**

- Spans the lithium value chain, from lithium mining in Brazil to refining to battery grade lithium hydroxide in Germany
- Strategic holdings in junior lithium miners in Portugal (Savannah Plc., 16%) and Germany (Zinnwald Plc., 29%) to secure input for existing and planned downstream plants
- Strategic partnership with Grupo Lagoa in Portugal to build a sizable lithium concentrate pilot plant (8.000-9.000 tons) at Lagoa's existing feldspar mine by 2027. Right to develop a commercial size spodumene plant at a later stage
- Advanced plans for lithium carbonate plants in Brazil and Europe

#### **Financial Profile**

## Segment Adj. EBITDA (\$M)

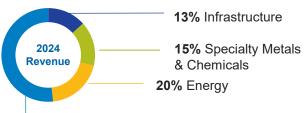


			-7
2021	2022	2023	2024
\$573	\$2,805	\$3,160	\$854

#### **Demand Characteristics and End Markets**

- · Demand correlated to growth in demand for:
  - · Electric vehicles (lithium)
  - · Grid stabilization batteries (lithium)
  - Semi-conductor capacitors (tantalum)
- Provides solutions for a broad variety of end markets, including infrastructure, specialty metals & chemicals, energy and transportation

#### **End Market Breakdown**



**52%** Transportation

**AMG Germany** 

#### **Assets**

**AMG Brazil** 



#### AMG Critical Materials

- · Spodumene Concentrate
- Tantalum Concentrate
- Feldspar

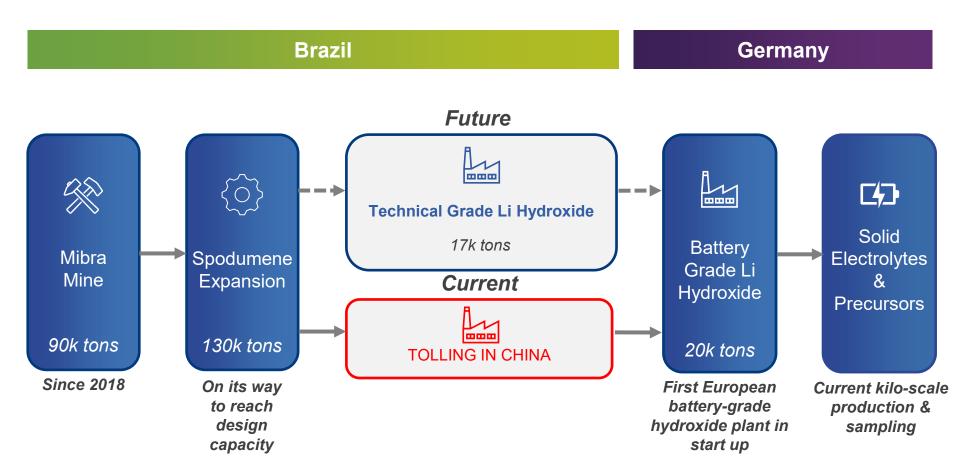
#### AMG Germany

- · Lithium Hydroxide
- Lithium Sulfide
- Development Products

#### AMG Specialty Materials

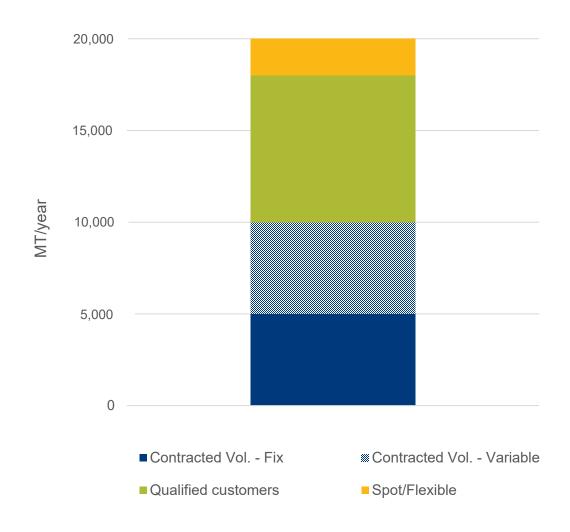
- Tantalum and Niobium Oxides
- Specialty Aluminum Alloys

## LITHIUM VALUE CHAIN



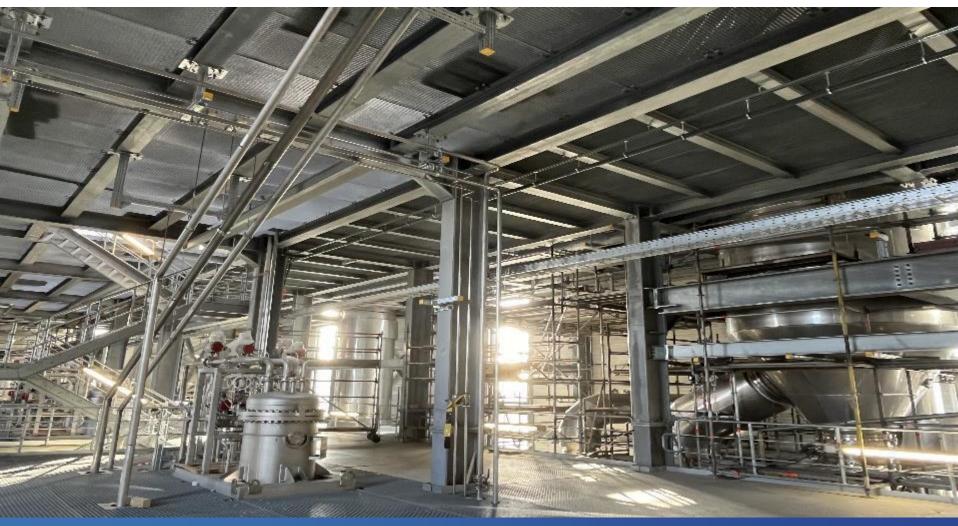
From mining through to next generation lithium products

## LITHIUM HYDROXIDE COMMERCIAL PLAN



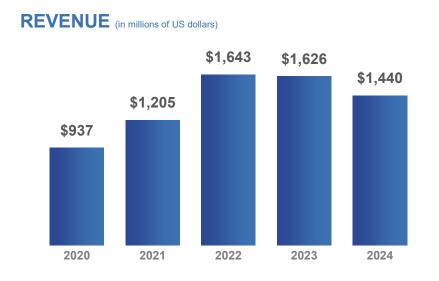
- Volume under longterm contract to deliver a binding 5,000 MT/yr plus an optional 5,000 MT/yr to EcoPro BM Hungary
- Target to get
  qualified with every
  CAM and cell
  producer in Europe
  including related
  OEMs
- Up to 2,000 MT/year reserved to spot customers to allow for operating flexibility and testing markets

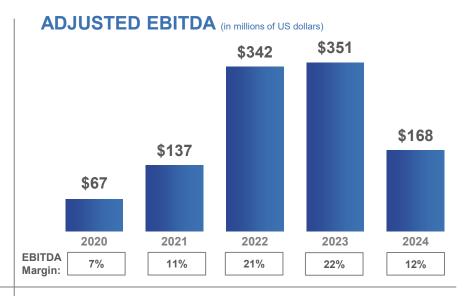
## 3. FINANCIALS AND OUTLOOK



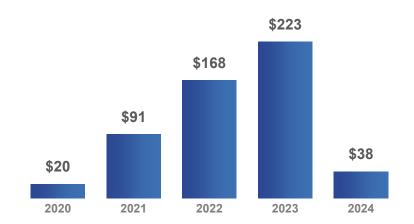
AMG Lithium GmbH: Lithium Hydroxide Battery-Grade Refinery – Bitterfeld, Germany

## FINANCIAL SUMMARY: 2020 - 2024

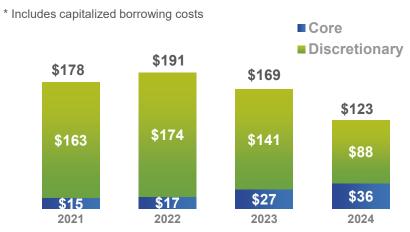




## OPERATING CASH FLOW (in millions of US dollars)



## CAPITAL EXPENDITURES (in millions of US dollars)



Core: Maintenance & Environmental, Growth: Vanadium, SP1+, and Lithium Module 1



## GROWTH STRATEGY SNAPSHOT



**Proactive Portfolio Management:** AMG and Asbury Carbons signed a definitive agreement in October 2025 for AMG to sell Graphit Kropfmühl GmbH to Asbury Carbons. The transaction reflects an enterprise value of \$65 million, and AMG will use the proceeds from this transaction to strengthen its balance sheet and focus on its core growth businesses.



### Strategic Developments:

- AMG Lithium GmbH signed an MoU with Beijing Easpring Material Technology Co., Ltd.
  for the supply and offtake of battery-grade lithium hydroxide monohydrate. As a first step,
  both companies are collaborating closely to ensure a successful qualification of AMG
  Lithium's plant while negotiating a binding offtake agreement.
- SARBV's development with Advanced Circular Materials Company (ACMC) "Supercenter"
  phase 1 project in Saudi Arabia remains on schedule in the detailed engineering phase.
  The EPC contract has been awarded on a full notice to proceed basis and pre-construction works are expected to begin very soon.



**Robust Financial Position:** Continuing to maintain a strong balance sheet during the third quarter of 2025, AMG's total liquidity is \$419 million, supporting its growth initiatives and operational needs.

## **QUARTERLY FINANCIAL HIGHLIGHTS**

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



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



#### ADJUSTED EBITDA (IN MILLIONS OF US DOLLARS)



- Revenue of \$435 million in Q3 '25 increased 22% compared to the Q3 '24 revenue of \$356 million
- Q3 '25 adjusted EBITDA of \$64 million was a 58% increase over Q3 '24 adjusted EBITDA of \$40 million, largely due to the continued strong performance by the AMG Technologies segment
- Net income attributable to shareholders for Q3 '25 was \$13 million, compared to a \$13 million net loss in Q3 '24; this strong recovery in profitability was driven by the strong performance of the AMG Technologies segment

## **QUARTERLY** REVENUE DRIVERS

## LITHIUM

SEGMENT RESULTS				KEY DRIVERS		
	Q3 2025	Q3 2024		Price	Volume	
Revenue	\$32.7	\$48.6	Spodumene			
Adjusted Gross Profit	\$3.9	\$12.9	Tantalum	^	<b>~</b>	

#### **VANADIUM**

SEGMENT RESULTS				KEY DRIVERS		
	Q3 2025	Q3 2024		Price	Volume	
Revenue	Vanadium	Vanadium				
- Tevende	\$154.0	\$151.0	Titanium Alloys	<b>()</b>	<b>()</b>	
Adjusted Gross Profit	\$25.5	\$15.9			•	
			Chrome			

## **TECHNOLOGIES**

SEGMENT RESULTS			KEY DRIVERS		
				Volume	
	Q3 2025	Q3 2024	Graphite	<b>&lt;&gt;</b>	<b>&lt;&gt;</b>
Revenue	\$248.0	\$156.4	Silicon	<b>&lt;&gt;</b>	~
Adjusted Gross Profit	\$58.6	\$34.9	Antimony	^	~
-	·		Engineering Book	to Bill	*

AMG

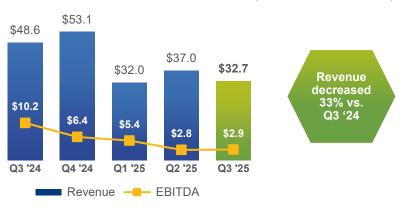
## FINANCIAL PERFORMANCE, LEVERAGE & VALUATION DASHBOARD

METRIC	Q3 2025	FY 2024
Return on Assets	1.9%	-1.3%
Return on Equity	7.1%	-4.7%
Return on Capital Employed	14.4%	9.1%
EV / Adjusted EBITDA	6.6x	5.6x
Total Net Debt / Adjusted EBITDA	2.2x	2.8x
Liquidity (USD millions)	\$419	\$494

 In July 2025, to preserve liquidity and reduce refinancing risk, AMG executed a maturity extension on its \$200 million revolving credit facility; the revolver maturity date was extended from November 2026 to August 2028 with terms similar to the original agreement; the term loan maturity date of November 2028 remains unchanged

## **AMG LITHIUM FINANCIAL HIGHLIGHTS**

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



#### ADJUSTED GROSS PROFIT (IN MILLIONS OF US DOLLARS)



### CAPITAL EXPENDITURES (IN MILLIONS OF US DOLLARS)



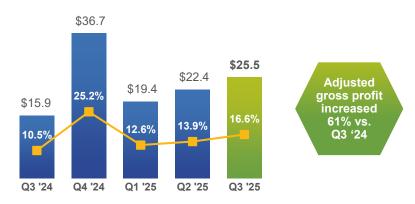
- Revenue decreased 33% compared to Q3 2024, primarily driven by an 8% reduction in lithium market prices, a 32% decrease in lithium concentrate sales volumes, and a 64% decrease in tantalum sales volumes due to shipping delays that will be reversed in the fourth quarter; these were partially offset by higher average tantalum sales prices
- In Q3 2025, AMG sold 15,409 dry metric tons ("dmt") of lithium concentrates, 32% lower than in Q3 2024 due mainly to technical issues; the average realized sales price was \$530/dmt CIF China and the average cost per ton was \$420/dmt CIF China, down from \$450/dmt in Q3 2024 due to the lower cost of mining activities in the current guarter

## **AMG VANADIUM FINANCIAL HIGHLIGHTS**

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



#### ADJUSTED GROSS PROFIT (IN MILLIONS OF US DOLLARS)



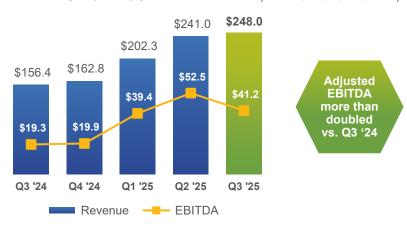
#### CAPITAL EXPENDITURES (IN MILLIONS OF US DOLLARS)



- Revenue increased by 2% in Q3 2025, due mainly to increased sales prices in ferrovanadium and chrome metal, partially offset by lower volumes of ferrovanadium due to production issues from our refinery suppliers
- Adjusted gross profit of \$26 million in Q3 2025 was 61% higher than Q3 2024, largely due to the lower inventory cost adjustments in the current quarter, as well as a compensation payment of \$5 million for an equipment failure related to our growth investment in Zanesville
- Q3 2025 adjusted EBITDA was 81% higher than Q3 2024, primarily due to the higher sales prices and the Zanesville compensation payment of \$5 million

## **AMG TECHNOLOGIES** FINANCIAL HIGHLIGHTS

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



#### ADJUSTED GROSS PROFIT (IN MILLIONS OF US DOLLARS)



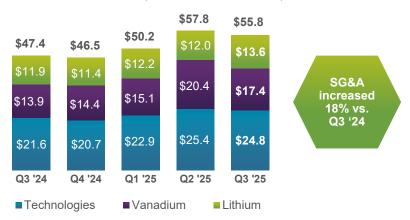
### ORDER INTAKE (IN MILLIONS OF US DOLLARS)

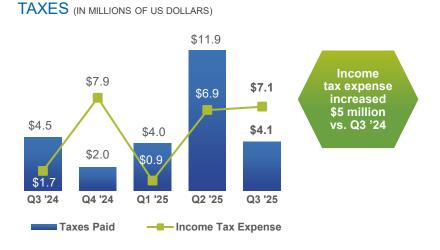


- Q3 2025 revenue increased by \$92 million, or 59%, vs. Q3 2024, driven largely by higher antimony sales prices in the current quarter as well as by strong sales in Engineering of turbine blade coating furnaces
- Adjusted EBITDA of \$41 million in Q3 2025 was more than double the \$19 million in Q3 2024, with the increase due to higher profitability in AMG Antimony and AMG Engineering
- The Company signed \$87 million in new orders during Q3 2025, representing a 0.92x book to bill ratio; order backlog was \$402 million as of September 30, 2025

## **KEY CORPORATE** INCOME STATEMENT ITEMS

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





#### NET FINANCE COST (IN MILLIONS OF US DOLLARS)



- SG&A expenses in Q3 2025 were 18% higher than Q3 2024, with the
  variance largely driven by the headcount increases in our Lithium,
  Chrome, Engineering, and LIVA businesses associated with our
  strategic expansion projects, higher AMG Antimony personnel costs
  related to its increased sales activity, and higher professional fees
- Net finance cost in Q3 2025 was \$14 million vs. \$8 million in Q3 2024, due to a decrease in interest income as well as increased quarter over quarter non-cash intercompany foreign exchange losses from a weaker EUR/USD exchange rate
- AMG recorded an income tax expense of \$7 million in Q3 2025 compared to \$2 million in Q3 2024; AMG paid taxes of \$4 million in Q3 2025 compared to \$5 million in Q3 2024, with the decrease reflecting a timing difference in tax settlements

## CASH FLOW AND WORKING CAPITAL

### CASH (USED IN) FROM OPERATING ACTIVITIES

(IN MILLIONS OF US DOLLARS)

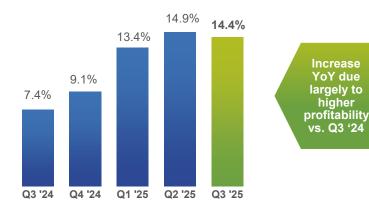


#### NET DEBT (IN MILLIONS OF US DOLLARS)

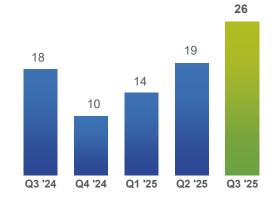




#### **ANNUALIZED ROCE**



#### **WORKING CAPITAL DAYS**





## **OUTLOOK**

# CAPITAL EXPENDITURES

- AMG is targeting \$75 to \$100 million of capital expenditures in 2025.
- AMG is at the end of a period of significant capital intensity that positions us for strong profitability as market prices improve.

# ADJUSTED EBITDA

- We expect our adjusted EBITDA to exceed \$220 million in 2025. This guidance includes a temporary tailwind from selling low-priced antimony of more than \$70 million.
- Regarding AMG's 5-year guidance, at normalized market prices we guide to an EBITDA of \$500 million or more in five years or earlier.
- The fundamental positions of our businesses are sound, and AMG remains focused on disciplined, sustainable growth

