

AMG Critical Materials N.V.
Condensed Interim Consolidated Financial Statements
(unaudited)
June 30, 2023

Semi-Annual Financial Report

This report contains the semi-annual financial report of AMG Critical Materials N.V. (“AMG” or “the Company”), a Company which was incorporated in the Netherlands as a public limited liability company on November 21, 2006. The address of the Company’s registered office is WTC Amsterdam, Toren C, Strawinskylaan 1343, 1077 XX Amsterdam.

The semi-annual report for the six months ended June 30, 2023 consists of the responsibility statement by the Company’s Management Board, the semi-annual management report and the condensed consolidated semi-annual financial statements. The information in this semi-annual financial report is unaudited.

The Management Board of the Company hereby declares that to the best of their knowledge, the semi-annual financial statements, which have been prepared in accordance with IAS 34, “Interim Financial Reporting” as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the entities included in the consolidation taken as a whole. The half-year management board report gives a true and fair view of the important events of the past six-month period and their impact on the half-year financial statements, as well as the principal risks and uncertainties for the six-month period to come, and the most important related party transactions.

/s/ Heinz C. Schimmelbusch
Chief Executive Officer

/s/ Jackson Dunkel
Chief Financial Officer

/s/ Eric E. Jackson
Chief Operating Officer

Management Report

AMG is a global critical materials company at the forefront of CO₂ reduction trends. AMG produces highly engineered specialty metals and mineral products and provides related vacuum furnace systems and services to the transportation, infrastructure, energy, and specialty metals & chemicals end markets. AMG is organized under three reportable segments: AMG Clean Energy Materials, AMG Critical Minerals and AMG Critical Materials Technologies. AMG Clean Energy Materials is comprised of the Vanadium, Lithium, and Tantalum business units. AMG Critical Minerals is comprised of the Graphite, Silicon, and Antimony business units. AMG Critical Materials Technologies is comprised of the Engineering, Titanium and Chrome business units.

AMG Clean Energy Materials combines our recycling and mining operations producing materials for infrastructure and energy storage solutions while reducing the CO₂ footprint of both suppliers and customers. AMG Clean Energy Materials spans the vanadium, lithium, and tantalum value chains. AMG Clean Energy Materials has major production facilities in the US, Brazil and Germany. AMG Critical Minerals consists of our mineral processing operations in graphite, silicon metal and antimony. AMG Critical Materials Technologies combines our leading vacuum furnace technology line with high-purity materials serving global leaders in the aerospace sector.

With approximately 3,600 employees at June 30, 2023, AMG operates globally with production facilities in Germany, the United Kingdom, France, the United States, China, Mexico, Brazil, India, Sri Lanka, and Mozambique, and has sales and customer service offices in Japan.

AMG generated the highest profit attributable to shareholders in our history in the first half of 2023 which almost doubled from our first half of 2022. This outstanding result is mainly driven by our AMG Clean Energy Materials segment, specifically AMG Lithium and its Brazilian operation.

AMG Clean Energy Materials benefited from higher sales volumes and pricing of lithium concentrate in the first half of 2023. AMG Clean Energy Materials is the segment which is and will continue receiving the most capital investment within AMG, and the capital expenditures of \$78 million in the first half of 2023 mainly reflect our investment into the battery-grade lithium hydroxide plant in Bitterfeld, Germany and expansion of our lithium activities globally.

AMG Critical Minerals had lower revenue compared to the same period in the prior year due to lower volumes across the segment largely driven by the silicon metal plant care and maintenance plan for the first two months of the year, followed by reduced operations of only a single furnace during the first half of 2023.

AMG Critical Materials Technologies had higher revenue compared to the same period in the prior year. This improvement was driven by strong revenues in our engineering unit, as well as higher sales volumes of titanium alloys and chrome metal, partially offset by lower chrome metal pricing. Order backlog was \$337 million as of June 30, 2023, which is the highest backlog in the Company's history. The Company signed \$243 million in new orders during the first half of 2023, representing a 1.87x book to bill ratio. The first half of 2023 benefited from strong orders of remelting, turbine blade, heat treatment and induction furnaces.

AMG's selling, general and administrative expenses for the first half 2023 were \$90 million versus \$74 million in the comparative period in 2022. This increase was primarily driven by higher personnel costs due to additional hiring in our Lithium, Engineering, and LIVA businesses. It was also driven by a one-time pension expense of \$7 million due to the restructuring of executive employee benefit plans.

AMG's net finance costs were \$14 million in the first half of 2023 compared to \$21 million in the first half of 2022. This decrease was mainly driven by foreign exchange gains of \$2 million in the first half of 2023 as compared to foreign exchange losses of \$8 million in the comparable prior period. The Company also benefited from higher interest income earned in 2023 due to the overall increase in global interest rates, and higher cash and cash equivalents balances relative to the comparable prior period.

AMG recorded an income tax expense of \$62 million in first half of 2023, compared to \$22 million in the same period in 2022. This variance was mainly driven by higher profitability in AMG Lithium at its Brazil operation. AMG paid taxes of \$56 million in the first half 2023, compared to \$13 million in the first half of 2022 due to the aforementioned higher profitability.

Net profit attributable to shareholders for the first half of 2023 of \$99 million was driven by the higher revenue noted above offset partially by higher selling, general, and administrative expenses and higher income tax expense relative to the first half of the prior year.

Cash from operating activities was \$153 million in the first half of 2023, driven by the higher net profit and offset partially by higher income tax payments.

AMG's annualized return on capital employed for the first half of 2023 was 35.7%, as compared to 25.5% for the same period in 2022, reflecting the increased profitability during the current period.

AMG finished the first half of 2023 with \$280 million of net debt. This decrease was mainly due to the benefit of higher cash balances as a result of the strong operating cash flows from operating activities.

AMG continued to maintain a strong balance sheet and adequate sources of liquidity during the year. As of June 30, 2023, AMG had \$391 million of unrestricted cash and total liquidity of \$586 million. With this cash on hand and strong projected operating cash flows, AMG believes it can fully fund its current approved strategic projects. Additionally, AMG executed a mandate letter on July 25, 2023 with KfW IPEX-Bank GmbH and Citigroup, Inc. ("Citi"), which will serve as an additional source of financing for the construction of our proposed technical-grade lithium chemical plant in Brazil.

Management's objectives consistently focus on delivering positive operational results as well as generating cash to be able to support expansion, research and development, and vertical integration strategies. These objectives are measured by the Company primarily using adjusted EBITDA and cash from operating activities. EBITDA, adjusted for exceptional items, is a measure used by management as a proxy for operating profit. Short-term executive incentive plans have adjusted EBITDA and cash flow from operations targets.

Adjusted EBITDA is not a defined performance measure in IFRS Standards. The Company's definition of adjusted EBITDA may not be comparable with similarly titled performance measures and disclosures by other entities. The following table shows a reconciliation of the Company's net profit to adjusted EBITDA.

Profit for the period to adjusted EBITDA reconciliation

	For the six months ended	
	June 30,	
	2023	2022
Profit for the period	100,020	59,763
Income tax expense	62,479	21,667
Net finance cost	13,899	21,130
Equity-settled share-based payment transactions	2,964	2,752
Restructuring expense	363	182
Pension adjustment	6,700	—
Silicon's partial closure	185	—
Inventory cost adjustment	4,188	—
Asset impairment reversal	(767)	—
Strategic project expense ⁽¹⁾	7,101	7,903
Share of loss of associates	1,792	500
Others	—	99
Adjusted EBIT	198,924	113,996
Depreciation and amortization	26,640	21,890
Adjusted EBITDA	225,564	135,886

⁽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 Catalysts & Technologies, the LIVA Battery System, and the lithium expansion in Germany, which incurred project expenses during the the first half of 2023 but are not yet operational. AMG is adjusting EBITDA for these exceptional charges.

Risks and Uncertainties

In our 2022 Annual Report, we have described certain risk categories and risk factors which could have a material adverse effect on our financial position and results. These risks include the COVID-19 pandemic, metal and mineral price volatility, mining, customer, supply, project execution, legal and regulatory, climate change, currency, competition, product quality, safety and liability, financing, business interruption, and information technology. During the first half of 2023, the global markets have

experienced significant risks related to the rise of inflation in many countries, instability within the banking sector, higher interest rates, and elevated energy prices resulting from the geopolitical environment. These macroeconomic issues have particularly impacted our Asian and European geographic end markets, and could expand into a global recessionary environment. While the Company has enacted measures to mitigate these risks including long-term, index-based sales contracts, interest rate swaps and energy contract hedges, the future consequences of these economic uncertainties cannot currently be estimated with any accuracy. Apart from these factors, the Company believes that the risks identified for the second half of 2023 are in line with the risks that AMG presented in its 2022 Annual Report.

Additional risks currently not known to us, or currently believed not to be material, could ultimately have a material impact on our business, objectives, revenues, income, assets, liquidity, or capital resources.

Operational Outlook

Given the global economic uncertainty and the slowdown in China, current spot prices across AMG's critical materials portfolio are significantly below the prices we experienced when we announced our initial guidance for 2023 in November 2022. The price of lithium carbonate in November 2022, the date of our \$400 million EBITDA guidance, has almost halved and our other relevant portfolio prices are down an average of 25%.

Therefore, we have changed our full year EBITDA guidance for 2023 from "exceeding \$400 million in EBITDA" to "a range between \$350 million to \$380 million in EBITDA." An EBITDA in this range represents the highest EBITDA in the history of AMG.

Regarding our long-term guidance, we are extremely pleased with the advancement of our strategic projects. We are moving forward with our lithium concentrate expansion in Brazil. We've signed a mandate letter to fund the chemical upgrader in Brazil, and our lithium hydroxide refinery in Bitterfeld, Germany, is under construction, with commissioning for the first 20,000-ton module expected in the fourth quarter of 2023.

These transformational projects in lithium, our newly complete ferrovanadium spent catalyst recycling facility in Ohio, and the continued ramp-up in our AMG Critical Materials Technologies segment will drive increased volumes across our Clean Energy Materials segment and confirm our confidence in our long-term guidance. Our long-term guidance therefore remains unchanged at an EBITDA level of \$650 million, or more, in 5 years, or earlier.

AMG anticipates the Company will increase overall staffing which was approximately 3,400 at December 31, 2022 by 15% to 20% at the end of 2023 due to the hiring associated with the ramp-up of the vanadium and lithium expansion projects in our Clean Energy Materials segment as well as hiring to support the aerospace recovery in our Critical Materials Technologies segment.

Capital expenditures for 2023 are expected to be between \$175 million and \$200 million mainly driven by the expansion of our lithium concentrate facility in Brazil and expenditures related to the construction of the lithium hydroxide plant in Germany.

With regard to financing in 2023, AMG has signed a mandate letter to fund a chemical upgrader in Brazil as previously discussed herein. Although we look to consistently optimize our financial structure, our current liquidity can fully fund all of the remaining approved capital expansion projects mentioned above.

AMG Critical Materials N.V.
Condensed Interim Consolidated Income Statement
For the six months ended June 30,
In thousands of US dollars

	Note	2023 Unaudited	2022 Unaudited
Continuing operations			
Revenue	6	889,909	827,957
Cost of sales	10	(622,533)	(650,523)
Gross profit		267,376	177,434
Selling, general and administrative expenses		(89,780)	(74,496)
Other income, net		594	122
Net other operating income		594	122
Operating profit		178,190	103,060
Finance income		11,026	2,380
Finance cost		(24,925)	(23,510)
Net finance cost		(13,899)	(21,130)
Share of loss of associates and joint ventures		(1,792)	(500)
Profit before income tax		162,499	81,430
Income tax expense	7	(62,479)	(21,667)
Profit for the period		100,020	59,763
Profit attributable to:			
Shareholders of the Company		98,984	58,746
Non-controlling interests		1,036	1,017
Profit for the period		100,020	59,763
Earnings per share			
Basic earnings per share		3.08	1.84
Diluted earnings per share		3.01	1.81

The notes are an integral part of these condensed interim consolidated financial statements.

AMG Critical Materials N.V.
Condensed Interim Consolidated Statement of Comprehensive Income
For the six months ended June 30,
In thousands of US dollars

	Note	2023 Unaudited	2022 Unaudited
Profit for the period		100,020	59,763
Other comprehensive income			
<i>Items of other comprehensive income (loss) that may be reclassified to profit or loss in subsequent periods:</i>			
Exchange differences on translation of foreign operations		4,794	(6,721)
Cash flow hedges, effective portion of changes in fair value		382	18,008
Cash flow hedges reclassified to profit or loss, net of tax		1,073	(44)
Cost of hedging reserve, changes in fair value		155	896
Income tax expense on cash flow hedges		(1,075)	(644)
Net increase on cash flow hedges		535	18,216
Net other comprehensive income that may be reclassified to profit or loss in subsequent periods		5,329	11,495
<i>Items of other comprehensive income (loss) not to be reclassified to profit or loss in subsequent periods:</i>			
Exchange differences on translation of foreign operations - non-controlling interest		384	(2,920)
Actuarial (losses) gains on defined benefit plans		(2,517)	46,097
Income tax benefit (expense) on actuarial (losses) gains		746	(13,795)
Net (loss) gain on defined benefit plans		(1,771)	32,302
Change in fair value of equity investments classified as fair value through other comprehensive income		2,151	(2,998)
Net other comprehensive income not being reclassified to profit or loss in subsequent periods		764	26,384
Other comprehensive income for the period, net of tax		6,093	37,879
Total comprehensive income for the period, net of tax		106,113	97,642
Total comprehensive income attributable to:			
Shareholders of the Company		104,477	98,366
Non-controlling interest		1,636	(724)
Total comprehensive income for the period, net of tax		106,113	97,642

The notes are an integral part of these condensed interim consolidated financial statements.

AMG Critical Materials N.V.
Condensed Interim Consolidated Statement of Financial Position
In thousands of US dollars

	Note	June 30, 2023 Unaudited	December 31, 2022
Assets			
Property, plant and equipment	8	851,805	797,611
Goodwill and other intangible assets	9	41,235	41,404
Derivative financial instruments	15	31,839	33,042
Equity-accounted investees		16,147	—
Other investments	15	31,339	29,324
Deferred tax assets	7	37,924	37,181
Restricted cash	8, 15	381	5,875
Other assets		10,445	8,612
Total non-current assets		1,021,115	953,049
Inventories	10	252,435	277,311
Derivative financial instruments	15	2,412	3,516
Trade and other receivables	6	179,727	162,548
Other assets		117,828	121,834
Current tax assets	7	6,627	7,289
Restricted cash	15	1,059	1,045
Cash and cash equivalents		391,251	346,043
Total current assets		951,339	919,586
Total assets		1,972,454	1,872,635
Equity			
Issued capital		853	853
Share premium		553,715	553,715
Treasury shares		(10,730)	(14,685)
Other reserves		(39,334)	(44,869)
Retained earnings (deficit)	11	90,543	(4,461)
Equity attributable to shareholders of the Company		595,047	490,553
Non-controlling interests		35,185	27,296
Total equity		630,232	517,849
Liabilities			
Loans and borrowings	12	658,722	661,270
Lease liabilities		43,912	44,224
Employee benefits		127,827	117,160
Provisions		12,969	12,361
Deferred revenue	6	20,000	20,000
Other liabilities		3,931	15,009
Derivative financial instruments	15	191	284
Deferred tax liabilities	7	18,515	27,269
Total non-current liabilities		886,067	897,577
Loans and borrowings	12	5,778	15,164
Lease liabilities		4,892	4,710
Short-term bank debt	13	8,116	6,391
Deferred revenue	6	14,533	28,277
Other liabilities		71,088	69,917
Trade and other payables		245,889	240,101
Derivative financial instruments	15	2,711	7,746
Advance payments from customers	6	51,947	51,054
Current tax liability	7	38,778	23,548
Provisions		12,423	10,301
Total current liabilities		456,155	457,209
Total liabilities		1,342,222	1,354,786
Total equity and liabilities		1,972,454	1,872,635

The notes are an integral part of these condensed interim consolidated financial statements.

AMG Critical Materials N.V.
Condensed Interim Consolidated Statement of Changes in Equity
In thousands of US dollars

Equity attributable to shareholders of the Company

(Unaudited)

	Issued capital	Share premium	Treasury shares	Other reserves	Retained earnings (deficit)	Total	Non-controlling interests	Total equity
Balance at January 1, 2023	853	553,715	(14,685)	(44,869)	(4,461)	490,553	27,296	517,849
Foreign currency translation	—	—	—	4,794	—	4,794	384	5,178
Change in fair value of equity investments classified as FVOCI	—	—	—	2,151	—	2,151	—	2,151
Gains on cash flow hedges, net of tax	—	—	—	490	—	490	45	535
Actuarial (losses) gains, net of tax	—	—	—	(1,942)	—	(1,942)	171	(1,771)
Net income recognized through other comprehensive income	—	—	—	5,493	—	5,493	600	6,093
Profit for the period	—	—	—	—	98,984	98,984	1,036	100,020
Total comprehensive income for the period	—	—	—	5,493	98,984	104,477	1,636	106,113
Purchase of common shares	—	—	(6,960)	—	—	(6,960)	—	(6,960)
Equity-settled share-based payments	—	—	—	—	2,964	2,964	—	2,964
Settlement of share-based payment awards	—	—	10,915	—	(10,733)	182	—	182
Transfer to retained deficit	—	—	—	42	(42)	—	—	—
Change in non-controlling interest	—	—	—	—	17,918	17,918	6,253	24,171
Dividend	—	—	—	—	(14,087)	(14,087)	—	(14,087)
Balance at June 30, 2023	853	553,715	(10,730)	(39,334)	90,543	595,047	35,185	630,232
Balance at January 1, 2022	853	553,715	(16,596)	(96,421)	(173,117)	268,434	25,718	294,152
Foreign currency translation	—	—	—	(6,721)	—	(6,721)	(2,920)	(9,641)
Change in fair value of equity investments classified as FVOCI	—	—	—	(2,998)	—	(2,998)	—	(2,998)
Gains on cash flow hedges, net of tax	—	—	—	18,215	—	18,215	1	18,216
Actuarial gains, net of tax	—	—	—	31,124	—	31,124	1,178	32,302
Net income (loss) recognized through other comprehensive income	—	—	—	39,620	—	39,620	(1,741)	37,879
Profit for the period	—	—	—	—	58,746	58,746	1,017	59,763
Total comprehensive income (loss) for the period	—	—	—	39,620	58,746	98,366	(724)	97,642
Purchase of common shares	—	—	(1,503)	—	—	(1,503)	—	(1,503)
Equity-settled share-based payments	—	—	—	—	2,752	2,752	—	2,752
Settlement of share-based payment awards	—	—	3,193	—	(3,528)	(335)	—	(335)
Transfer to retained deficit	—	—	—	(67)	67	—	—	—
Change in non-controlling interest	—	—	—	—	(910)	(910)	58	(852)
Dividend	—	—	—	—	(10,098)	(10,098)	—	(10,098)
Balance at June 30, 2022	853	553,715	(14,906)	(56,868)	(126,088)	356,706	25,052	381,758

The notes are an integral part of these condensed interim consolidated financial statements.

AMG Critical Materials N.V.
Condensed Interim Consolidated Statement of Cash Flows
For the six months ended June 30,
In thousands of US dollars

	Note	2023 Unaudited	2022 Unaudited
Cash from operating activities			
Profit for the period		100,020	59,763
Adjustments to reconcile net profit to net cash flows:			
Non-cash:			
Income tax expense	7	62,479	21,667
Depreciation and amortization		26,640	21,890
Asset impairment reversal	8	(767)	—
Net finance cost		13,899	21,130
Share of loss of associates and joint ventures		1,792	500
Loss on sale or disposal of property, plant and equipment	8	35	33
Equity-settled share-based payment transactions	14	2,964	2,752
Movement in provisions, pensions, and government grants		8,104	(2,917)
Working capital and deferred revenue adjustments		3,901	(63,774)
Cash generated from operating activities		219,067	61,044
Finance costs paid, net		(9,716)	(12,153)
Income tax paid		(55,981)	(13,040)
Net cash from operating activities		153,370	35,851
Cash used in investing activities			
Proceeds from sale of property, plant and equipment	8	26	93
Acquisition of property, plant and equipment and intangibles	8, 9	(69,291)	(82,608)
Investments in associates and joint ventures		(17,939)	(500)
Use of restricted cash	8	5,480	51,252
Interest received on restricted cash		30	76
Capitalized borrowing cost paid	8	(8,366)	(8,321)
Other		(1)	8
Net cash used in investing activities		(90,061)	(40,000)
Cash used in financing activities			
Net borrowing (repayment) of short-term bank debt	12	2,041	152
Repayment of borrowings	12	(12,755)	(8,437)
Net repurchase of common shares		(6,960)	(1,523)
Dividends paid	11	(14,087)	(10,098)
Payment of lease liabilities		(2,659)	(2,588)
Contributions by non-controlling interests		14,000	—
Net cash used in financing activities		(20,420)	(22,494)
Net increase (decrease) in cash and cash equivalents		42,889	(26,643)
Cash and cash equivalents at January 1		346,043	337,877
Effect of exchange rate fluctuations on cash held		2,319	(10,476)
Cash and cash equivalents at June 30		391,251	300,758

The notes are an integral part of these condensed interim consolidated financial statements.

Notes to the Condensed Interim Consolidated Financial Statements

1. Reporting entity

AMG Critical Materials N.V. (herein referred to as “the Company”, “AMG NV” or “AMG”) is domiciled in the Netherlands. These condensed consolidated interim financial statements (‘interim financial statements’) as of and for the six months ended June 30, 2023 comprise the Company and its subsidiaries (together referred to as ‘the Group’). The Group is primarily involved in the supply of critical materials, producing highly engineered specialty metals and mineral products and providing related vacuum furnace systems and services (see notes 5 and 6).

2. Basis of preparation

These interim financial statements have been prepared in accordance with IAS 34 *Interim Financial Reporting* and should be read in conjunction with the Group’s last annual consolidated financial statements as of and for the year ended December 31, 2022 (‘last annual financial statements’). They do not include all the information required for a complete set of IFRS financial statements. However, selected explanatory notes are included to explain events and transactions that are significant to an understanding of the changes in the Group’s financial position and performance since the last annual financial statements.

3. Use of judgements and estimates

In preparing these interim financial statements, management has made judgements and estimates that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates.

The significant judgements made by management in applying the Group’s accounting policies and the key sources of estimation uncertainty were the same as those described in the last annual financial statements.

4. Significant accounting policies

Except as described below, the accounting policies applied in these interim financial statements are the same as those applied in the Group’s consolidated financial statements as of and for the year ended December 31, 2022 (the policy for recognizing and measuring income taxes in the interim period is described in note 7). A number of new standards are effective from January 1, 2023 but they do not have a material effect on the Group’s financial statements.

5. Segment Reporting

The following tables present revenue and profit information for the Company’s operating segments for the six months ended June 30, 2023 and 2022, respectively. AMG headquarters costs and assets are allocated thirty percent to AMG Clean Energy Materials, twenty percent to AMG Critical Minerals, and fifty percent to AMG Critical Materials Technologies in 2023 and 2022 based on an estimation of services provided to the operating segments.

Segment information:

Six month period ended June 30, 2023	AMG Clean Energy Materials	AMG Critical Minerals	AMG Critical Materials Technologies	Eliminations ¹	Total
Revenue					
Revenue from external customers	427,567	120,200	342,142	—	889,909
Intersegment revenue	6,793	—	1,034	(7,827)	—
	434,360	120,200	343,176	(7,827)	889,909
Segment results					
Operating profit	170,021	804	7,365	—	178,190

Six month period ended June 30, 2022	AMG Clean Energy Materials	AMG Critical Minerals	AMG Critical Materials Technologies	Eliminations¹	Total
Revenue					
Revenue from external customers	303,421	210,325	314,211	—	827,957
Intersegment revenue	14,503	—	4,369	(18,872)	—
Total revenue	317,924	210,325	318,580	(18,872)	827,957
Segment results					
Operating profit	77,923	12,733	12,404	—	103,060
Segment assets					
At June 30, 2023	1,058,540	250,622	663,292	—	1,972,454
At December 31, 2022	1,012,307	276,145	584,183	—	1,872,635
Segment liabilities					
At June 30, 2023	716,893	148,384	476,945	—	1,342,222
At December 31, 2022	730,095	153,310	471,381	—	1,354,786

¹ Eliminations column includes intersegment trade eliminations. The intersegment revenue eliminates against the intersegment cost of sales.

6. Revenue

The Company's operations and main revenue streams are those described in the last annual financial statements. The Company's revenue is derived from contracts with customers.

Disaggregation of revenue

In the following table, revenue is disaggregated by primary geographical market and timing of revenue recognition. The table also includes a reconciliation of the disaggregated revenue with the Group's reportable segments (see note 5).

Geographical information:

	AMG Clean Energy Materials	AMG Critical Minerals	AMG Critical Materials Technologies	Total
Six month period ended June 30, 2023				
Asia	250,399	18,117	80,710	349,226
North America	136,323	4,614	126,708	267,645
Europe	11,618	95,657	129,515	236,790
South America	28,735	216	1,953	30,904
Other	492	1,596	3,256	5,344
Total Revenue	427,567	120,200	342,142	889,909
Timing of revenue recognition				
Products transferred at a point in time	427,567	120,200	248,915	796,682
Products and services transferred over time	—	—	93,227	93,227
Total Revenue	427,567	120,200	342,142	889,909

	AMG Clean Energy Materials	AMG Critical Minerals	AMG Critical Materials Technologies	Total
Six month period ended				
June 30, 2022				
Asia	124,396	21,599	81,170	227,165
North America	137,286	9,446	91,333	238,065
Europe	6,708	175,984	131,457	314,149
South America	34,644	452	1,602	36,698
Other	387	2,844	8,649	11,880
Total Revenue	303,421	210,325	314,211	827,957
Timing of revenue recognition				
Products transferred at a point in time	303,421	210,325	233,494	747,240
Products and services transferred over time	—	—	80,717	80,717
Total Revenue	303,421	210,325	314,211	827,957

Contract balances

The following table provides information about receivables, contract assets, and contract liabilities from contracts with customers.

	June 30, 2023	December 31, 2022
Trade receivables, net of allowance for doubtful accounts	133,805	124,754
Gross amount due from customers for contract work	45,797	37,565
Advance payments	51,947	51,054
Deferred revenue	34,533	48,277

The contract assets primarily relate to the Company's rights to consideration for work completed but not billed at the reporting date for furnace construction contracts. The contract assets are transferred to receivables when the rights become unconditional. This usually occurs when the Company issues an invoice to the customer. The contract liabilities primarily relate to the advance consideration received from customers. The advanced payments balance above pertains to consideration received for furnace construction contracts. The remaining contract liabilities pertain to prepayments received from customers for spodumene sale contracts, spent catalyst processing fee contracts, and titanium aluminide contracts and are included in the deferred revenue balance.

The Company recognized revenues of \$54,956 (2022: \$33,022) that were included in the balance of contract liabilities as of December 31, 2022. There were \$3,389 (2022: \$411) of revenues recognized in the six months ended June 30, 2023 that pertained to performance obligations that were satisfied or partially satisfied in previous periods.

7. Income tax expense

The major components of income tax expense in the condensed interim consolidated income statement are:

	June 30, 2023	June 30, 2022
Current income tax		
Current income tax expense	(72,253)	(23,828)
Deferred income tax		
Origination and reversal of temporary differences	16,396	(5,409)
Changes in previously recognized tax losses, tax credits and recognized temporary difference for changes in enacted tax rates and currency effects	(6,622)	7,570
Total income tax expense	(62,479)	(21,667)

The June 30, 2023 effective tax rate was impacted by pre-tax losses and related carryforwards of \$19,414 for which tax benefits could not be recorded due to the ongoing loss positions in the respective jurisdictions where the losses have occurred.

The June 30, 2022 effective tax rate was impacted by pre-tax losses and related carryforwards of \$8,049 for which tax benefits could not be recorded due to the ongoing loss positions in the respective jurisdictions where the losses have occurred. Also, during the period ended June 30, 2022, the net recognized deferred tax assets (liabilities) were adjusted to reflect changes in currency rates in Brazil. The impact of the currency rates in Brazil was a decrease to income tax expense of \$10,844.

The Company has adopted International Tax Reform - Pillar Two Model Rules - Amendments to IAS 12 upon their release on May 23, 2023. The amendments provide a temporary mandatory exception from deferred tax accounting for the top-up tax, which is effective immediately, and require new disclosures about the Pillar Two exposure from December 31, 2023. The mandatory exception applies retrospectively. However, because no new legislation to implement the top-up tax was enacted or substantively enacted at December 31, 2022 in any jurisdiction in which the Company operates and no related deferred taxes were recognized at that date, the retrospective application has no impact on the Company's interim financial statements.

The relief and the new disclosures will also be reflected in the Company's consolidated financial statements as of and for the year ending 31 December 2023.

8. Property, plant and equipment

Acquisitions and disposals

During the six months ended June 30, 2023, assets with a cost of \$69,083 (2022: \$76,788) were acquired. Additionally, the property, plant and equipment in accounts payable increased \$176 (2022: decreased by \$5,552). For the six months ended June 30, 2023, restricted cash was mainly used to fund \$5,530 (2022: \$51,386) of project requisitions related to our new vanadium spent catalyst recycling facility in Zanesville, Ohio, and \$3,490 (2022: \$7,604) of capitalized interest payments, net of interest income, related to the project.

Assets with a book value of \$61 were disposed of during the six months ended June 30, 2023 (2022: \$126) resulting in a loss on sale or disposal of \$35 (2022: \$33).

The Company recorded an asset impairment reversal of (\$767) (2022: nil) mainly related to insurance proceeds of \$1,098 offset by restructuring expenses of \$88 for an equipment claim at one of our facilities in the UK and \$243 for tantalum equipment no longer in use at our Brazilian location.

Borrowing costs

The Company capitalized borrowing costs of \$4,846 (2022: \$6,459) during the six months ended June 30, 2023. These costs primarily related to the construction of the lithium hydroxide plant in Germany and the lithium concentrate expansion in Brazil.

The capitalized borrowing costs in the six months ended June 30, 2022 primarily related to the construction of the spent catalyst recycling facility in Zanesville, Ohio.

9. Intangible assets

Goodwill and indefinite-lived intangible assets are tested for impairment annually, and all other intangible assets are tested when circumstances indicate the carrying value may be impaired. No impairment tests were deemed necessary as there were no indicators of impairment at June 30, 2023 and 2022.

During the six months ended June 30, 2023, intangible assets with a cost of \$384 (2022: \$268) were capitalized.

10. Inventory

Write-down of inventories

During the six months ended June 30, 2023, the Group wrote down its inventory by \$7,291 (2022: \$1,246). This is a result of inventory cost adjustments associated with declining prices, primarily in our Chrome business, and inventory specification issues due to the acquisition and testing of global refinery wastes in our Vanadium business. The write-down is included in cost of sales in the condensed interim consolidated income statement.

11. Capital and reserves

Dividends

Dividends of \$14,087 (2022: \$10,098) or €0.30 (2022: €0.30) per share were paid during the six months ended June 30, 2023.

12. Loans and borrowings

The table below includes loans and borrowings for the six months ending June 30, 2023 and 2022:

	2023	2022
Beginning balance	676,434	702,725
New issues		
Subsidiary debt	—	85
Repayments		
Term loan and revolving credit facility	(1,750)	(1,750)
Subsidiary debt	(10,575)	(6,550)
Other movements	391	799
Ending balance	664,500	695,309

Subsidiary debt

During 2023, there were no new financing arrangements. During 2022, a Chinese subsidiary obtained an additional loan with a local bank of \$85 for the acquisition of property, plant and equipment related to the construction of an aluminum master alloys facility in China. The facility is denominated in Chinese renminbi, matures in 2028 and has an interest of 4.85%.

AMG's net finance costs were \$13,899 for the six month period ended June 30, 2023 compared to \$21,130 in the first half of 2022. This decrease was mainly driven by foreign exchange gains of \$1,859 in the first half of 2023 as compared to foreign exchange losses of (\$8,334) in the comparable prior period. The Company also benefited from higher interest income earned in 2023 due to the combined effect of higher global interest rates and higher cash and cash equivalents balances relative to the comparable prior period.

13. Short-term bank debt

During the six months ended June 30, 2023, a Chinese subsidiary secured new short-term bank debt of \$4,754 (2022: nil) primarily to finance working capital. The loans are denominated in Chinese renminbi and have interest rates between 3.20% and

4.30%. The loans have varying maturities with the latest maturity date occurring in June 2024. In addition, during the first six months ended June 30, 2023, there were repayments of short-term bank debt of \$2,713 (2022: nil).

14. Share-based payments

In May 2021, the shareholders of the Company approved the Company's Remuneration Policy and long-term incentive program at the Annual General Meeting. Under the terms of the Remuneration Policy, all awards for members of the Management Board were issued in the form of performance share units ("PSU's"). The PSU's feature a three year service period and also require an additional two year holding period subsequent to vesting in line with the Dutch Corporate Governance Code. The PSU's have a market performance vesting condition based upon the Company's total shareholder return relative to a global peer group. The PSU's do not vest for performance below the 50th percentile. The Company also established a restricted share unit ("RSU") plan as an additional compensation tool for the Company's employees, which is discussed in detail below.

Equity-settled stock options

Equity-settled stock options were discontinued as a result of the Company's 2021 Remuneration Policy. As such, there were no share options issued for the six months ended June 30, 2023 and 2022. However, stock options that were issued under the previous Remuneration Policy remain outstanding.

In the six months ended June 30, 2023, the Company recorded \$64 (2022: \$162) of expense related to stock options. There were nil (2022: nil) vested stock options exercised during the six months ended June 30, 2023.

Performance share units

During the six months ended June 30, 2023, the Company issued 160,289 (2022: 83,357) performance share units. The fair value of the PSU's granted during the six months ended June 30, 2023 was calculated as €37.46 (2022: €35.98) using a Monte Carlo simulation. The Company recorded expense of \$1,872 (2022: \$1,844) related to the outstanding PSU's in the six months ended June 30, 2023.

During the six months ended June 30, 2023, the 2019 PSU awards vested based on performance conditions, and the Company re-issued 107,737 (2022: 107,737) treasury shares for settlement of the awards.

Restricted share units

The RSU plan provides share-based payments as a component of compensation to senior employees of the Company. In the six months ended June 30, 2023, the Company issued nil (2022: 79,888) RSU's to certain employees which are share-settled under the new plan. The RSU's granted to each employee will vest on the third anniversary of the grant date. The vesting is subject only to service conditions provided that the employee has remained continuously in the employment of the Company or a Group Company until the vesting date. In the event that the Supervisory Board has approved to pay-out any dividends to shareholders of the Company, the equivalent of the cash amount of the dividend will be converted to incremental RSU's to be awarded upon the vesting date to employees. As these awards will be equity-settled, the balance is recorded in equity rather than as a liability in accordance with IFRS 2. The fair value of the RSU's granted during the six months ended June 30, 2022 was €32.74 based on the closing price of AMG's shares on the date of grant. The Company recorded expense of \$1,028 (2022: \$746) related to the outstanding RSU's in the six months ended June 30, 2023.

15. Financial instruments - Fair values and risk management

(a) Accounting classifications and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy at June 30, 2023. The fair value of the financial assets and liabilities are included at the price that would be received to sell the instrument in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions. Methods and assumptions used to estimate fair values are consistent with those used in the year ended December 31, 2022.

June 30, 2023	Carrying Amount	Fair Value		
		Level 1	Level 2	Level 3
Financial assets measured at fair value				
Restricted cash	1,440	1,440	—	—
Other investments	31,339	7,862	—	23,477
FVOCI - equity instruments	32,779	9,302	—	23,477
Foreign currency forward contracts	2,595	—	2,595	—
Commodity forward contracts	174	—	174	—
Interest rate derivatives	31,282	—	31,282	—
Energy forward contracts	59	—	59	—
Derivatives designated as hedging instruments	34,110	—	34,110	—
Interest rate derivatives	141	—	141	—
Derivatives not designated as hedging instruments	141	—	141	—
	67,030	9,302	34,251	23,477

Total current 3,471

Total non-current 63,559

June 30, 2023	Carrying Amount	Fair Value		
		Level 1	Level 2	Level 3
Financial liabilities measured at fair value				
Foreign currency forward contracts	1,948	—	1,948	—
Commodity forward contracts	218	—	218	—
Energy forward contracts	692	—	692	—
Derivatives designated as hedging	2,858	—	2,858	—
Interest rate derivatives	44	—	44	—
Derivatives not designated as	44	—	44	—
Contingent consideration	1,686	—	—	1,686
	4,588	—	2,902	1,686

Total current 2,713

Total non-current 1,875

December 31, 2022	Carrying Amount	Fair Value		
		Level 1	Level 2	Level 3
Financial assets measured at fair value				
Restricted cash	6,920	6,920	—	—
Other investments	29,324	8,222	—	21,102
FVOCI - equity instruments	36,244	15,142	—	21,102
Foreign currency forward contracts	3,181	—	3,181	—
Commodity forward contracts	3	—	3	—
Interest rate derivatives	32,358	—	32,358	—
Energy forward contracts	944	—	944	—
Derivatives designated as hedging instruments	36,486	—	36,486	—
Interest rate derivatives	72	—	72	—
Derivatives not designated as hedging instruments	72	—	72	—
	72,802	15,142	36,558	21,102
Total current	3,516			
Total non-current	69,286			
December 31, 2022				
	Carrying Amount	Fair Value		
		Level 1	Level 2	Level 3
Financial liabilities measured at fair value				
Foreign currency forward contracts	6,906	—	6,906	—
Commodity forward contracts	28	—	28	—
Interest rate derivatives	—	—	—	—
Energy forward contracts	625	—	625	—
Derivatives designated as hedging instruments	7,559	—	7,559	—
Interest rate derivatives	471	—	471	—
Derivatives not designated as hedging instruments	471	—	471	—
Contingent consideration	2,292	—	—	2,292
	10,322	—	8,030	2,292
Total current	10,038			
Total non-current	284			

For cash and cash equivalents, trade and other receivables, trade payables, and short-term bank debt, the carrying amounts approximate fair value because of the short maturity of these instruments, and therefore, fair value information is not included in the tables above. The fair value of the Company's term loan B was \$343,026 (December 31, 2022: \$334,373) based on quoted prices at June 30, 2023. The Company's municipal bonds are fixed rate borrowings, and the fair value of those bonds was \$282,117 (December 31, 2022: \$272,627) based on quoted prices at June 30, 2023. The fair value of the term loan and municipal bonds is based on quoted prices for similar securities adjusted for the prevailing market-based yields and are deemed to be Level 2 inputs. The remaining loans and borrowings primarily maintain a floating interest rate and approximate fair value.

There were no transfers of financial instruments between Levels 1 and 2 for the periods ended June 30, 2023 and 2022.

There were also no transfers of financial instruments out of Level 3 for the periods ended June 30, 2023 and 2022.

Reconciliation of recurring fair value measurements categorized as Level 3 within the fair value hierarchy:

	Non-qualified pension assets	Non-quoted equity investment in Global Advanced Metals Pty. LTD	Contingent consideration
Balance at January 1, 2023	7,473	13,629	2,292
Purchases	990	—	—
Changes in fair value	(26)	1,411	(654)
Foreign currency gain (loss)			48
Balance at June 30, 2023	8,437	15,040	1,686

	Non-qualified pension assets	Non-quoted equity investment in Global Advanced Metals Pty. LTD	Contingent consideration
Balance at January 1, 2022	6,451	12,300	2,673
Purchases	990	—	—
Changes in fair value	(28)	(1,266)	(205)
Balance at June 30, 2022	7,413	11,034	2,468

(b) Risk management activities

The Company views derivative instruments as risk management tools and does not use them for trading or speculative purposes. During the course of operations, including normal purchases and normal sales of product, the Company enters into commodity forward and foreign exchange forward contracts to manage price and currency risks. There have been no other changes to the Company's risk management activities as disclosed in our December 31, 2022 annual report.

16. Commitments and contingencies

Commitments

There were commitments for the manufacture and purchase of property, plant and equipment in the amount of \$80,665 (December 31, 2022: \$115,237). These capital commitments related primarily to AMG Lithium's construction of building site facilities in Bitterfeld, Germany, AMG Brazil's capital expenditures related to Spodumene 1+ and AMG Vanadium's new spent catalyst recycling facility in Zanesville, Ohio.

Contingencies

At June 30, 2023, there were business-related bank guarantees for the benefit of third parties in the amount of \$179,678 (December 31, 2022: \$160,839), which were made in the normal course of business.

There have been no material updates to the Company's contingencies.

17. Related parties

Material related party transactions during the period include the recognition of stock-based compensation for certain employees and the exercise and settlement of certain stock-based compensation arrangements. These transactions are disclosed in more detail in notes 11 and 14.

The Company amended the employment agreements for the members of the Management Board. The agreements amended the base salary and retirement benefits of the Management Board effective July 1, 2023. The salary for the Chief Executive Officer, Chief Operating Officer, and Chief Financial Officer will be \$1,500, \$1,100, and \$900, respectively, under the amended agreements. For the six months ended June 30, 2023, the Company has recognized an additional \$6,700 of pension expense in relation to the amendment of the Management Board's defined benefit retirement plans.

18. Subsequent events

On July 25, 2023, the Company signed a mandate letter with KfW IPEX-Bank GmbH and Citi for the purpose of financing the construction of our proposed technical-grade lithium chemical plant in Brazil. The financing structure is expected to cover all the funding requirements and be supported by Euler Hermes (the German Export Credit Agency representing its government) under its Untied Loan Guarantee program for projects which deliver critical raw materials into Germany. This proposed financing is a cornerstone of our strategy to be the premier supplier of battery-grade lithium hydroxide in Europe.

On August 17, 2023, the Company signed an exclusive memorandum of understanding with Grupo Lagoa, which operates a pegmatite mine in Portugal, which has supplied the Portuguese ceramic and glass industry since 1984. The intention of the partnership is to concentrate the lithium minerals contained in the pegmatite to produce commercial grade Spodumene concentrate. Basic engineering of a sizeable Pilot Plant with a capacity to process up to 80,000 tonnes per annum of pegmatite has been initiated. Additional geological studies, including diamond drilling, are currently being conducted to confirm present estimates of the size and quality of the resources which we believe will support an industrial Spodumene operation similar in size to our existing Brazilian operations. The industrial plant will be pursued subject to permitting from the relevant Portuguese authorities and other concerned stakeholders, the successful operation of the pilot plant, and confirmation of the available resource base.