HALF-YEAR FINANCIAL REPORT 2024

Six months ended 30 June 2024

Content

1. Half-year activity report

1.1 Management analysis principles and accounting standards

The main alternative performance indicators used by the Group are defined in note 4 to the condensed consolidated financial statements at 30 June 2024 in section 2 of this document.

When analyzing changes in its results, and more particularly changes in its sales, the Group identifies the impact of the following effects (such analysis is unaudited):

- **scope effect:** the scope effect corresponds to the impact of changes in the Group's scope of consolidation, which arise from acquisitions and divestments of entire businesses or as a result of the first-time consolidation or deconsolidation of entities. Increases or reductions in capacity are not included in the scope effect;
- **currency effect:** the currency effect corresponds to the mechanical impact of consolidating accounts denominated in currencies other than the euro at different exchange rates from one period to another. The currency effect is calculated by applying the foreign exchange rates of the prior period to the figures for the period under review;
- **price effect:** the impact of changes in average selling prices is estimated by comparing the weighted average net unit selling price of a range of related products in the period under review with their weighted average net unit selling price in the prior period, multiplied, in both cases, by the volumes sold in the period under review; and
- **volume effect:** the impact of changes in volumes is estimated by comparing the quantities delivered in the period under review with the quantities delivered in the prior period, multiplied, in both cases, by the weighted average net unit selling price in the prior period.

1.2 First-half 2024 highlights

1.2.1 Organic projects

In line with its ambition for 2028 unveiled at the Capital Markets Day of September 2023, Arkema is continuing to implement its highly profitable organic projects to address attractive markets identified by the Group.

Thus, in High-Performance Polymers, Arkema has finalized an investment at its Serquigny site (France) that will increase its global Pebax® elastomer production capacity by 40% and lower the water consumption of the site by 25%. Capable of producing both the bio-circular Pebax® Rnew® and classical Pebax® elastomer ranges, the new unit will support the strong growth of the Group's customers, particularly in the sports and consumer goods markets.

In addition, the PA11 plant in Singapore and the Nutrien HF site in the United States are now operational and will start ramping up in the second half of the year.

1.2.2 Acquisitions

On 2 May 2024, Arkema signed an agreement for an enterprise value of US$150 million to acquire Dow's flexible packaging laminating adhesives business, a leading producer of adhesives for the flexible packaging market, with annual sales of around US$250 million. This proposed acquisition will significantly expand Arkema's portfolio of flexible packaging solutions, enabling the Group to become a key player in this attractive market. This acquisition should be finalized in the last quarter of 2024, subject to approval by certain antitrust authorities.

The Group has also strengthened its position in new generation batteries, with the acquisition of stakes in two start-ups. Thus, on 12 January 2024, Arkema announced that it had acquired a stake in Tiamat, a start-up pioneer in sodium-ion battery technology, which will enable the Group to accelerate the development of technical solutions adapted to these batteries, which do not use lithium. On 17 April 2024, Arkema also signed an agreement to acquire a majority stake of nearly 78% in Proionic, a leading start-up in the production and development of ionic liquids. With this acquisition, finalized on 3 June, Arkema completes its broad range of solutions and consolidates its position as a key player in materials regardless of battery technologies. In addition, on 14 May 2024, the Group announced that ProLogium, a Taiwanese technology leader in advanced batteries, had chosen Arkema as its key development and supply partner, notably in new generation lithium ceramic batteries, ahead of the launch of its gigafactory in France.

Finally, on 2 January 2024, Arkema finalized the acquisition of Irish manufacturer Arc Building Products, specialized in construction adhesives and sealants and which generates around €15 million in annual sales.

1.2.3 Corporate Social Responsibility

As part of the roll-out of its climate plan, Arkema announced on 26 February 2024 that it had signed long-term renewable energy supply agreements for its Calvert City (Kentucky), Beaumont (Texas), Chatham (Virginia) and West Chester (Pennsylvania) sites, as well as for all Bostik sites in the United States. By the end of 2024, Arkema is expected to obtain approximately 40% of the power needed to run its operations in the United States from renewable sources, which constitutes a major milestone in the Group's decarbonization goal to reduce its Scopes 1 and 2 greenhouse gas emissions by 48.5% by 2030 versus 2019.

1.2.4 Financing

In March 2024 Arkema successfully completed a €400 million undated hybrid bond issue with an annual coupon of 4.8% and a first call date after five years. The Group thus anticipates the refinancing of one of its two outstanding hybrid bond issues, for the same amount and with a first call date on 17 September 2024.

1.3 Governance

At the combined annual general meeting of shareholders of 15 May 2024 at the Théâtre des Sablons in Neuilly-sur-Seine, with a quorum of 76.6%, shareholders very largely approved all the resolutions recommended by the Board of Directors, in particular the renewal of Thierry Le Hénaff, Chairman and Chief Executive Officer, as director for a term of four years, with a 90% majority.

The Board of Directors, which met after the annual general meeting, decided to reappoint Thierry Le Hénaff as Chairman and Chief Executive Officer for the duration of his term of office as director.

In addition, in accordance with article L. 225-27-1 of the French Commercial Code and the Company's Articles of Association, on 2 July 2024:

- Philippe Allart was appointed as a director representing employees by the French Group Works Council (the responsibilities of which are determined by the French delegation of the European Group Works Council) to replace Nathalie Muracciole for a four-year term; and
- the term of office of Susan Rimmer as a director representing employees was renewed by the European Group Works Council for a further four-year term.

1.4 Analysis of first-half 2024 financial results

The figures in this section are provided on a consolidated basis and in accordance with Arkema's organization comprising the following three coherent and complementary segments dedicated to Specialty Materials: Adhesive Solutions, Advanced Materials and Coating Solutions, as well as the Intermediates segment which groups together activities with more volatile results.

1.4.1 Analysis of the Group's results

(In millions of euros)	**First-half 2024**	First-half 2023	YoY change
Sales	**4,877**	**4,966**	**-1.8%**
EBITDA	**801**	**784**	**+2.2%**
Specialty Materials	732	715	+2.4%
Intermediates	123	118	+4.2%
Corporate	(54)	(49)	
EBITDA margin	**16.4%**	**15.8%**	
Specialty Materials	16.5%	15.8%	
Intermediates	29.9%	27.4%	
Recurring depreciation and amortization	(297)	(265)	
Recurring operating income (REBIT)	**504**	**519**	**-2.9%**
REBIT margin	10.3%	10.5%	
Other income and expenses	(77)	(39)	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	(75)	(63)	
Operating income	**352**	**417**	**-15.6%**
Equity in income of affiliates	(2)	(5)	
Financial result	(33)	(35)	
Income taxes	(88)	(92)	
Net income	**229**	**285**	**-19.6%**
Net income attributable to non-controlling interests	5	1	
Net income – Group share	**224**	**284**	**-21.1%**
Adjusted net income	**352**	**369**	**-4.6%**

Sales

At **€4,877 million**, the Group's **sales** were down by 1.8% compared with first-half 2023. They were impacted by a negative 4.8% price effect, reflecting the decrease of certain raw materials and still unfavorable market conditions in upstream acrylics and PVDF in the first quarter. In light of the prior year's baseline which was marked by destocking, volumes grew by 2.2% in a demand environment that remained subdued. Volumes were driven by Specialty Materials (up 3.4%), up in all three segments, but were down in Intermediates. Certain markets such as batteries, energy, structural bonding, sports and packaging were well oriented, while the construction market remains globally lackluster. The 2.1% positive scope effect mainly corresponds to the acquisition of PIAM in Advanced Materials. At a negative 1.3%, the currency effect is primarily linked to the depreciation of the Chinese yuan and Argentine peso against the euro.

Specialty Materials accounted for 92% of Group sales in the first half of 2024, and the breakdown of sales by segment was similar to 2023. Adhesive Solutions thus now represents 29% of Group sales (28% in H1'23), Advanced Materials and Coating Solutions came in stable at 37% and 26% respectively, and Intermediates are slightly down at 8% (9% in H1'23).

There was a slight change in the regional sales breakdown relative to the prior year, which was marked by weak demand in Asia. Thus, North America now represents 35% of Group sales (37% in H1'23), Europe 34% (36% in H1'23), Asia 26% (22% in H1'23) and the rest of the world 5% (5% in H1'23).

EBITDA and recurring operating income

Group **EBITDA** rose by 2.2% over the first half of 2024 to **€801 million** (€784 million in H1'23), supported by the improving performances of industrial adhesives, High Performance Polymers strengthened by PIAM's contribution, and the downstream of Coating Solutions. Performance Additives were down on the prior year's high comparison base, impacted notably by several planned maintenance turnarounds in Thiochemicals in the second quarter, while the upstream acrylics market remains close to low cycle conditions. EBITDA is also beginning to benefit from the ramp-up of recent organic projects, to the tune of €20 million over the first half of the year. The Group's **EBITDA margin** grew to **16.4%** (15.8% in H1'23), which highlights the strength and resilience of the Group's portfolio of technologies and solutions in a challenging economic context.

Recurring operating income (REBIT) of €504 million (€519 million in H1'23), includes €297 million in recurring depreciation and amortization, up €32 million compared with the first half of 2023, mainly reflecting the consolidation of PIAM and the start-up of new production units. In the first half of 2024, the REBIT margin was virtually stable year-on-year at 10.3% (10.5% in H1'23).

Operating income

Operating income came to €352 million over the period (€417 million in H1'23). This figure includes €77 million in one-off expenses, including around €50 million in cash expenditure. These one-off expenses correspond notably to start-up costs for the Singapore platform, restructuring and environmental expenses, legal fees for ongoing proceedings in the United States and costs linked to the acquisition of Dow's flexible packaging laminating adhesives business (for further details, see note 5.1 to the condensed consolidated financial statements at 30 June 2024 in section 2 of this document). In 2023, other income and expenses included notably the capital gain on the divestment of Febex. Operating income includes also €75 million in depreciation and amortization related to the revaluation of assets carried out as part of the allocation of the purchase price of businesses, up by €12 million euros year-on-year, reflecting essentially the integration of PIAM acquisition.

Financial result

The financial result represented a net expense of €33 million in the first half of 2024, virtually stable year-on-year, with the increase linked to the new bonds issued in November 2023 being offset by the increase in interest rates on deposits.

Income taxes

The income tax expense came to €88 million (€92 million expense in H1'23). Excluding exceptional items, the tax rate for the first half amounted to 22% of recurring operating income.

Net income – Group share and adjusted net income

Net income – Group share consequently totaled €224 million (€284 million in H1'23), and net earnings per share amounted to €2.93.

Excluding the post-tax impact of non-recurring items, adjusted net income came in at €352 million (€369 million in H1'23), representing €4.71 per share.

1.4.2 Analysis of results by segment

Adhesive Solutions (29% of total Group sales)

(In millions of euros)	First-half 2024	First-half 2023	YoY change
Sales	**1,386**	**1,390**	**-0.3%**
EBITDA	**214**	**188**	**+13.8%**
EBITDA margin	15.4%	13.5%	
Recurring operating income (REBIT)	**170**	**147**	**+15.6%**
REBIT margin	12.3%	10.6%	
Other income and expenses	(16)	(12)	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	(53)	(51)	
Operating income	**101**	**84**	**+20.2%**

Sales of the Adhesive Solutions segment were stable year-on-year at **€1,386 million** (€1,390 million in H1'23). Volumes were up 3.4%, supported by industrial adhesives, in particular in durable goods, packaging and labeling, while the construction market stabilized at a low level in a challenging market environment. The negative 3.3% price effect reflects the lower price of certain raw materials while the currency effect was a negative 1.2%. The scope effect was limited at a positive 0.8%, corresponding to the integration of Polytec PT and Arc Building Products.

The segment's **EBITDA** was up strongly by 13.8% on first-half 2023 to **€214 million**. The **EBITDA margin** improved by 190 bps to **15.4%**, crossing the 15% threshold for the first time in a half-year period. The Adhesive Solutions segment thus maintained a good dynamic, confirming all its potential. It benefited notably from the integration of acquisitions and the development of related synergies, the active management of its selling prices, cost control, and the development of its high-performance solutions in partnership with its customers.

At €170 million, recurring operating income was up more than 15% year-on-year (€147 million in H1'23), including €44 million in recurring depreciation and amortization, a slight year-on-year increase, owing primarily to the integration of acquisitions. In the first half, REBIT margin grew 170 bps to 12.3% (10.6% in H1'23).

Operating income was also up by a sharp 20.2%, coming in at €101 million (€84 million in H1'23). This figure includes €53 million in depreciation and amortization related to the revaluation of assets carried out as part of the allocation of the purchase price of businesses, including some new bolt-on acquisitions. It also includes a €16 million expense corresponding primarily to restructuring costs and to costs linked to the acquisition of Dow's flexible packaging laminating adhesives business.

Advanced Materials (37% of total Group sales)

(In millions of euros)	First-half 2024	First-half 2023	YoY change
Sales	**1,796**	**1,849**	**-2.9%**
EBITDA	**352**	**345**	**+2.0%**
EBITDA margin	19.6%	18.7%	
Recurring operating income (REBIT)	**183**	**210**	**-12.9%**
REBIT margin	10.2%	11.4%	
Other income and expenses	(51)	(16)	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	(19)	(8)	
Operating income	**113**	**186**	**-39.2%**

Sales in the Advanced Materials segment totaled **€1,796 million**, down by 2.9% year-on-year (€1,849 million in H1'23). Volumes were stable (up 0.3%), supported by positive momentum in High Performance Polymers in Asia, notably in the battery, energy, medical and sports markets, but were impacted in the second quarter by several planned maintenance turnarounds in Thiochemicals. At negative 6.4%, the price effect mainly reflects the decrease of certain raw materials and the still high comparison base for PVDF prices in the first quarter of 2023. The scope effect linked to the integration of PIAM amounted to a positive 4.9% and the currency effect was a negative 1.7%.

At **€352 million**, the segment's **EBITDA** was up 2.0% year-on-year (€345 million in H1'23), supported by the integration and ramp-up of PIAM, and the progressive contribution of organic projects. In the first quarter of the year it was impacted by the expected decline in PVDF relative to last year's high point, and by lower volumes due to the planned maintenance turnarounds in Thiochemicals in the second quarter. In early June, the exceptional flooding of the Danube led to a three-month shutdown of our German organic peroxides facility for an impact on EBITDA estimated at around €15 million, mainly in Q3'24.

Moreover, the PA11 plant in Singapore and the Nutrien HF site in the United States are now operational, and will start ramping up in the second half of the year. The **EBITDA margin** grew 90 bps in the first half to **19.6%** (18.7% in H1'23).

Recurring operating income amounted to €183 million (€210 million in H1'23) including €169 million in recurring depreciation and amortization, up compared with the first half of 2023, mainly reflecting the consolidation of PIAM and the start-up of new production units.

At €113 million (€186 million in H1'23), operating income included €51 million expenses corresponding mainly to start-up costs for the Singapore platform, specific asset impairments and restructuring and environmental expenses. In the first half of 2023, other income and expenses included notably the capital gain on the divestment of Febex.

Coating Solutions (26% of total Group sales)

(In millions of euros)	First-half 2024	First-half 2023	YoY change
Sales	**1,263**	**1,278**	**-1.2%**
EBITDA	**166**	**182**	**-8.8%**
EBITDA margin	13.1%	14.2%	
Recurring operating income (REBIT)	**105**	**121**	**-13.2%**
REBIT margin	8.3%	9.5%	
Other income and expenses	0	(1)	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	(3)	(4)	
Operating income	**102**	**116**	**-12.1%**

Sales in the Coating Solutions segment were down by 1.2% compared with first-half 2023 and came to **€1,263 million**. They were impacted by a negative 8.7% price effect, reflecting the year-on-year decrease of certain raw materials and less favorable market conditions in upstream acrylics. Volumes were up by a sharp 7.7% relative to last year's baseline marked by destocking, driven by the segment's downstream activities, particularly in the industrial coatings market, led by the development of solutions focused on sustainability such as powders and additives, and in the electronics and renewable energy markets. Volumes were also up in upstream acrylics, notably in Europe. The currency effect was very limited, at a negative 0.2%.

Segment **EBITDA** amounted to **€166 million**, down 8.8% year-on-year, reflecting notably the still high comparison base in upstream acrylics in the first quarter of 2023.

It was also supported by higher volumes in the segment's downstream activities, benefiting from the contribution of Sartomer's organic project in China and from growth initiatives focused on more sustainable and value-added solutions. In this environment, the **EBITDA margin** stood at **13.1%** (14.2% in H1'23).

In line with the change in EBITDA, recurring operating income represented €105 million (€121 million in H1'23), including stable recurring depreciation and amortization of €61 million.

Operating income amounted to €102 million in first-half 2024 and included a €3 million expense for depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses.

Intermediates (8% of total Group sales)

(In millions of euros)	**First-half 2024**	First-half 2023	YoY change
Sales	**412**	**430**	**-4.2%**
EBITDA	**123**	**118**	**+4.2%**
EBITDA margin	29.9%	27.4%	
Recurring operating income (REBIT)	**103**	**93**	**+10.8%**
REBIT margin	25.0%	21.6%	
Other income and expenses	(1)	0	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	-	-	
Operating income	**102**	**93**	**+9.7%**

At **€412 million, sales** for the Intermediates segment decreased 4.2% in first-half 2024 compared with first-half 2023. Down 10.7%, volumes integrated the mechanical impact of lower refrigerant gas quotas, but were supported in the second quarter by higher demand for the acrylics business in China. The positive 8.4% price effect mainly reflects the good momentum of refrigerant gases, while market conditions for acrylics in China remained challenging. The currency effect was a negative 1.9%.

In this context, segment **EBITDA** grew 4.2% to **€123 million** (€118 million in H1'23), and the **EBITDA margin** came to a very good level of **25.0%** *versus* 21.6% in H1'23.

Recurring operating income increased by over 10%, coming in at €103 million (€93 million in H1'23), including recurring depreciation and amortization of €20 million, down by €5 million year-on-year.

Operating income came in at €102 million for the period (€93 million in H1'23).

1.4.3 Group cash flow analysis

(In millions of euros)	**First-half 2024**	First-half 2023
Cash flow from operating activities	380	417
Cash flow from investing activities	(386)	(387)
Net cash flow	**(6)**	**30**
Of which net cash flow from portfolio management operations	(41)	(39)
Free cash flow	**35**	**69**
Of which non-recurring cash flow including exceptional capital expenditure	(37)	(55)
Recurring cash flow	**72**	**124**

EBITDA can be reconciled to free cash flow as follows:

(In millions of euros)	**First-half 2024**	First-half 2023
EBITDA	**801**	**784**
Taxes	(93)	(112)
Cash items included in the financial result	(26)	(28)
Change in working capital(1)	(281)	(161)
Change in fixed asset payables(2)	(50)	(124)
Other	(10)	(23)
Operating cash flows	**341**	**336**
Recurring capital expenditure	(269)	(212)
Recurring cash flow	**72**	**124**
Exceptional capital expenditure	-	(12)
Non-recurring cash flow	(37)	(43)
Free cash flow	**35**	**69**

(1) Excluding cash flows related to non-recurring items and portfolio management operations. These items represented a nil amount in first-half 2024 and a net cash outflow of €3 million in first-half 2023.

(2) Excluding cash flows related to non-recurring items and portfolio management operations. These items represented a nil amount in first-half 2024 and in first-half 2023.

Recurring cash flow came to **€72 million** (€124 million in H1'23). It reflects the usual seasonality of business, as well as higher capital expenditure in line with the Group's full-year guidance, with recurring capital expenditure amounting to €269 million (€212 million in H1'23). At end-June 2024, working capital remained well controlled and represented 15.7% of annualized sales (16.9% at end-June 2023).

At **€35 million, free cash flow** includes a non recurring cash outflow of €37 million related in particular to start-up costs for the Singapore platform.

The net cash outflow from portfolio management operations of €41 million includes payments linked to the Arc Building Products acquisition, finalized on 2 January 2024, the acquisition of a majority stake of nearly 78% in Proionic on 3 June 2024, and costs linked to the acquisition of Dow's flexible packaging laminating adhesives business, which is expected to be finalized in fourth-quarter 2024. In the prior year, portfolio management operations generated a €39 million net cash outflow and corresponded essentially to the acquisition of Polytec PT, partly offset by the proceeds from the divestment of Febex.

1.4.4 Balance sheet analysis

(In millions of euros)	**30 June 2024**	31 December 2023	Change
Non-current assets*	9,608	9,502	+1.1%
Working capital	1,593	1,275	+24.9%
Capital employed	**11,201**	**10,777**	**+3.9%**
Deferred tax assets	151	157	-3.8%
Provisions for pensions and other employee benefits	379	397	-4.5%
Other provisions	432	402	+7.5%
Total provisions	**811**	**799**	**+1.5%**
Long-term assets covering some provisions	148	122	+21.3%
Total provisions net of non-current assets	**663**	**677**	**-2.1%**
Deferred tax liabilities	454	436	+4.1%
Net debt (excluding hybrid bonds)	**2,170**	**2,230**	**-2.7%**
Shareholders' equity	**7,904**	**7,455**	**+6.0%**

* *Excluding deferred tax and including pension assets.*

Between 31 December 2023 and 30 June 2024, non-current assets increased by €106 million, mainly attributable to:

- the impact of acquisitions for an amount of €34 million, corresponding essentially to the integration of Arc Building Product's and Proionic's assets, which notably led to the recognition of €24 million in provisional goodwill, as well as to the finalization of the Polytec PT purchase price allocation, for which the final goodwill amounted to €35 million (for further details, see notes 3.1 and 8 to the condensed consolidated financial statements at 30 June 2024 in section 2 of this document);
- capital expenditure amounting to €269 million;
- a €53 million increase in right-of-use assets related to the Group's lease commitments under IFRS 16;
- €382 million in depreciation and amortization mainly including (i) €297 million in recurring depreciation and amortization, of which €41 million arising from the application of IFRS 16, (ii) €75 million in depreciation and amortization related to the revaluation of property, plant and equipment and intangible assets as part of the allocation of the purchase price of businesses, and (iii) €10 million in exceptional write-downs of industrial and intangible assets; and
- a €92 million positive currency translation effect, mainly linked to the euro's depreciation against the US dollar at 30 June 2024.

At 30 June 2024, working capital rose by €318 million compared with 31 December, 2023, including an €18 million outflow in non-monetary effects (for further details, see note 5.2 to the condensed consolidated financial statements at 30 June 2024 in section 2 of this document). This working capital increase mainly reflects the usual seasonality of business, as well as higher capital expenditure towards the end of the year.

Consequently, between 31 December 2023 and 30 June 2024, the Group's capital employed increased by €424 million to €11,201 million.

Deferred tax assets amounted to €151 million at 30 June 2024, down slightly by €6 million compared with 31 December 2023.

Gross provisions totaled €811 million. Some of these provisions are covered, accounting for an aggregate €147 million, mainly by the guarantee facility granted by TotalEnergies and described in note 9.1.2 to the condensed consolidated financial statements at 30 June 2024 (see section 2 of this document) and therefore by long-term assets recognized in the balance sheet. These consist mainly of provisions related to former industrial sites in the United States. A pension asset of €1 million was also recognized in the balance sheet. At 30 June 2024, provisions net of these non-current assets were down by €14 million to €663 million.

Net provisions can be analyzed as follows by type:

(In millions of euros)	**30 June 2024**	31 December 2023
Pension liabilities	250	265
Other employee benefit obligations	128	130
Environmental contingencies	136	133
Restructuring	27	30
Other	122	119

Between 31 December 2023 and 30 June 2024, net provisions for pension liabilities decreased by €15 million, primarily due to a slight increase in the discount rates applied in the United States, the United Kingdom and Europe compared with December 2023, leading to a decrease in pension obligations. Provisions for other employee benefit obligations (healthcare costs, welfare costs and long-service awards) were largely unchanged at €128 million, with all other provisions also remaining unchanged.

Net debt and hybrid bonds amounted to €3,270 million at 30 June 2024 (€2,930 million at 31 December 2023), representing 2.2 times last-twelve-months EBITDA. This increase primarily reflects the cash flows described in section 1.4.3 of this document, and also includes the payment of the dividend of €3.50 per share for a total amount of €261 million, as well as share buybacks for a total amount of €14 million in first half 2024. In addition, in March 2024, Arkema successfully completed a €400 million undated hybrid bond issue with an annual coupon of 4.8% and a first call date after 5 years. The Group having thus anticipated the refinancing of one of its two outstanding hybrid bond for the same amount with a first call date of 17 September 2024, the amount of hybrid bonds temporarily amounts to €1.1 billion.

Shareholders' equity amounted to €7,904 million against €7,455 million at 31 December 2023. The €449 million increase primarily included (i) €229 million in net income for the period, (ii) the issue of hybrid bonds for a total of €399 million, (iii) the payment of a dividend of €3.50 per share for a total amount of €261 million, (iv) share buybacks for a total amount of €14 million, as well as (v) a positive €71 million translation adjustment principally due to the appreciation of the US dollar against the euro.

1.5 Transactions with related parties

Transactions between consolidated companies have been eliminated in the consolidation process. In addition, in the normal course of business, the Group has business relationships with certain non-consolidated companies or with companies which are accounted for under the equity method. The values involved are not significant.

1.6 Main risks and uncertainties

The main risks and uncertainties which the Group could face over the next six months are the same as those described in chapter 2 of the 2023 Universal Registration Document filed with the French financial markets authority (*Autorité des marchés financiers* – AMF) on 28 March 2024 under number D.24-0207. This document is available on Arkema's website (www.arkema.com) in the "Investors" section and on the AMF website (www.amf-france.org). Additionally, an update on the Group's liabilities and contingent liabilities is provided in the notes to the condensed consolidated financial statements at 30 June 2024 and can be found in section 2 of this document.

1.7 Outlook

At the beginning of the third quarter, the macroeconomic context remains in line with that of previous quarters, with no tangible signs of a rebound in demand. In this environment, Arkema's teams will continue to focus on the elements that are within their control, in particular the strict management of operations and the ramp-up of the major projects presented last September at the Capital Markets Day. These projects are expected to contribute around €60 million to EBITDA over the full year, of which €40 million is anticipated in the second half of the year.

In this context, Arkema confirms its full-year guidance and tightens its range based on the results of the first six months. The Group thus aims to achieve a higher EBITDA year-on-year in 2024, estimated at between €1.53 and €1.63 billion (€1.5 billion in 2023), depending on the evolution of macroeconomic conditions (previously between €1.5 and €1.7 billion). Third-quarter EBITDA should be slightly up compared with the prior year.

Finally, beyond the short-term priorities, the Group will continue to implement its strategic roadmap, accelerating its innovation efforts in partnership with its customers, and deploying its portfolio of cutting-edge technologies to support the development of solutions for a less carbon-intensive and more sustainable world.

2. **Condensed consolidated** financial statements

At 30 June 2024

Consolidated income statement

(In millions of euros)	Notes	**1st half 2024**	1st half 2023
Sales	***(4.8 & 4.9)***	**4,877**	**4,966**
Operating expenses		(3,838)	(3,922)
Research and development expenses		(137)	(136)
Selling and administrative expenses		(473)	(452)
Other income and expenses	*(5.1)*	(77)	(39)
Operating income	***(4.8)***	**352**	**417**
Equity in income of affiliates		(2)	(5)
Financial result	*(10.1)*	(33)	(35)
Income taxes	*(7)*	(88)	(92)
Net income		**229**	**285**
Attributable to non-controlling interests		5	1
Net income – Group share		**224**	**284**
Earnings per share (in euros)	*(11.6)*	*2.93*	*3.73*
Diluted earnings per share (in euros)	*(11.6)*	*2.92*	*3.72*

Consolidated statement of comprehensive income

(In millions of euros)	Notes	1st half 2024	1st half 2023
Net income		**229**	**285**
Hedging adjustments		(3)	(38)
Other		0	0
Deferred taxes on hedging adjustments and other items		0	2
Change in translation adjustments	*(11.5)*	71	(143)
Other recyclable comprehensive income		**68**	**(179)**
Impact of remeasuring unconsolidated investments		(1)	—
Actuarial gains and losses	*(6.1)*	18	(7)
Deferred taxes on actuarial gains and losses		(4)	1
Other non-recyclable comprehensive income		**13**	**(6)**
TOTAL INCOME AND EXPENSES RECOGNIZED DIRECTLY THROUGH EQUITY		**81**	**(185)**
Total comprehensive income		**310**	**100**
Attributable to non-controlling interests		(6)	(1)
Total comprehensive income – Group share		316	101

Consolidated balance sheet

(In millions of euros)	Notes	**30 June 2024**	31 December 2023
ASSETS			
Goodwill	*(8.1)*	3,061	3,040
Other intangible assets, net	*(8.2)*	2,400	2,416
Property, plant and equipment, net	*(8.3)*	3,787	3,730
Investments in equity affiliates		10	13
Other investments		56	52
Deferred tax assets		151	157
Other non-current assets		294	251
Total non-current assets		**9,759**	**9,659**
Inventories		1,361	1,208
Accounts receivable		1,539	1,261
Other receivables and prepaid expenses		191	170
Income taxes recoverable		135	142
Current financial derivative assets		12	32
Cash and cash equivalents		2,094	2,045
Assets held for sale		—	—
Total current assets		**5,332**	**4,858**
TOTAL ASSETS		**15,091**	**14,517**
LIABILITIES AND SHAREHOLDERS' EQUITY			
Share capital	*(11.1)*	750	750
Paid-in surplus and retained earnings		6,690	6,304
Treasury shares	*(11.3)*	(34)	(21)
Translation adjustments		252	170
Shareholders' equity – Group share		**7,658**	**7,203**
Non-controlling interests		246	252
Total shareholders' equity		**7,904**	**7,455**
Deferred tax liabilities		454	436
Provisions for pensions and other employee benefits	*(6.1)*	379	397
Other provisions and non-current liabilities	*(9.1)*	445	416
Non-current debt	*(10.2)*	3,038	3,734
Total non-current liabilities		**4,316**	**4,983**
Accounts payable		1,114	1,036
Other creditors and accrued liabilities		417	392
Income taxes payable		87	83
Current financial derivative liabilities		27	27
Current debt	*(10.2)*	1,226	541
Liabilities associated with assets held for sale		—	—
Total current liabilities		**2,871**	**2,079**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**15,091**	**14,517**

Consolidated cash flow statement

(In millions of euros)	Notes	**1st half 2024**	1st half 2023
OPERATING CASH FLOWS			
Net income		229	285
Depreciation, amortization and impairment of assets		382	334
Other provisions and deferred taxes		23	(26)
(Gains)/Losses on sales of long-term assets		4	(28)
Undistributed affiliate equity earnings		3	5
Change in working capital	*(5.2)*	(279)	(164)
Other changes		18	11
Cash flow from operating activities		**380**	**417**
INVESTING CASH FLOWS			
Intangible assets and property, plant, and equipment additions	*(4.3)*	(269)	(224)
Change in fixed asset payables		(50)	(124)
Acquisitions of operations, net of cash acquired	*(3.1)*	(29)	(65)
Increase in long-term loans		(55)	(33)
Total expenditures		**(403)**	**(446)**
Proceeds from sale of intangible assets and property, plant, and equipment		3	7
Change in fixed asset receivables		(2)	—
Proceeds from sale of operations, net of cash transferred		—	32
Repayment of long-term loans		16	20
Total divestitures		**17**	**59**
Cash flow from investing activities		**(386)**	**(387)**
FINANCING CASH FLOWS			
Issuance/(Repayment) of shares and paid-in surplus	*(11.1)*	—	0
Purchase of treasury shares	*(11.3)*	(14)	(23)
Issuance of hybrid bonds	*(11.2)*	399	—
Dividends paid to parent company shareholders	*(11.4)*	(261)	(253)
Interest paid to bearers of subordinated perpetual notes	*(11.2)*	(5)	(5)
Dividends paid to non-controlling interests and buyout of minority interests		(1)	(2)
Increase in long-term debt		3	396
Decrease in long-term debt		(750)	(42)
Increase/(Decrease) in short-term debt		685	(34)
Cash flow from financing activities		**56**	**37**
Net increase/(decrease) in cash and cash equivalents		50	67
Effect of exchange rates and changes in scope		(1)	7
Cash and cash equivalents at beginning of period		2,045	1,592
Cash and cash equivalents at end of period		**2,094**	**1,666**

Consolidated statement of changes in shareholders’ equity

(In millions of euros)	Share capital	Paid-in surplus	Hybrid bonds	Retained earnings	Translation adjustments	Treasury shares	Share-holders’ equity – Group share	Non-controlling interests	Share-holders’ equity
At 1 January 2024	**750**	**1,067**	**700**	**4,537**	**170**	**(21)**	**7,203**	**252**	**7,455**
Cash dividend	—	—	—	(266)	—	—	(266)	(1)	(267)
Issuance of share capital	—	—	—	—	—	—	—	—	—
Capital reduction by cancellation of treasury shares	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	—	—	—	—	—	(14)	(14)	—	(14)
Grants of treasury shares to employees	—	—	—	(1)	—	1	—	—	—
Share-based payments	—	—	—	16	—	—	16	—	16
Issuance of hybrid bonds	—	—	400	(1)	—	—	399	—	399
Redemption of hybrid bonds	—	—	—	—	—	—	—	—	—
Other	—	—	—	4	—	—	4	1	5
Transactions with shareholders	**—**	**—**	**400**	**(248)**	**—**	**(13)**	**139**	**—**	**139**
Net income	—	—	—	224	—	—	224	5	229
Total income and expenses recognized directly through equity	—	—	—	10	82	—	92	(11)	81
Total comprehensive income	**—**	**—**	**—**	**234**	**82**	**—**	**316**	**(6)**	**310**
At 30 June 2024	**750**	**1,067**	**1,100**	**4,523**	**252**	**(34)**	**7,658**	**246**	**7,904**

(In millions of euros)	Share capital	Paid-in surplus	Hybrid bonds	Retained earnings	Translation adjustments	Treasury shares	Shareholders’ equity – Group share	Non-controlling interests	Sharehol ders’ equity
At 1 January 2023	**750**	**1,067**	**700**	**4,451**	**352**	**(20)**	**7,300**	**39**	**7,339**
Cash dividend	—	—	—	(258)	—	—	(258)	(1)	(259)
Issuance of share capital	—	—	—	—	—	—	—	—	—
Capital reduction by cancellation of treasury shares	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	—	—	—	—	—	(23)	(23)	—	(23)
Grants of treasury shares to employees	—	—	—	0	—	0	—	—	—
Share-based payments	—	—	—	12	—	—	12	—	12
Issuance of hybrid bonds	—	—	—	—	—	—	—	—	—
Redemption of hybrid bonds	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	—	—	—	2	2
Transactions with shareholders	**—**	**—**	**—**	**(246)**	**—**	**(23)**	**(269)**	**1**	**(268)**
Net income	—	—	—	284	—	—	284	1	285
Total income and expenses recognized directly through equity	—	—	—	(42)	(141)	—	(183)	(2)	(185)
Total comprehensive income	**—**	**—**	**—**	**242**	**(141)**	**—**	**101**	**(1)**	**100**
At 30 June 2023	**750**	**1,067**	**700**	**4,447**	**211**	**(43)**	**7,132**	**39**	**7,171**

Notes to the consolidated financial statements as at 30 June 2024

Note 1 Highlights

1.1 Portfolio management

On 2 May 2024, the Group announced plans to acquire Dow's flexible packaging laminating adhesives business, generating annual sales of around US$250 million. The proposed acquisition will significantly expand Arkema's portfolio of solutions for flexible packaging, particularly in food and medical applications, as well as for industrial lamination (window films, photovoltaic panel backsheets, etc.). Combined with Bostik's existing commercial presence, product offering and technological breadth for flexible packaging, this operation will enable the Group to ideally complement its existing business and deliver a high and balanced level of cost and development synergies, which should represent around US$30 million in EBITDA within five years. This proposed acquisition is based on an enterprise value of US$150 million (around 10 times expected 2024 EBITDA) and will trigger around US$50 million in implementation costs or capex over the next three years. The deal is expected to be finalized in late 2024.

On 2 January 2024, Arkema finalized the acquisition of Irish manufacturer Arc Building Products (FDM Arc Manufacturing Limited), specialized in construction adhesives and sealants and which generates around €15 million in annual sales. This acquisition strengthens the Group's position in this growing market, through a broader range of solutions and a local industrial footprint.

Finally, the Group has strengthened its range of solutions for new-generation batteries through the acquisition of a majority stake of nearly 78% in Proionic, a leading start-up in the production and development of ionic liquids, with sales of €2.5 million in 2023. This deal was finalized on 3 June 2024.

The impacts of these operations are described in note 3.1 "Business combinations".

1.2 Other highlights

In March 2024 Arkema successfully issued €400 million of perpetual hybrid bonds with an annual 4.8% coupon and a first call date after five years. Arkema thus anticipates the refinancing of one of its two outstanding hybrid bond issues, amounting to €400 million with a first call date of 17 September 2024.

Note 2 Accounting policies and new standards

The condensed consolidated interim financial statements should be read in conjunction with the Group's most recent annual consolidated financial statements for the year ended 31 December 2023. 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.

Arkema, a major player in Specialty Materials, is a French limited liability company *(société anonyme)* with a Board of Directors, subject to the provisions of book II of the French Commercial Code and all other legal provisions applicable to French commercial companies. The Arkema Group's LEI is 9695000EHMS84KKP2785.

The Company's head office is at 420, rue d'Estienne-d'Orves, 92700 Colombes (France). It was incorporated on 31 January 2003 and the shares of Arkema have been listed on the Paris stock exchange (Euronext) since 18 May 2006. The Group's parent company is Arkema S.A.

The Group's condensed consolidated interim financial statements at 30 June 2024 were prepared under the responsibility of the Chairman and CEO of Arkema and were approved for publication by the Board of Directors of Arkema on 31 July 2024.

The condensed consolidated interim financial statements at 30 June 2024 were prepared in compliance with IAS 34 "Interim financial reporting" and established in accordance with the IFRS (International Financial Reporting Standards) issued by the IASB (International Accounting Standards Board) as released at 30 June 2024 and the IFRS endorsed by the European Union at 30 June 2024.

The accounting framework and standards adopted by the European Commission can be accessed from the following website:

https://ec.europa.eu/info/law/international-accounting-standards-regulation-ec-no-1606-2002.

The accounting policies applied in preparing the consolidated financial statements at 30 June 2024 are identical to those used in the consolidated financial statements at 31 December 2023, except for IFRS standards, amendments and interpretations, as adopted by the European Union and the IASB, that are mandatory for accounting periods commencing on or after 1 January 2024 (and which had not been applied early by the Group), namely:

Amendments to IAS 1	Classification of liabilities as current or non-current	Adopted by the European Union on 20 December 2023
Amendments to IAS 7 and IFRS 7	Supplier financing arrangements	Adopted by the European Union on 16 May 2024
Amendments to IFRS 16	Lease liability in a sale and leaseback	Adopted by the European Union on 21 November 2023

Application of these amendments had no significant impact on the financial statements at 30 June 2024.

The standards, amendments and interpretations published by the IASB and the IFRS IC (IFRS Interpretations Committee) which are not yet mandatory for accounting periods commencing on or after 1 January 2024 (and which have not been applied early by the Group) are:

Amendments to IAS 21	Lack of exchangeability	Not adopted by the European Union at 30 June 2024
Amendments to IFRS 7 and IFRS 9	Classification and Measurement of Financial Instruments	Not adopted by the European Union at 30 June 2024
IFRS 18	Presentation and Disclosure in Financial Statements	Not adopted by the European Union at 30 June 2024
IFRS 19	Subsidiaries without Public Accountability: Disclosures	Not adopted by the European Union at 30 June 2024

The Group does not expect application of the amendments to IAS 21, IFRS 7 and IFRS 9, and IFRS 19 to have a significant impact.

Preparation of the condensed consolidated interim financial statements in accordance with IFRS requires Group management to make estimates and determine assumptions that can have an impact on the amounts recognized in assets and liabilities at the balance sheet date, and have a corresponding impact on the income statement. Management made its estimates and determined its assumptions on the basis of past experience and taking into account different factors considered to be reasonable for the valuation of assets and liabilities. These condensed consolidated interim financial statements therefore take into consideration, in particular, the current conflict in Ukraine and are based on information available at the closing date. Use of different assumptions could have a material effect on these valuations. The main assumptions made by management in preparing the financial statements are those used for measuring the recoverable value of property, plant and equipment and intangible assets, pension benefit obligations, deferred taxes and provisions. The disclosures provided concerning contingent assets and liabilities and off-balance sheet commitments at the date of preparation of the condensed consolidated interim financial statements also involve the use of estimates.

The estimates and judgments incorporating the impacts of climate change in particular are presented in note 5 of the annual consolidated financial statements for the year ended 31 December 2023.

The condensed consolidated interim financial statements are prepared in accordance with the historical cost convention, except for certain financial assets and liabilities which are recognized at fair value.

The condensed consolidated interim financial statements are presented in millions of euros, rounded to the nearest million, unless otherwise indicated.

The functional operating currency of foreign companies in the scope of consolidation is their local currency, in which most of their transactions are denominated. Their balance sheets are translated into euros on the basis of exchange rates at the end of the period. The statements of income and of cash flows are translated using the average exchange rates during the period. Foreign exchange differences resulting from translation of the financial statements of these subsidiaries are recorded either in "Translation adjustments" in shareholders' equity in the consolidated financial statements for the Group share, or in "Non-controlling interests" for the share not directly or indirectly attributable to the Group. In exceptional cases, a company's functional currency may differ from the local currency.

In application of IAS 21 "The effects of changes in foreign exchange rates", transactions denominated in foreign currencies are translated by the entity carrying out the transaction into its functional currency at the exchange rate applicable on the transaction date. Monetary balance sheet items are restated at the closing exchange rate at the balance sheet date. Gains and losses resulting from translation are recognized in recurring operating income, unless they result from unhedged financing, in which case they are included in the financial result.

The Group's standard pattern of business shows seasonality effects. Various characteristics contribute to these effects:

- demand for products manufactured by the Group is generally lower in the summer months (July-August) and in December, notably as a result of the slowdown in industrial activity during these months, particularly in France and the rest of Europe;
- in some of the Group's businesses, particularly those serving the paints and coatings as well as the refrigeration and air-conditioning markets, sales are generally higher in the first half of the year than in the second half. By contrast, in adhesives, the two halves of the year are more evenly balanced;
- the major multi-annual maintenance turnarounds at the Group's production plants also have an impact on seasonality, and tend in general to be carried out in the second half of the year.

These seasonal effects observed in the past are not necessarily representative of future trends, but can have a material effect on changes in results and working capital from one quarter of the year to the next.

Note 3 Scope of consolidation

3.1 Business combinations

3.1.1 Business combinations during the period

As described in note 1.1 “Portfolio management”, business combinations in 2024 correspond to the acquisition of FDM Arc Manufacturing Limited and Proionic GmbH.

In accordance with IFRS 3 (Revised), the Group used the acquisition method for the accounting treatment of these operations.

The amount recognized in the financial statements at 30 June 2024 for the identifiable assets acquired and liabilities assumed at the acquisition date is €11 million, of which €2 million in property, plant and equipment.

The goodwill of €24 million recognized at 30 June 2024 for FDM Arc Manufacturing Limited and Proionic GmbH is provisional and not amortizable for tax purposes. Under IFRS 3 (Revised), the Group has 12 months from the acquisition date to finalize the value of the assets acquired and liabilities assumed.

3.1.2 Finalization of purchase price allocations

The Group has finalized the purchase price allocation for POLYTEC PT GmbH Polymere Technologien.

Intangible assets stated at fair value primarily comprise customer relations and technologies. They amount to €38 million.

Final goodwill totals €35 million and mainly corresponds to the value of future technologies and expected business development. Goodwill on the acquisition amortizable for tax purposes represents €12 million.

The final purchase price allocation for PI Advanced Materials (PIAM) will take place in the second half of the year.

3.2 Warranties related to sales of businesses

When selling businesses, the Arkema Group has sometimes granted the purchaser warranties in respect of unrecorded liabilities. In most cases, these warranties are capped and granted for a limited period of time. They are also limited in terms of their coverage to certain types of expenses or litigation. In the majority of cases, they cover risks of occurrence of environmentally related expenses or litigation.

The cumulative residual amount of capped warranties in respect of unrecorded liabilities granted by the Group amounts to €37 million at 30 June 2024 (€55 million at 31 December 2023). These amounts are stated net of provisions recognized in the balance sheet in respect of such warranties.

Note 4 Alternative performance indicators and information by segment

To monitor and analyze the financial performance of the Group and its activities, Group management uses alternative performance indicators. These are financial indicators that are not defined by IFRS. This note presents a reconciliation of these indicators and the aggregates from the consolidated financial statements under IFRS.

4.1 Recurring operating income (REBIT) and EBITDA

(In millions of euros)	Notes	**1st half 2024**	1st half 2023
OPERATING INCOME		**352**	**417**
- Depreciation and amortization related to the revaluation of property, plant and equipment and intangible assets as part of the allocation of the purchase price of businesses		(75)	(63)
- Other income and expenses	*(5.1)*	(77)	(39)
RECURRING OPERATING INCOME (REBIT)		**504**	**519**
- Recurring depreciation and amortization of property, plant and equipment and intangible assets		(297)	(265)
EBITDA		**801**	**784**

Details of depreciation and amortization of property, plant and equipment and intangible assets:

(In millions of euros)	Notes	1st half 2024	1st half 2023
Depreciation and amortization of property, plant and equipment and intangible assets (including goodwill)	*(8.1 & 8.2 & 8.3)*	**(382)**	**(334)**
Of which: Recurring depreciation and amortization of tangible and intangible assets		(297)	(265)
Of which: Depreciation and amortization related to the revaluation of property, plant and equipment and intangible assets as part of the allocation of the purchase price of businesses		(75)	(63)
Of which: Impairment included in other income and expenses	*(5.1)*	(10)	(6)

4.2 Adjusted net income and adjusted earnings per share

(In millions of euros)	Notes	1st half 2024	1st half 2023
NET INCOME – GROUP SHARE		**224**	**284**
- Depreciation and amortization related to the revaluation of property, plant and equipment and intangible assets as part of the allocation of the purchase price of businesses		(75)	(63)
- Other income and expenses	*(5.1)*	(77)	(39)
- Other income and expenses attributable to non-controlling interests		—	—
- Taxes on depreciation and amortization related to the revaluation of property, plant and equipment and intangible assets as part of the allocation of the purchase price of businesses		16	13
- Taxes on other income and expenses		12	8
- One-time tax effects		(4)	(4)
ADJUSTED NET INCOME		**352**	**369**
Weighted average number of ordinary shares		74,748,618	74,716,206
Weighted average number of potential ordinary shares	*(11.6)*	75,043,514	75,043,514
ADJUSTED EARNINGS PER SHARE (IN EUROS)		**4.71**	**4.94**
DILUTED ADJUSTED EARNINGS PER SHARE (IN EUROS)		**4.69**	**4.92**

4.3 Recurring capital expenditure

(In millions of euros)	1st half 2024	1st half 2023
INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT ADDITIONS	**269**	**224**
- Exceptional capital expenditure	—	12
- Investments relating to portfolio management operations	—	—
- Capital expenditure with no impact on net debt	—	—
RECURRING CAPITAL EXPENDITURE	**269**	**212**

Exceptional capital expenditure corresponds to a very limited number of capital expenditure items for major development projects that the Group presents separately in its financial reporting due to their size and nature. In 2023, exceptional capital expenditure concerned investments in Specialty Polyamides in Asia and the partnership with Nutrien in the United States for the supply of anhydrous hydrogen fluoride.

Investments relating to portfolio management operations reflect the impact of acquisition operations.

4.4 Free cash flow

(In millions of euros)	1st half 2024	1st half 2023
Cash flow from operating activities	380	417
+ Cash flow from investing activities	(386)	(387)
NET CASH FLOW	**(6)**	**30**
- Net cash flow from portfolio management operations	(41)	(39)
FREE CASH FLOW	**35**	**69**
- Exceptional capital expenditure	—	(12)
- Non-recurring cash flow	(37)	(43)
RECURRING CASH FLOW	**72**	**124**
- Recurring capital expenditure	(269)	(212)
OPERATING CASH FLOWS	**341**	**336**

Operating Cash Flow corresponds to the recurring cash flow before recurring capital expenditure.

The net cash flow from portfolio management operations corresponds to the impact of acquisition and divestment operations described in note 1 “Highlights”.

Non-recurring cash flow corresponds to cash flow from other income and expenses, as described in note 5.1 “Other income and expenses”.

4.5 Net debt

(In millions of euros)	Notes	30 June 2024	31 December 2023
Non-current debt	*(10.2)*	3,038	3,734
+ Current debt	*(10.2)*	1,226	541
- Cash and cash equivalents	*(10.2)*	2,094	2,045
NET DEBT		**2,170**	**2,230**
+ Hybrid bonds	*(11.2)*	1,100	700
NET DEBT AND HYBRID BONDS		**3,270**	**2,930**

4.6 Working capital

(In millions of euros)	Notes	30 June 2024	31 December 2023
Inventories		1,361	1,208
+ Accounts receivable		1,539	1,261
+ Other receivables including income taxes recoverable		326	312
+ Current financial derivative assets		12	32
- Accounts payable (operating suppliers)		1,114	1,036
- Other liabilities including income taxes		504	475
- Current financial derivative liabilities		27	27
WORKING CAPITAL		**1,593**	**1,275**

4.7 Capital employed

(In millions of euros)	Notes	30 June 2024	31 December 2023
Goodwill, net	*(8.1)*	3,061	3,040
+ Intangible assets (excluding goodwill) and property, plant and equipment, net	*(8.2 & 8.3)*	6,187	6,146
+ Investments in equity affiliates		10	13
+ Other investments and other non-current assets		350	303
Working capital		1,593	1,275
CAPITAL EMPLOYED		**11,201**	**10,777**

4.8 Information by segment

As required by IFRS 8 "Operating segments", segment information for the Group is presented in accordance with the internal reporting structure that is used by executive management in order to assess financial performance and allocate resources.

Arkema is organized around three complementary, coherent segments dedicated to Specialty Materials, namely Adhesive Solutions, Advanced Materials and Coating Solutions, and an Intermediates segment consisting of activities with more volatile results.

The Adhesive Solutions segment is headed by a member of the Executive Committee, and the Advanced Materials, Coating Solutions and Intermediates segments are directed by the Chief Operating Officer who is also a member of the Executive Committee. Both of these segment heads report to the Chairman and CEO, Arkema's chief operating decision-maker as defined by IFRS 8, and are in regular contact with him for the purpose of discussing their segments' operating activities, financial results, forecasts and plans.

The Chief Operating Officer is supported by three other Executive Committee members, who report to him and are respectively in charge of the Coating Solutions segment and each of the two Business Lines[1] making up the Advanced Materials segment: High Performance Polymers and Performance Additives.

The content of the segments is as follows:

- Adhesive Solutions comprises the following Business Lines:
  - Construction and Consumer, providing solutions for construction, renovation of buildings, and DIY; and
  - Industrial Assembly, comprising high performance adhesives for durable goods, and adhesive solutions for packaging and non-woven.

The Adhesive Solutions segment supplies technologies used in building activities for businesses and individuals, including sealants, tile and flooring adhesives and waterproofing systems, and technologies used in industry, including state-of-the-art know-how in the automotive, textiles, glazing, flexible and rigid packaging, and hygiene markets.

- Advanced Materials comprises the following Business Lines:
  - High Performance Polymers, consisting of specialty polyamides, PVDF, polyimides, fluorospecialties and PEKK, and
  - Performance Additives, covering interface agents combining specialty surfactants and molecular sieves, organic peroxides, thiochemicals and hydrogen peroxide.

The Advanced Materials segment offers innovative solutions with high added value to meet the major challenges of sustainable development, including lightweighting, new energies, access to water, bio-based products and recycling. These solutions are used in a wide variety of sectors such as the automotive and transportation sectors, oil and gas, renewable energies (photovoltaics, lithium-ion batteries, wind power), consumer goods (sports equipment, packaging, beauty and health products, etc.), electronics, construction, coatings, animal nutrition and water treatment.

- Coating Solutions comprises the following Business Lines:
  - Coating resins, combining the EU/US acrylics activities and coating resins; and
  - Coating Additives, combining Sartomer photocure resins and Coatex rheology additives.

This segment offers a broad range of innovative products for decorative paints, industrial coatings and adhesives, and also provides solutions for applications in the paper industry, superabsorbents, water treatment and oil and gas extraction, and in cutting-edge high-growth markets such as 3D printing and electronics.

- The Intermediates segment comprises the following activities:
  - Fluorogases, and
  - Asia Acrylics.

These industrial intermediate chemicals activities, in which Arkema holds leading positions, concern competitive global product lines used in several industrial sectors such as construction, production of cold (refrigeration and air conditioning), the automotive industry, coatings and water treatment.

Functional and financial activities which cannot be directly allocated to operational activities (notably certain research costs and central costs) are brought together in a Corporate segment.

(1) *Business Lines are activities or groups of activities.*

Operating income and assets are allocated between segments prior to inter-segment adjustments. Sales between segments take place at market prices.

1st half 2024 *(In millions of euros)*	Adhesive Solutions	Advanced Materials	Coating Solutions	Intermediates	Corporate	Total
Sales	**1,386**	**1,796**	**1,263**	**412**	**20**	**4,877**
EBITDA*	**214**	**352**	**166**	**123**	**(54)**	**801**
Recurring depreciation and amortization of property, plant and equipment and intangible assets*	(44)	(169)	(61)	(20)	(3)	(297)
Recurring operating income (REBIT)*	**170**	**183**	**105**	**103**	**(57)**	**504**
Depreciation and amortization related to the revaluation of property, plant and equipment and intangible assets as part of the allocation of the purchase price of businesses	(53)	(19)	(3)	—	—	(75)
Other income and expenses	(16)	(51)	0	(1)	(9)	(77)
Operating income	**101**	**113**	**102**	**102**	**(66)**	**352**
Equity in income of affiliates	—	(2)	—	—	—	(2)
Intangible assets and property, plant and equipment additions	27	176	43	11	12	269
Of which: Recurring capital expenditure**	27	176	43	11	12	269

* *See note 4.1 "Recurring operating income (REBIT) and EBITDA".*
** *See note 4.3 "Recurring capital expenditure".*

1st half 2023 *(In millions of euros)*	Adhesive Solutions	Advanced Materials	Coating Solutions	Intermediates	Corporate	Total
Sales	**1,390**	**1,849**	**1,278**	**430**	**19**	**4,966**
EBITDA*	**188**	**345**	**182**	**118**	**(49)**	**784**
Recurring depreciation and amortization of property, plant and equipment and intangible assets	(41)	(135)	(61)	(25)	(3)	(265)
Recurring operating income (REBIT)*	**147**	**210**	**121**	**93**	**(52)**	**519**
Depreciation and amortization related to the revaluation of property, plant and equipment and intangible assets as part of the allocation of the purchase price of businesses	(51)	(8)	(4)	—	—	(63)
Other income and expenses	(12)	(16)	(1)	0	(10)	(39)
Operating income	**84**	**186**	**116**	**93**	**(62)**	**417**
Equity in income of affiliates	—	(5)	—	—	—	(5)
Intangible assets and property, plant and equipment additions	33	137	39	8	7	224
Of which: Recurring capital expenditure**	33	125	39	8	7	212

* *See note 4.1 "Recurring operating income (REBIT) and EBITDA".*
** *See note 4.3 "Recurring capital expenditure".*

4.9 Information by geographical area

Sales are presented on the basis of the geographical location of customers.

1st half 2024 *(In millions of euros)*	Non-Group sales
Europe	1,658
of which France	*373*
NAFTA*	1,717
of which United States	*1,526*
Asia	1,262
*of which China***	*609*
Rest of the world	240
TOTAL	**4,877**

* *USA, Canada, Mexico.*
** *China, Hong Kong and Taiwan.*

1st half 2023 *(In millions of euros)*	Non-Group sales
Europe	1,769
of which France	*396*
NAFTA*	1,830
of which United States	*1,640*
Asia	1,105
*of which China***	*496*
Rest of the world	262
TOTAL	**4,966**

* *USA, Canada, Mexico.*
** *China, Hong Kong and Taiwan.*

Note 5 Other information relating to operating activities

5.1 Other income and expenses

Other income and expenses concern a limited number of well-identified non-recurring items of income and expense of a particularly material nature that the Group presents separately in its income statement in order to facilitate understanding of its recurring operational performance.

	1st half 2024			1st half 2023		
(In millions of euros)	**Expenses**	**Income**	**Net**	Expenses	Income	Net
Restructuring and environment	(22)	1	(21)	(23)	1	(22)
Goodwill impairment	—	—	—	—	—	—
Asset impairment (excluding goodwill)	(10)	—	(10)	(6)	—	(6)
Litigation and claims	(17)	7	(10)	(1)	—	(1)
Gains (losses) on sales and purchases of assets	(13)	—	(13)	(2)	23	21
Other	(23)	—	(23)	(31)	—	(31)
TOTAL OTHER INCOME AND EXPENSES	**(85)**	**8**	**(77)**	**(63)**	**24**	**(39)**

In the first half of 2024, restructuring and environmental expenses mainly concern the Corporate segment in the United States (see note 9.1.2 “Other provisions”), as well as Adhesive Solutions and Advanced Materials. Specific asset impairments have mainly been recognized in the Hydrogen Peroxide activities for the Jarrie site in France (see note 8.3 “Other property, plant and equipment”). Expenses related to litigation and claims include, in particular, legal fees for ongoing proceedings in the United States. The income and expenses relating to sales and purchases of assets were mainly attributable to the acquisition of Dow’s flexible packaging laminating adhesives business. “Other” mainly includes start-up costs for the Singapore platform.

In the first half of 2023, restructuring and environment expenses mainly concern the Corporate and Adhesives Solutions segments, and in particular an additional charge to the environmental provision concerning the Saint-Fons site. Specific asset impairments have mainly been recognized in the Hydrogen Peroxide activities for the Jarrie site in France (see note 8.3 “other property, plant and equipment”). The income and expenses relating to sales of assets are mainly attributable to the divestment of Febex. The item “Other” primarily includes start-up costs related to exceptional capital expenditure in Specialty Polyamides in Asia (see note 4.3 “Recurring capital expenditure”).

The total impairment (including goodwill impairment) included in other income and expenses amounts to a net expense of €10 million at 30 June 2024 compared with a net expense of €6 million at 30 June 2023.

5.2 Working capital

Cash flows in foreign currencies are translated into euros using the average exchange rates of each period. Cash flow statements exclude foreign exchange differences arising from the translation into euros of assets and liabilities recognized in balance sheets denominated in foreign currencies at the end of the period (except for cash and cash equivalents).

The change in working capital reported in the cash flow statement amounts to €279 million in cash flow from operating activities and €52 million in cash flow from investing activities.

(In millions of euros)	31 December 2023	Changes in scope	Monetary flows in the cash flow statement (operating and investing activities)	Translation adjustment	Other non-monetary flows	**30 June 2024**
Inventories	1,208	4	141	8	—	1,361
+ Accounts receivable, excluding fixed asset receivables	1,260	3	264	9	—	1,536
+ Other receivables, including income taxes recoverable	312	1	15	(2)	—	326
- Accounts payable, excluding fixed asset payables	864	2	117	7	(3)	987
- Other liabilities, including income taxes	475	1	24	1	3	504
TOTAL OPERATING CATEGORIES	**1,441**	**5**	**279**	**7**	**0**	**1,732**
+ Fixed asset receivables	1	—	2	—	—	3
- Other creditors and fixed asset payables	172	—	(50)	2	3	127
TOTAL INVESTING CATEGORIES	**(171)**	**—**	**52**	**(2)**	**(3)**	**(124)**
+ Current financial derivative assets and liabilities	5	—	—	—	(20)	(15)
TOTAL WORKING CAPITAL	**1,275**	**5**	**331**	**5**	**(23)**	**1,593**

5.3 Off-balance sheet commitments related to operating activities

5.3.1 Off-balance sheet commitments related to the Group's operating activities

The main commitments given are summarized in the table below:

(In millions of euros)	**30 June 2024**	31 December 2023
Guarantees granted	144	136
Comfort letters	—	—
Contractual guarantees	4	1
Customs and excise guarantees	28	27
TOTAL	**176**	**164**

Guarantees granted are mainly bank guarantees in favor of local authorities and public bodies (state agencies, environmental agencies) in respect of environmental obligations or concerning classified sites, as well as rent guarantees for the Group's future headquarters.

5.3.2 Contractual commitments related to the Group's operating activities

In the normal course of business, the Arkema Group has signed multi-year purchase agreements for raw materials and energy for the operational requirements of its factories, in order to guarantee the security and continuity of supply. Signature of such contracts over initial periods generally comprised between one and ten years is a normal practice for companies in the Group's business sector in order to cover their needs.

These purchase commitments were valued taking into account, on a case-by-case basis, Arkema's financial commitment to its suppliers, as certain of these contracts include clauses which oblige the Group to take delivery of the minimum volumes as set out in the contract or, otherwise, to pay financial compensation to the supplier. Depending on the case, these commitments are reflected in the purchase contracts in the form of notice periods, indemnification to be paid to the supplier in case of early termination of the contract or "take or pay" clauses. The value of these agreements thus corresponds to the minimum amount payable to suppliers as indemnification in the event of termination of the contracts or failure to take delivery of the minimum contractual quantities, less any quantities that can be resold on the market when the Group is able to do so (even though this may not be its intention upon entering into the agreements).

Some lease or purchase commitments do not fall within the scope of IFRS 16. Many of them are irrevocable purchase commitments described above, and service contracts or contracts making available assets that are not identified or not controlled by Arkema at 30 June 2024. Only the irrevocable portion of outstanding future purchases has been valued, and the corresponding amounts are included in the table below at 30 June 2024.

The total amount of the Group's financial commitments is €1,244 million at 30 June 2024, maturing as follows:

(In millions of euros)	**30 June 2024**	31 December 2023
Y	216	—
Y+1	166	259
Y+2	145	135
Y+3	95	113
Y+4	87	96
Y+5 until expiry of the contracts	535	616
TOTAL	**1,244**	**1,219**

Note 6 Provisions for pensions and other employee benefits

6.1 Provisions for pensions and other employee benefits

(In millions of euros)	**30 June 2024**	31 December 2023
Pension obligations	251	267
Healthcare and similar coverage	44	45
Dispensation from work	13	14
Post-employment benefits	**308**	**326**
Long service awards	71	71
Other long-term benefits	**71**	**71**
Provisions for pensions and other employee benefits	**379**	**397**

(In millions of euros)	**30 June 2024**	31 December 2023
Provision recognized in liabilities	379	397
Amount recognized in assets	(1)	(2)
Net provisions for pensions and other employee benefits	**378**	**395**

The discount rates used by the Arkema Group are as follows:

Pension obligations, healthcare and similar coverage	France	Germany	UK	Rest of Europe	USA
2024	3.80	3.85	5.10	3.50	5.45
2023	3.55	3.60	4.50	3.51	4.95

The present value of benefit obligations at the end of 2023 has been adjusted at 30 June 2024 on the basis of sensitivity analysis tables prepared by the Group's external actuaries in the context of the full-year 2023 closing, to take account of the change in interest rates over the half-year. The fair value of plan assets has also been reassessed on the basis of new valuations at 30 June 2024. The effects of the change in discount rates and the revaluation of assets are included in actuarial gains and losses for the period.

The change in net provisions for post-employment benefits over the first half of 2024 is as follows:

(In millions of euros)	Pension obligations	Healthcare and similar coverage	Dispensation from work	Total post-employment benefits
Net liability (asset) at beginning of period	**265**	**45**	**14**	**324**
Provision recognized in liabilities	*267*	*45*	*14*	*326*
Amount recognized in assets	*(2)*	—	—	*(2)*
(Income)/Expense for the period	9	1	—	10
Net benefits paid by the employer	(10)	(1)	(1)	(12)
Changes in scope	—	—	—	—
Actuarial gains and losses recognized in shareholders' equity	(16)	(2)	—	(18)
Translation adjustments	2	1	—	3
Net liability (asset) at end of period	**250**	**44**	**13**	**307**
Provision recognized in liabilities	*251*	*44*	*13*	*308*
Amount recognized in assets	*(1)*	—	—	*(1)*

6.2 Share-based payments

6.2.1 Free share grants

On 8 November 2023, the Board of Directors decided to introduce two free performance share plans for employees, particularly people in positions of responsibility whose work has an influence on the Group's results.

Performance shares are generally granted on the condition of continued presence within the Group and achievement of financial and CSR objectives. These objectives include a greenhouse gas emissions reduction target.

Movements in the free share grant plans existing at 30 June 2024 are as follows:

Plan	Grant date	Vesting period	Holding period	Total number of free shares granted	Number of shares subject to performance conditions	Fair value (euros per share)	Number of shares vested in 1st half 2024	Number of shares canceled in 1st half 2024	Total number of shares still to be granted at 30 June 2024
2020-1, 2	5 May 2020	3-4 years	0-3 years	9,129	-	10.09-20.94	6,601	1,338	-
2020-4	4 Nov. 2020	4 years	-	128,245(1)	111,365	54.33	-	380	115,895
2021-1	9 Nov. 2021	3 years	2 years	239,575(2)	227,387	81.91	6,000	40	226,035
2021-2	9 Nov. 2021	4 years	-	124,713(3)	105,293	83.92	-	258	115,895
2022-1, 2	9 Nov. 2022	4 years	-	52,255	-	63.45-70.51	-	-	52,244
2022-3	9 Nov. 2022	3 years	2 years	234,715(4)	219,835	68.26	-	50	227,705
2022-4	9 Nov. 2022	4 years	-	128,540(5)	106,515	66.15	-	500	124,415
2023-1	8 Nov. 2023	3 years	2 years	247,665(6)	232,980	69.45	-	130	243,335
2023-2	8 Nov. 2023	4 years	-	126,995(7)	102,800	67.68	-	480	126,200

(1) May be raised to 150,518 in the event of outperformance.
(2) May be raised to 285,052 in the event of outperformance.
(3) May be raised to 145,772 in the event of outperformance.
(4) May be raised to 278,682 in the event of outperformance.
(5) May be raised to 149,843 in the event of outperformance.
(6) May be raised to 294,261 in the event of outperformance.
(7) May be raised to 147,555 in the event of outperformance.

The amount of the IFRS 2 expense recognized in respect of free shares at 30 June 2024 is €13 million (€12 million at 30 June 2023).

Note 7 Income taxes

The income tax expense breaks down as follows:

(In millions of euros)	1st half 2024	1st half 2023
Current income taxes	(81)	(98)
Deferred income taxes	(7)	6
TOTAL INCOME TAXES	**(88)**	**(92)**

The income tax expense amounts to €88 million for the first half of 2024, compared with €92 million for the first half of 2023.

Pillar Two provisions are applicable to the Group in 2024. The Group applies the temporary relief from deferred tax accounting. The amount of current tax relating to Pillar Two has been recognized for €1 million.

Note 8 Intangible assets and property, plant and equipment

8.1 Goodwill

Goodwill is initially recognized when a business combination takes place.

Goodwill is not amortized after initial recognition. It is included in the cash-generating units (CGUs) that are subject to impairment tests as soon as any indicators of potential impairment are identified. Impairment tests are performed at least annually. Impairment tests are performed following the methodology described in note 8.5 “Asset value monitoring”.

	30 June 2024			31 December 2023
(In millions of euros)	Gross book value	Accumulated depreciation and impairment	Net book value	Net book value
Goodwill	3,693	(632)	3,061	3,040

The breakdown by segment is as follows:

Goodwill by segment	30 June 2024 Net book value	31 December 2023 Net book value
Adhesive Solutions	1,726	1,715
Advanced Materials	896	902
Coating Solutions	395	379
Intermediates	44	44
Corporate	—	—
TOTAL	**3,061**	**3,040**

Changes in the net book value of goodwill are as follows:

(In millions of euros)	2024
At 1 January	**3,040**
Acquisitions and final purchase price allocations	(7)
Impairment	—
Disposals	—
Translation adjustments	28
Reclassifications	—
At 30 June	**3,061**

In 2024, the “acquisitions” line corresponds to goodwill on FDM Arc Manufacturing Limited and Proionic GmbH, offset by the reduction in goodwill following the purchase price allocation for POLYTEC PT GmbH Polymere Technologien (see note 3.1 “Business combinations”).

8.2 Other intangible assets

Other intangible assets mainly include patents and technologies, trademarks, software and IT licenses, capitalized contracts, customer relations, and capitalized research expenses. These intangible assets are recognized in the balance sheet at their acquisition or production cost, less any accumulated amortization and impairment losses recognized following impairment tests as described in note 8.5 "Asset value monitoring".

	30 June 2024			31 December 2023
(In millions of euros)	**Gross book value**	**Accumulated depreciation and impairment**	**Net book value**	Net book value
Patents and technologies	645	(319)	326	330
Trademarks	675	(9)	666	664
Software and IT licenses	497	(419)	78	85
Capitalized REACH costs	92	(61)	31	33
Other capitalized research expenses	29	(29)	0	0
Capitalized contracts	197	(81)	116	13
Asset rights	107	(51)	56	51
Customer relations	938	(216)	722	709
Other intangible assets	366	(80)	286	319
Intangible assets in progress	144	(25)	119	212
TOTAL	**3,690**	**(1,290)**	**2,400**	**2,416**

Trademarks essentially comprise the Bostik® and Den Braven® trademarks, which are part of the Adhesive Solutions segment.

Changes in the net book value of intangible assets are as follows:

(In millions of euros)	**2024**
At 1 January	**2,416**
Acquisitions	23
Depreciation	(97)
Impairment	0
Disposals	—
Changes in scope	38
Translation adjustments	18
Reclassifications	2
At 30 June	**2,400**

"Changes in scope" includes intangible assets for POLYTEC PT GmbH Polymere Technologien.

8.3 Other property, plant and equipment

	30 June 2024			31 December 2023
(In millions of euros)	**Gross book value**	**Accumulated depreciation and impairment**	**Net book value**	Net book value
Land and buildings	2,464	(1,595)	869	860
Complex industrial facilities	3,810	(3,288)	522	540
Other property, plant and equipment	4,863	(3,235)	1,628	1,598
Construction in progress	568	(33)	535	515
TOTAL PROPERTY, PLANT AND EQUIPMENT EXCLUDING RIGHTS OF USE	**11,705**	**(8,151)**	**3,554**	**3,513**
Rights of use	490	(257)	233	217
TOTAL PROPERTY, PLANT AND EQUIPMENT	**12,195**	**(8,408)**	**3,787**	**3,730**

Changes in the net book value of property, plant and equipment excluding rights of use are as follows:

(In millions of euros)	**2024**
At 1 January	**3,513**
Acquisitions	246
Depreciation	(234)
Impairment	(10)
Disposals	(1)
Changes in scope	2
Translation adjustments	40
Other	—
Reclassifications	(2)
At 30 June	**3,554**

Impairment at 30 June 2024 mainly concerns specific property, plant and equipment for Hydrogen Peroxide activities at the Jarrie site in France.

8.4 IFRS 16 Leases: Rights of use and IFRS 16 debt

At 30 June 2024, the net book value of rights of use related to leases is €233 million.

	30 June 2024			31 December 2023
(In millions of euros)	**Gross book value**	**Accumulated depreciation and impairment**	**Net book value**	Net book value
Rights of use: real estate assets (head offices, offices)	98	(73)	25	28
Rights of use: industrial assets (factories, land, warehouses)	71	(28)	43	46
Rights of use: logistics assets (trucks, containers, trolleys)	269	(136)	133	120
Rights of use: other assets (cars, etc.)	52	(20)	32	23
TOTAL RIGHTS OF USE	**490**	**(257)**	**233**	**217**

Changes in the net book value of rights of use are as follows:

(In millions of euros)	**2024**
At 1 January	**217**
Acquisitions	55
Depreciation	(41)
Disposals	(3)
Changes in scope	—
Translation adjustments	4
Reclassifications	1
At 30 June	**233**

The IFRS 16 debt amounts to €235 million at 30 June 2024 (see note 10.2 “Other current debt”). The total non-discounted value of the Group’s future lease payments amounts to €266 million at 30 June 2024, maturing as follows:

(In millions of euros)	**30 June 2024**
Within one year	76
1-5 years	118
After 5 years	72
TOTAL	**266**

At 30 June 2024, the cash outflows associated with leases amounts to €41 million. The financial expenses related to the IFRS 16 debt amounts to €4 million.

The application of exemptions for short-term leases and leases of low-value assets concerns amounts that are not material at Group level.

8.5 Asset value monitoring

The recoverable amount of property, plant and equipment and intangible assets is tested as soon as any indication of impairment is identified. A review to identify if any such indication exists is performed at each year-end, based on a five-year plan validated by the Executive Committee. This impairment test is performed at least once a year and includes goodwill and trademarks with indefinite useful lives.

An asset’s recoverable amount corresponds to the greater of its value in use and its fair value less costs to sell.

Tests are performed for each autonomous group of assets, termed Cash Generating Units (CGUs). A CGU is a group of assets whose continued use generates cash flows that are substantially independent of cash flows generated by other groups of assets. They are worldwide business operations, which bring together groups of similar products in strategic, commercial and industrial terms.

The value in use of a CGU is determined on the basis of the discounted future cash flows that are expected to be generated by the assets in question, based upon Group management’s expectation of future economic and operating conditions over the next five years or, when the asset is to be sold, by comparison with its market value. Any impairment is calculated as the difference between the recoverable amount and the carrying amount of the CGU. Because of its unusual nature, any such impairment is presented separately in the income statement under the “Other income and expenses” caption. Impairment may be reversed, to the maximum carrying amount that would have been recognized for the asset had the asset not been impaired. Impairment losses on goodwill are irreversible (in application of IFRIC 10, impairment losses on goodwill recognized in previous interim accounting periods cannot be written back).

In 2023, the terminal value was calculated based on mid-cycle cash flows and a perpetuity growth rate of 2% for all these CGUs except Fluorogases and Adhesive Solutions, for which the rates used were 0% and 2.5% respectively. The rate used to discount future cash flows and the terminal value is the Group’s weighted average cost of capital, estimated at 8.5% in 2023, except for the Asia Acrylics CGU, for which the rate was estimated at 9.5%.

At the end of June 2024, new tests were carried out for certain CGUs after indications of impairment were identified – in particular a change in EBITDA in first-half 2024 compared with first-half 2023. The tests assumed a perpetuity growth rate of 2% for all these CGUs except the Fluorogases CGU and the Adhesive Solutions segment CGU, for which the rates used were 0% and 2.5%, respectively. The discount rates used at end-June 2024 were the same as at end-December 2023, except for the Asia Acrylics CGU reviewed at 9%. These tests did not lead to recognition of impairment.

Sensitivity analyses carried out evaluating the impact of reasonable changes in the basic assumptions – in particular the impact of a 1-point increase in the discount rate, or of a change of minus 0.5 of a point in the perpetuity growth rate, or minus 10% in EBITDA, or plus 20% in capital expenditure – confirmed the net carrying amounts of the different CGUs, excluding the Hydrogen Peroxide CGU, for which the assumption of a change of plus 20% in capital expenditure would lead to impairment losses of less than €20 million.

Lastly, impairment losses were recognized on other specific assets at 30 June 2024 (see note 8.3 “Other property, plant and equipment”).

Note 9 Other provisions and other non-current liabilities, contingent liabilities and litigation

9.1 Other provisions and non-current liabilities

9.1.1 Other non-current liabilities

Other non-current liabilities amount to €13 million at 30 June 2024 versus €14 million at 31 December 2023.

9.1.2 Other provisions

(In millions of euros)	Environmental provisions	Restructuring	Other	Total
At 1 January 2024	**216**	**30**	**156**	**402**
Increases in provisions	40	—	16	56
Reversals of provisions on use	(16)	(3)	(20)	(39)
Reversals of unused provisions	—	(0)	—	—
Changes in scope	0	—	—	0
Translation adjustments	4	0	2	6
Other	—	0	7	7
At 30 June 2024	**244**	**27**	**161**	**432**

Furthermore, certain provisions are covered by non-current assets (receivables and deposits):

(In millions of euros)	Environmental provisions	Restructuring	Other	Total
Total provisions at 30 June 2024	244	27	161	432
Portion of provisions covered by receivables or deposits	83	—	39	122
Deferred tax asset related to amounts covered by the Total indemnity	25	—	—	25
Provisions at 30 June 2024 net of non-current assets	136	27	122	285
For information: Provisions at 1 January 2024 net of non-current assets	133	30	119	282

Environmental provisions

Environmental provisions are recognized mainly to cover expenses related to soil and water table clean-up, as well as expenses related to the reinforcement of certain structures to address physical climate risks such as flooding. These provisions are primarily attributable to:

- France for €102 million (€100 million at 31 December 2023);
- the United States for €130 million (€105 million at 31 December 2023), of which €108 million in respect of former industrial sites covered 100% by the TotalEnergies SE group indemnity for the benefit of the Arkema Group in connection with the spin-off of Arkema Businesses (receivable recognized in “Other non-current assets” for an amount of €83 million and €25 million recognized in deferred tax assets). The increase of gross provision mainly reflects the impact of the proposed transaction by Legacy Site Services LLC (LSS), in the name and on behalf of Arkema Inc, with the New Jersey Department of Environmental Protection, covered 100% by the TotalEnergies SE group, as described in note 9.2.

Restructuring provisions

Restructuring provisions are mainly in respect of restructuring measures in France for €18 million (€20 million at 31 December 2023), in Europe excluding France for €4 million (€5 million at 31 December 2023) and in the United States for €3 million (€3 million at 31 December 2023).

Increases in such provisions in the period mainly correspond to the restructuring plans described in note 5.1 “Other income and expenses”.

Other provisions

Other provisions amount to €161 million and mainly comprise:

- provisions for labor litigation for €77 million (€75 million at 31 December 2023);
- provisions for commercial litigation and warranties for €34 million (€32 million at 31 December 2023);
- provisions for tax litigation for €30 million (€30 million at 31 December 2023); and
- provisions for other risks for €20 million (€19 million at 31 December 2023).

9.2 Liabilities and contingent liabilities

Liabilities and contingent liabilities are described in note 10.2 to the consolidated financial statements at 31 December 2023. There was no development in liabilities and contingent liabilities during the first half of 2024 with an actual or potential material effect on the Group's consolidated financial statements, outside of the developments outlined below.

Fluorinated substances

On the AFFF PFAS litigation, Arkema Inc continues to be sued in the US in the AFFF MDL, along with numerous other users and multiple fluorochemical manufacturers. Concerning the AFFF MDL which is pending in federal court in South Carolina, the Court ordered in April 2024 all remaining water provider defendants to engage in mediation, which is ongoing. For one so-called "water-provider" case the Court has also scheduled a January 2025 trial.

Concerning the cases involving a former operating site in New Jersey for which Arkema Inc. is indemnified by Legacy Site Services, LLC (LSS) (see note 9.3 "Commitments received"), LSS acting as exclusive agent for Arkema Inc. has reached a proposed settlement with the New Jersey Department of Environmental Protection for certain historical contamination liabilities associated with the former site. The settlement consists of a payment totaling $33.95 million, as well as a contingent reserve fund in the initial amount of $75 million in the form of a letter of credit and/or a self-guarantee to provide additional financial assurance that the remediation activities associated with the West Deptford Property will be completed. This contingent reserve fund is intended to provide backup remediation monies to the state only if the party to the other settlement with NJDEP fails to perform under the terms of its own settlement. This settlement requires public notice and court approval before becoming final. The Group has recorded provisions and receivables reflecting this settlement (see note 9.1.2) in its financial statements. As indicated in note 9.3 "Commitments received", Arkema Inc. is indemnified by LSS for these liabilities.

Harvey (Arkema Inc.)

Since September 2017, Arkema Inc. has been defending, and continues to defend, multiple civil lawsuits that were filed against it by private individuals and governmental entities following flooding as a result of Hurricane Harvey.

One of those cases was certified in May 2022 as a class action for certain claims asserted under federal statutes. A class action settlement was concluded in 2023. On 6 June 2024, the District Court gave final approval to the settlement, delivered a final ruling and administratively closed the case.

All but one of the remaining lawsuits were consolidated in 2020 for pre-trial purposes into a state multi-district litigation pending in Texas court. The majority of the initial matters involving the largest number of private individuals has been settled, and negotiations are ongoing to settle the other cases concerning private individuals. In April 2024, another group of private individuals filed suits and Arkema Inc. will vigorously defend itself on legal and factual grounds.

For all these contingent liabilities, the Group has set aside provisions for expected costs net of insurance reimbursements.

Pierre-Bénite

Pursuant to a prefectural decision issued on 14 June 2023, Arkema France is required to perform additional analyses for certain PFAS in the area around the Pierre Bénite site, as well as an environmental assessment (interprétation de l'état des milieux) and a health risk assessment. These analyses are underway. The provisions set aside at 31 December 2023 are sufficient to cover the cost of these studies. Given that (i) the results of these studies are pending, and (ii) regulations may change, it cannot be ruled out that the Group's exposure will be greater than the provisioned amounts. With regard to ongoing proceedings, an environmental summary proceedings procedure (référé pénal environnemental) was initiated against Arkema France by several associations on 30 May 2023. The judge dismissed the request on 16 November 2023, upholding the arguments put forward by the Group. The appeal lodged by the associations was deemed inadmissible by the Lyon Court of Appeal. The matter has been appealed before the Cour de Cassation, where proceedings are underway. On 19 March, Arkema was notified of a request for judicial expertise issued by the Lyon Metropole against the industrial operators of the Pierre-Benite platform. The purpose of this action is to appoint an expert regarding the presence of PFAS and their various sources. Finally in the context of a judicial information opened in 2023 following a complaint from the mayor of Pierre-Benite, law enforcement officers visited our sites in Pierre-Benite, Cetia, and Colombes HQ on 9 April Arkema provided all requested information to the investigators.

9.3 Commitments received

Commitments received from TotalEnergies SE in 2006

In connection with the Spin-Off of Arkema's Businesses, TotalEnergies SE and certain TotalEnergies companies extended certain indemnities, or assumed certain obligations, for the benefit of the Arkema Group. Some are still in application while others terminated during 2017. The indemnities and obligations concerned are described below, and relate to actual or potential environmental liabilities of the Group arising from certain sites in France, Belgium and the United States, the operations of which in the majority of cases have ceased.

Obligations and indemnities given in respect of Former Industrial Sites

In order to cover certain risks relating to certain industrial sites situated in France, Belgium and the United States in respect of which the Group is or could be held liable, and where, for the most part, operations have ceased (the Former Industrial Sites), TotalEnergies SE companies have entered into indemnity and service agreements with Arkema or its subsidiaries.

Pursuant to these agreements, the obligations and environmental responsibilities associated with these former industrial sites in France and at Rieme in Belgium were transferred to TotalEnergies SE group companies.

Agreement relating to certain former industrial sites located in the United States

In March 2006, Arkema Participations (which absorbed Arkema Amériques in 2023) completed the acquisition from Elf Aquitaine Inc. and Arkema France of Arkema Delaware Inc., a holding company for most of the Group's operations in the United States. The negotiated terms of the stock purchase agreement among Elf Aquitaine Inc., Legacy Site Services and Arkema Participations (which absorbed Arkema Amériques in 2023), dated 7 March 2006 (the Arkema Delaware Main SPA) required Elf Aquitaine Inc. to use US$270 million to capitalize a new subsidiary, Legacy Site Services LLC, to perform remediation services and indemnify the Group against the cost of environmental contamination liabilities incurred by the Group entities covered by this indemnity, and related personal injury and property damage claims associated with contamination at 35 of the Group's closed and formerly operated facilities and 24 third party sites where the Group's liability arises solely out of waste shipments from the sites other than currently operated sites. In exchange for this indemnification, Arkema Participations (which absorbed Arkema Amériques in 2023) agreed to grant to Legacy Site Services LLC control over remediation activities and the defense of claims relating to contamination liabilities at these facilities and sites.

The sites currently operated by the Group are excluded from this indemnity, as are sites that received waste associated with current operations of the Group, certain sites where no significant restoration work is currently underway or anticipated, and other sites where the Group could be held liable for environmental pollution. These other sites include, for example, sites where remediation has been conducted in the past or where future remediation costs or liability are believed to be insignificant or non-existent based upon information available at the time when the indemnity was entered into. Arkema Participations (which absorbed Arkema Amériques in 2023) has waived any claims against Legacy Site Services LLC, Total S.A. or their respective subsidiaries in respect of the sites not covered by the indemnity.

The Legacy Site Services LLC indemnity covers the costs of restoration and clean-up of the soil and groundwater, the costs of related defense and settlement costs and personal injury, property and natural resource damages. The indemnity does not cover liabilities unrelated to site remediation, in particular liabilities in respect of products manufactured on the said sites, liability arising from certain dangerous and potentially dangerous substances, particularly asbestos exposure, and criminal liability.

The indemnity described above is capped at US$270 million. The amount received by Arkema under this indemnity amounts to US$176 million. At the same time as the stock purchase agreement and the indemnity described above, Legacy Site Services LLC and Arkema Inc. entered into a supplemental contamination indemnity agreement pursuant to which Legacy Site Services LLC will indemnify the liabilities of the Group in excess of US$270 million, on the same terms, for the same sites and subject to the same exceptions as the indemnity described in the preceding paragraph.

Note 10 Financing

10.1 Financial result

Financial result includes the cost of debt adjusted for capitalized financial expenses, and as regards provisions for pensions and employee benefits, the interest cost, the expected return on plan assets and the actuarial gains and losses related to changes in the discount rate on other long-term benefits. It also includes the portion of foreign exchange gains and losses corresponding to the interest income/expense reflected by the difference between the spot exchange rate and the forward exchange rate, and the foreign exchange gain/loss on unhedged financing.

(In millions of euros)	**1st half 2024**	1st half 2023
Cost of debt	(15)	(11)
Spot/forward exchange rate difference and foreign exchange gain/loss on unhedged financing	(11)	(16)
Financial income/expenses on provisions for pensions and employee benefits	(7)	(7)
Capitalized interest	4	2
Interest expenses on leases	(4)	(3)
Other	0	0
FINANCIAL RESULT	**(33)**	**(35)**

10.2 Other current debt

Group net debt amounted to €2,170 million at 30 June 2024, taking account of cash and cash equivalents of €2,094 million.

10.2.1 Analysis of net debt by category

(In millions of euros)	**30 June 2024**	31 December 2023
Bonds	2,788	3,486
Bank loans	64	70
Other current debt	22	22
Non-current debt excluding IFRS 16 debt	**2,874**	**3,578**
Bonds	700	—
Syndicated credit facility	—	—
Negotiable European Commercial Paper	398	389
Other bank loans	36	45
Other current debt	21	40
Current debt excluding IFRS 16 debt	**1,155**	**474**
Debt excluding IFRS 16 debt	**4,029**	**4,052**
Non-current IFRS 16 debt	164	156
Current IFRS 16 debt	71	67
Debt	**4,264**	**4,275**
Cash and cash equivalents	2,094	2,045
Net debt	**2,170**	**2,230**

Bonds

- In January 2015, the Group issued a €700 million bond that will mature on 20 January 2025, with a fixed coupon of 1.50%.

At 30 June 2024, the fair value of this bond is €691 million.

- In April 2017, the Group issued a €700 million bond that will mature on 20 April 2027, with a fixed coupon of 1.50%. A further €200 million tap issue was undertaken in June 2017, bringing the total amount of this bond issue to €900 million.

At 30 June 2024, the fair value of this bond is €853 million.

- In December 2019, the Group issued a €500 million bond that will mature on 3 December 2029, with a fixed coupon of 0.75%.

At 30 June 2024, the fair value of this bond is €431 million.

- In October 2020, the Group issued a €300 million green bond that will mature on 14 October 2026, with a fixed coupon of 0.125%. This bond is entirely dedicated to the financing of Arkema's new, world-scale plant in Singapore to manufacture 100% bio-based Rilsan® polyamide 11.

At 30 June 2024, the fair value of this bond is €278 million.

- In January 2023, the Group issued a €400 million bond that will mature on 23 January 2031, with a fixed coupon of 3.5%.

At 30 June 2024, the fair value of this bond is €394 million.

- In November 2023, the Group issued a €700 million bond that will mature on 20 May 2030, with a fixed coupon of 4.25%.

At 30 June 2024, the fair value of this bond is €718 million.

These issues are part of the Group's Euro Medium Term Notes (EMTN) program introduced in October 2013.

Negotiable European Commercial Paper

In April 2013, the Group introduced an annually renewed Negotiable European Commercial Paper program. The maximum amount of this debt program is €2 billion.

Issues outstanding as part of this program amount to €400 million at 30 June 2024.

Syndicated line of credit

On 28 July 2022, the Group amended and extended its syndicated line of credit maturing on 29 July 2024. The amount was increased to €1.1 billion and the maturity extended to 28 July 2027 with two one-year extension options subject to lender approval.

The cost of the credit line is linked to three key CSR criteria for the Group: greenhouse gas emissions, volatile organic compound emissions and the total recordable injury rate (TRIR). These indicators are calculated each year.

This line is intended to finance the general needs of the Group and serves as a back-up facility for the short-term negotiable securities program.

IFRS 16 debt

The maturities of the Group's future lease payments, at non-discounted value, are presented in note 8.4 "IFRS 16 Leases".

10.2.2 Analysis of debt excluding IFRS 16 debt by currency

The Arkema Group's debt excluding IFRS 16 debt is mainly denominated in euros.

(In millions of euros)	**30 June 2024**	31 December 2023
Euros	3,914	3,922
South Korean won	81	105
US dollars	11	12
Other	23	13
TOTAL DEBT EXCLUDING IFRS 16 DEBT	**4,029**	**4,052**

Part of the debt in euros is converted through swaps to the accounting currency of internally financed subsidiaries, in line with the Group's policy. At 30 June 2024, the swapped portion, mainly in US dollars, represented approximately 22% of gross debt excluding IFRS 16 debt.

10.2.3 Analysis of debt excluding IFRS 16 debt by maturity

The breakdown of debt by maturity, excluding IFRS 16 debt and including interest costs, is as follows:

(In millions of euros)	**30 June 2024**	31 December 2023
Less than 1 year	1,215	517
Between 1 and 2 years	68	778
Between 2 and 3 years	1,266	365
Between 3 and 4 years	51	965
Between 4 and 5 years	78	51
More than 5 years	1,641	1,673
TOTAL DEBT EXCLUDING IFRS 16 DEBT	**4,319**	**4,349**

10.2.4 Changes in liabilities from financing activities

(In millions of euros)	31 December 2023	Changes in scope	Monetary flows in the cash flow statement (financing activities)	Translation adjustments	Non-current/ current reclassifycations	Other non-monetary flows	**30 June 2024**
Non-current debt excluding IFRS 16 debt	3,578	0	3	(1)	(706)	0	2,874
Current debt excluding IFRS 16 debt	474	0	(24)	(1)	706	0	1,155
IFRS 16 debt	223	0	(41)	3	0	50	235
- Cash and cash equivalents	2,045	4	50	(5)	0	0	2,094
NET DEBT	**2,230**	**(4)**	**(112)**	**6**	**0**	**50**	**2,170**

Note 11 Shareholders' equity and earnings per share

At 30 June 2024, Arkema's share capital amounted to €750 million, divided into 75,043,514 shares with a par value of €10.

11.1 Changes in share capital and paid-in surplus

	1st half 2024	2023
Number of shares at 1 January	**75,043,514**	**75,043,514**
Issuance of shares following the capital increase reserved for employees	—	—
Issuance of shares following the exercise of subscription options	—	—
Share capital reduction	—	—
Number of shares at end of period	**75,043,514**	**75,043,514**

11.2 Hybrid bonds

At 30 June 2024, the total nominal value of Arkema's perpetual hybrid bonds is €1,100 million. The breakdown is as follows:

Issue date	Nominal value *(in millions)*	Currency	Redemption option	Annual coupon rate
17 June 2019	400	EUR	5.25 years	2.75%
21 January 2020	300	EUR	6 years	1.50%
25 March 2024	400	EUR	5 years	4.80%

Arkema has an option to defer payment of coupons for the above bonds.

In accordance with IAS 32, when there is an unconditional right to avoid delivering cash or another financial asset in the form of repayment of principal or interest, an instrument is recognized in shareholders' equity. In application of this principle, the hybrid bonds are recorded in shareholders' equity, and the coupons paid are recorded as dividends in the Group's consolidated financial statements.

11.3 Treasury shares

The Company held 366,370 treasury shares at 30 June 2024.

	1st half 2024	2023
Number of treasury shares at 1 January	**228,901**	**231,087**
Purchase of treasury shares	150,000	357,726
Grants of treasury shares	(12,531)	(359,912)
Share capital reduction	—	—
Number of treasury shares at end of period	**366,370**	**228,901**

11.4 Dividends

The combined annual general meeting of 15 May 2024 approved the distribution of a €3.50 dividend per share in respect of the 2023 financial year, or a total amount of €261 million. This dividend was paid out on 21 May 2024.

11.5 Translation adjustments

The change in translation adjustments recognized in other recyclable comprehensive income mainly comprises the impacts of movements in the USD-EUR exchange rate.

11.6 Earnings per share

In accordance with IAS 33, the earnings per share and diluted earnings per share are calculated based on net income (Group share) less the net-of-tax interest paid to bearers of subordinated perpetual notes (hybrid bonds).

After this adjustment, the net income (Group share) is divided by the weighted average number of ordinary shares outstanding since the start of the year to calculate the earnings per share.

For the diluted earnings per share, the effect of dilution is thus calculated taking account of stock options and grants of free shares to be issued.

	1st half 2024	1st half 2023
Weighted average number of ordinary shares	74,748,618	74,716,206
Dilutive effect of stock options	0	0
Dilutive effect of free share grants	294,896	327,308
Weighted average number of potential ordinary shares	75,043,514	75,043,514

(In millions of euros)	**1st half 2024**	1st half 2023
Net income – Group share	224	284
Interest on subordinated perpetual notes, net of tax	(5)	(5)
Net income used in calculating earnings per share	219	279

	1st half 2024	1st half 2023
Earnings per share (in euros)	2.93	3.73
Diluted earnings per share (in euros)	2.92	3.72

Note 12 Subsequent events

On 4 July 2024, the Group exercised the second one-year extension option of its syndicated credit facility, bringing its maturity to 28 July 2029.

On 27 July 2024, the Group signed an agreement for the divestment of non-strategic assets in the Fluorogases business in China, representing around €30 million of Group sales at 30 June 2024.

Note 13 List of consolidated companies

The percentage of control indicated below also corresponds to the Group's ownership interest.

AEC Polymers		France	100.00	FC
Afinitica Technologies, S.L.		Spain	100.00	FC
Agiplast Italia S.r.l.		Italy	100.00	FC
American Acryl L.P.		United States	50.00	JO
American Acryl NA, LLC		United States	50.00	JO
Arkema Co., Ltd.		South Korea	100.00	FC
Arkema		France		FC
Arkema Antwerp		Belgium	100.00	FC
Arkema Argentina S.A.U.		Argentina	100.00	FC
Arkema B.V.		Netherlands	100.00	FC
Arkema Canada Inc.		Canada	100.00	FC
Arkema (Changshu) Chemicals Co., Ltd	(b)	China	100.00	FC
Arkema (Changshu) Specialty Materials Co., Ltd	(a)	China	100.00	FC
Arkema Chemicals India Private Limited		India	100.00	FC
Arkema (Changshu) Polyamides Co., Ltd	(b)	China	100.00	FC
Arkema (China) Investment Co., Ltd		China	100.00	FC
Arkema Coatex Brasil Indústria e Comércio Ltda		Brazil	100.00	FC
Arkema Coating Resins Malaysia Sdn. Bhd.		Malaysia	100.00	FC
ARKEMA UK LIMITED		United Kingdom	100.00	FC
Arkema Company Limited		Hong Kong	100.00	FC
Arkema Delaware Inc.		United States	100.00	FC
Arkema France		France	100.00	FC
Arkema GmbH		Germany	100.00	FC
Arkema Hydrogen Peroxide Co., Ltd. Shanghai		China	66.67	FC
Arkema Inc.		United States	100.00	FC
Arkema Insurance Designated Activity Company		Ireland	100.00	FC
Arkema K.K.		Japan	100.00	FC
Arkema Kimya Sanayi ve Ticaret AS		Turkey	100.00	FC
Arkema Korea Holding Co., Ltd		South Korea	100.00	FC
ARKEMA Holding Limited		United Kingdom	100.00	FC
Arkema Mexico S.A. de C.V.		Mexico	100.00	FC
Arkema Participations		France	100.00	FC
Arkema Peroxides India Private Limited		India	100.00	FC
Arkema Pte. Ltd		Singapore	100.00	FC
Arkema Pty Ltd		Australia	100.00	FC
Arkema Quimica S.A.U.		Spain	100.00	FC
Arkema Chemicals Saudi Arabia		Saudi Arabia	65.00	FC
Arkema (Shanghai) Distribution Co., Ltd		China	100.00	FC
Arkema Sp z.o.o.		Poland	100.00	FC
Arkema S.r.l.		Italy	100.00	FC
Arkema (Suzhou) Polyamides Co., Ltd		China	100.00	FC
Arkema Taixing Chemicals Co., Ltd		China	100.00	FC
Arkema Thiochemicals Sdn. Bhd.		Malaysia	86.00	FC
Arkema Yoshitomi, Ltd		Japan	49.00	SI
AMP Trucking, Inc.		United States	100.00	FC
ARR MAZ GLOBAL HOLDINGS, S.L.		Spain	100.00	FC
ARR-MAZ Brazil LLC		United States	100.00	FC
ArrMaz Chemicals (Yunnan) Co., Ltd		China	100.00	FC
ArrMaz China, LLC		United States	100.00	FC
ARR-MAZ DO BRASIL LTDA		Brazil	99.99	FC

ArrMaz Gulf Chemicals Ltd		Saudi Arabia	100.00	FC
ARRMAZ MOROCCO SARLAU		Morocco	100.00	FC
ArrMaz Morocco, LLC		United States	100.00	FC
ArrMaz Products Inc.		United States	100.00	FC
ArrMaz Speciality Chemicals, Inc.		United States	100.00	FC
ARRMAZ TECHNOLOGY AFRICA, SARL		Morocco	100.00	FC
A/S LIP Bygningsartikler. Nørre Aaby		Denmark	100.00	FC
Barrflex TU, LLC	(g)	United States	49.00	JV
Bostik Aktiebolag		Sweden	100.00	FC
Bostik Adhesives Limited		United Kingdom	100.00	FC
Bostik Argentina S.A.		Argentina	100.00	FC
Bostik A/S		Denmark	100.00	FC
Bostik AS		Norway	100.00	FC
Bostik Australia Pty Ltd		Australia	100.00	FC
Bostik Belux S.A. – N.V.	(b)	Belgium	100.00	FC
Bostik Benelux B.V.		Netherlands	100.00	FC
Bostik B.V.		Netherlands	100.00	FC
Bostik Canada Ltd		Canada	100.00	FC
Bostik Egypt for the production adhesive materials (Bostik Egypt) S.A.E.		Egypt	100.00	FC
Bostik Findley (China) Co., Ltd		China	100.00	FC
Bostik Malaysia SdN Bhd.		Malaysia	100.00	FC
Bostik GmbH		Germany	100.00	FC
Bostik Hellas S.A.		Greece	100.00	FC
Bostik Holding Hong Kong Ltd	(c)	Hong Kong	100.00	FC
Bostik Holding		France	100.00	FC
Bostik, Inc.		United States	100.00	FC
Bostik India Private Limited		India	100.00	FC
Bostik Industries Limited		Ireland	100.00	FC
Bostik Kimya Sanayi Ve Ticaret AS		Turkey	100.00	FC
Bostik Korea Limited		South Korea	100.00	FC
Bostik Limited		United Kingdom	100.00	FC
Bostik Mexicana S.A. de C.V.		Mexico	100.00	FC
Bostik Nederland B.V.		Netherlands	100.00	FC
Bostik New Zealand Limited		New Zealand	100.00	FC
Bostik-Nitta Co., Ltd.		Japan	80.00	FC
Bostik L.L.C.		Russia	100.00	FC
Bostik OY		Finland	100.00	FC
Bostik Philippines Inc.		Philippines	100.00	FC
Bostik Portugal Unipessoal Lda		Portugal	100.00	FC
Bostik Romania S.r.l		Romania	100.00	FC
Bostik S.A.		France	100.00	FC
Bostik S.A.		Spain	100.00	FC
Bostik (Shanghai) Management Co., Ltd		China	100.00	FC
BOSTIK SOUTH AFRICA (PTY) LTD		South Africa	100.00	FC
Bostik Sp z.o.o.		Poland	100.00	FC
Bostik (Thailand) Co., Ltd		Thailand	100.00	FC
Bostik Vietnam Company Limited		Vietnam	100.00	FC
Casda Biomaterials Co., Ltd		China	100.00	FC
Changshu Coatex Additives Co., Ltd	(b)	China	100.00	FC
CJ Bio Malaysia Sdn. Bhd.		Malaysia	14.00	SI
Coatex Asia-Pacific, Inc.	(g)	South Korea	100.00	FC
Coatex CEE s.r.o.		Slovakia	100.00	FC
Coatex Inc.		United States	100.00	FC
Coatex Netherlands B.V.		Netherlands	100.00	FC

Coatex		France	100.00	FC
CRACKLESS MONOMER Co Ltd		Taiwan	51.00	FC
Den Braven SA (Pty) Ltd		South Africa	100.00	FC
Delaware Chemicals Corporation		United States	100.00	FC
DIFI 13		France	100.00	FC
DIFI 14		France	100.00	FC
DIFI 16		France	100.00	FC
ERPRO 3D FACTORY		France	10.00	SI
FDM ARC Manufacturing Limited	(d)	Ireland	100.00	FC
FIXATTI		Belgium	100.00	FC
FIXATTI (CHINA) Polymer Specialties Co., Ltd. LTD		China	100.00	FC
Fixatti AG		Switzerland	100.00	FC
Fixatti Holding AG		Switzerland	100.00	FC
IDEAL WORK S.r.l.		Italy	100.00	FC
Ihsedu Agrochem Private Limited		India	24.90	SI
Jiangsu Bostik Adhesive Co., Ltd		China	100.00	FC
Lambson Limited		United Kingdom	100.00	FC
Lip Norge AS		Norway	100.00	FC
Lip Sverige AB		Sweden	100.00	FC
Michelet Finance, Inc.		United States	100.00	FC
MLPC International		France	100.00	FC
Ozark Mahoning Company		United States	100.00	FC
PI Advanced Materials Co., Ltd		South Korea	54.07	FC
Polimeros Especiales, S.A. de C.V.		Mexico	100.00	FC
POLYTEC PT GmbH Polymere Technologien		Germany	100.00	FC
Prochimir		France	100.00	FC
Proionic GmbH	(d)	Austria	77.75	FC
PT.Bostik Indonesia		Indonesia	100.00	FC
Sartomer (Guangzhou) Chemicals Ltd		China	100.00	FC
SDP Holding		Belgium	100.00	FC
Seki Arkema Co. Ltd		South Korea	51.00	FC
Shanghai Zhiguan Polymer Materials Co. Ltd		China	100.00	FC
Siroflex Limited		United Kingdom	100.00	FC
Société Marocaine des Colles		Morocco	97.01	FC
Sovereign Chemicals Limited		United Kingdom	100.00	FC
Taixing Sunke Chemicals Co., Ltd		China	100.00	FC
The LightLock Company Limited		Hong Kong	55.00	FC
Thermoplastic Powder Holding AG		Switzerland	100.00	FC
Turkish Products, Inc.		United States	100.00	FC
Usina Fortaleza Industria E Comércio de Massa Fina Ltda		Brazil	100.00	FC
Viking Chemical Company		United States	100.00	FC

(a) Companies that changed their name in 2024.
(b) Companies merged in 2024.
(c) Companies liquidated in 2024.
(d) Companies consolidated for the first time in 2024.
(e) Companies for which the percentage ownership changed in 2024, with no change in control.
(f) Companies for which the percentage ownership changed in 2024, with change in control.
(g) Companies deconsolidated in 2024.
NB: FC: full consolidation.
JO: joint operation – consolidated based on shares of assets, liabilities, income and expenses.
JV: joint venture – consolidation by the equity method.
SI: significant influence – consolidation by the equity method.

3. **Declaration by the person responsible for** the half-year financial report at 30 June 2024

I declare that, to the best of my knowledge, the condensed consolidated financial statements for the first half have been prepared in accordance with the applicable accounting standards and give a true and fair view of the assets, liabilities, financial position and results of the Company and all of the companies included in the scope of consolidation. I further declare that the management report, presented on pages 1 to 9, presents a fair review of (i) the major events that occurred in the first half of the financial year and of their impact on the financial statements, and (ii) the main related-party transactions, and that said management reports provides a description of the main risks and uncertainties for the remaining six months of the financial year.

Colombes, 31 July 2024

Thierry Le Hénaff

Chairman and Chief Executive Officer

4. **Statutory Auditors' Review** Report on the Half-yearly Financial Information

KPMG S.A.

Tour Eqho
2, avenue Gambetta
CS 60055 92066 Paris-La Défense
cedex S.A. au capital de € 5 497 100
775 726 417 R.C.S. Nanterre

Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles et du Centre

ERNST & YOUNG Audit

Tour First
TSA 14444
92037 Paris-La Défense cedex
S.A.S. à capital variable
344 366 315 R.C.S. Nanterre

Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles et du Centre

This is a free translation into English of the statutory auditors' review report on the half-yearly financial information issued in French and is provided solely for the convenience of English-speaking users. This report includes information relating to the specific verification of information given in the Group's half-yearly management report. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

Arkema

For the period from January 1 to June 30, 2024

Statutory Auditors' Review Report on the Half-yearly Financial Information

To the Shareholders,

In compliance with the assignment entrusted to us by your annual general meetings and in accordance with the requirements of article L. 451-1-2 III of the French Monetary and Financial Code ("Code monétaire et financier"), we hereby report to you on:

- the review of the accompanying condensed half-yearly consolidated financial statements of Arkema, for the period from January 1 to June 30, 2024;
- the verification of the information presented in the half-yearly management report.

These condensed half-yearly consolidated financial statements are the responsibility of the Board of Directors. Our role is to express a conclusion on these financial statements based on our review.

1. Conclusion on the financial statements

We conducted our review in accordance with professional standards applicable in France.

A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with professional standards applicable in France and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the accompanying condensed half-yearly consolidated financial statements are not prepared, in all material respects, in accordance with IAS 34 - standard of the IFRSs as adopted by the European Union applicable to interim financial information.

2. Specific verification

We have also verified the information presented in the half-yearly management report on the condensed half-yearly consolidated financial statements subject to our review.

We have no matters to report as to its fair presentation and consistency with the condensed half-yearly consolidated financial statements.

Paris-La Défense, July 31st 2024

The Statutory Auditors French original signed by

KPMG S.A.		ERNST & YOUNG Audit
Eric Dupré	François Quédiniac	Laurent Vitse

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Arkema, *société anonyme* with a share capital of €750,435,140
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