HALF-YEAR FINANCIAL REPORT 2022

Six months ended 30 June 2022

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 interim financial statements at 30 June 2022 in section 2 of this document.
For the purpose of tracking changes in its results, and more particularly its sales figures, the Group analyzes the following effects (unaudited analyses):

- **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 shutdowns of 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 2022 highlights

1.2.1 Organic growth projects

In line with its sustainable growth strategy and its ambition to become a pure Specialty Materials player, Arkema continued to invest in highly profitable organic growth projects, to support the rising demand for innovative, high performance materials, driven in particular by sustainable megatrends such as urbanization and social change, climate change, resource scarcity and technological transformation.

In Advanced Materials, on 17 January 2022 Arkema announced plans to increase its global production capacity for Pebax® elastomers by 25% through an investment at its Serquigny plant in France, to support its customers' strong growth, in particular in the sports and consumer goods markets. In addition, this investment, which is scheduled to come on stream in mid-2023, will lower the water consumption of the site by 25% thanks to process optimization.

Also in Advanced Materials, on 26 January 2022 Arkema announced that it was now targeting a capacity increase of 50% in fluoropolymer production at its Changshu site in China to support strong demand in lithium-ion batteries, as well as the significant growth in the water filtration, specialty coatings, and semiconductor sectors. The capacity extension is scheduled to start up in late 2022.

Lastly, on 31 May 2022, Arkema and Nippon Shokubai announced a strategic partnership to mass-produce ultrapure and high performance LiFSI electrolyte salts, a key component of battery cells for electric mobility. Combining Arkema's fluorochemicals expertise and Nippon Shokubai's unique know-how in the industrial-scale production of high-purity LiFSI electrolyte salts, this industrial project will support the development of the European battery value chain.

1.2.2 Acquisitions and divestments

On 28 February 2022, Arkema finalized the acquisition of Ashland's Performance Adhesives business, a first-class leader in high performance adhesives in the United States. With 2021 sales of approximately US$360 million and an EBITDA margin of over 25%, Ashland has strong technological and geographical complementarities with Bostik. This operation, based on a US$1,650 million enterprise value, *i.e.*, 8.7x the expected 2026 EBITDA after taking into account growth and synergies estimated at 12.5% of sales, marks a major step in Arkema's strengthening of its Adhesive Solutions segment.

The Group also expanded its offering of engineering adhesives with the acquisition, finalized on 1 April 2022, of Shanghai Zhiguan Polymer Materials (PMP) in China, specialized in hot-melt adhesives for the consumer electronics market and generating slightly over €1 million in annual sales.

1.2.3 Share buybacks

Following the completion on 24 November 2021 of the €300 million share buyback program, the Board of Directors decided on 24 January 2022 to reduce Arkema's share capital by 3.19%, by canceling 2,450,435 treasury shares acquired at a total cost of €270 million. Following this operation, Arkema's share capital amounted to €742,860,410, divided into 74,286,041 shares with a par value of €10.

1.2.4 Corporate Social Responsibility

In early January, the Group and other founding members of the "Pragati" project for sustainable castor crop farming published the results of the fifth year of their program, which saw a 50% increase in certified castor beans (36,000 tonnes) and over 5,800 farmers trained by the end of this fifth year.

1.3 Governance

At the combined annual general meeting held on 19 May 2022 at the *Palais Brongniart* in Paris, shareholders approved the reappointment, for four-year terms, of the following directors:

- Marie-Ange Debon, Chairman of the Audit and Accounts Committee;
- The *Fonds Stratégique de Participations*, whose permanent representative is Isabelle Boccon-Gibod, a member of the Audit and Accounts Committee and the Innovation and Sustainable Growth Committee; and
- Philippe Sauquet, a member of the Nominating, Compensation and Corporate Governance Committee.

The shareholders also approved the appointment of Nicolas Patalano, a member of the Arkema Actionnariat France company mutual fund (FCPE), as a director representing shareholder employees, for a four-year term, to replace Jean-Marc Bertrand, whose term was due to expire.

Following these changes, the proportion of independent directors on the Board is still 73% and the proportion of women directors is stable at 45%.

1.4 Analysis of first-half 2022 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 whose results are more volatile.
As of 1 January 2022, upstream PVDF has been reclassified from the Intermediates segment (formerly Fluorogases) to the Advanced Materials segment (High Performance Polymers). Data for 2021 has been restated accordingly.

1.4.1 Analysis of the Group's results

(In millions of euros)	First-half 2022	First-half 2021	YoY change
Sales	**6,071**	**4,621**	**+31.4%**
EBITDA	**1,324**	**836**	**+58.4%**
Specialty Materials	1,156	729	+58.6%
Intermediates	223	156	+42.9%
Corporate	-55	-49	
EBITDA margin	**21.8%**	**18.1%**	
Specialty Materials	21.2%	18.5%	
Intermediates	37.6%	23.6%	
Recurring depreciation and amortization	-266	-268	
Recurring operating income (REBIT)	**1,058**	**568**	**+86.3%**
REBIT margin	17.4%	12.3%	
Other income and expenses	-70	708	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	-40	-34	
Operating income	**948**	**1,242**	**-23.7%**
Equity in income of affiliates	-1	1	
Financial result	-14	-28	-50.0%
Income taxes	-201	-263	-23.6%
Net income	**732**	**952**	**-23.1%**
Of which: non-controlling interests	2	2	
Net income – Group share	**730**	**950**	**-23.2%**
Adjusted net income	**819**	**426**	**+92.3%**

SALES

At **€6,071 million**, the Group's **sales** were up by a sharp 31.4% compared with first-half 2021. Specialty Materials, at the core of the Group's strategy and which represented 90% of sales in the first half, saw volumes decline slightly by 2.2% compared with last year's elevated level. The Group's volumes were down by a moderate 3.8%. While underlying demand remained well oriented in most of the Group's end markets in the first half, particularly in the United States and to a lesser extent in Asia following the lockdowns in China, volumes were impacted by logistics difficulties, shortages of certain raw materials, especially in Adhesives, and by the slowdown observed in Europe in the second quarter, notably in the construction and automotive markets. The 30.0% positive price effect reflects in particular increased selling prices in Specialty Materials in the face of very high inflation in raw materials, energy and transportation costs, better conditions in upstream acrylics, as well as the improved product mix. The scope effect was a negative 1.5% in the first half, as the divestment of the PMMA business in May 2021 was only partially offset by the integration of acquisitions in Specialty Materials, particularly that of Ashland's performance adhesives, which was finalized on 28 February 2022. With the significant appreciation of the US dollar and Chinese yuan against the euro, particularly in the second quarter, the positive 6.7% currency effect reflects the strength of the Group's positioning in the United States and in China.

The breakdown of sales by segment reflects the changes in the scope of Arkema's portfolio, accelerated demand for high performance solutions serving sustainable megatrends, as well as more favorable market conditions in the acrylics chain. Adhesive Solutions thus now represents 24% of Group sales [1] (24.5% in H1'21), Advanced Materials 36% (33% in H1'21), Coating Solutions 30% (28% in H1'21) and Intermediates 10% (14.5% in H1'21).

The change in the regional sales split compared with first-half 2021 reflects the dynamism of the American region, as well as the slowdown in Europe in the second quarter. Europe represented 33.5% of Group sales in first-half 2022 (38% in H1'21), North America 34.5% (30% in H1'21), Asia 28% (28% in H1'21) and the rest of the world 4% (unchanged from H1'21).

EBITDA AND RECURRING OPERATING INCOME

Group **EBITDA** rose by a very significant 58.4% year-on-year and reached a historic high for a half-year period of **€1,324 million**. Growing strongly in each of the three segments, thus reflecting the Group's balance, Specialty Materials' EBITDA amounted to €1,156 million (€729 million in H1'21), supported in particular by the price effect in a highly inflationary context, the product mix improvement toward innovative, higher value-added solutions for sustainable megatrends, the integration of recent acquisitions in Adhesive Solutions, as well as by more favorable market conditions in upstream acrylics. Despite the negative scope effect of around €45 million linked to the divestment of PMMA, Intermediates' EBITDA amounted to €223 million (€156 million in H1'21), reflecting improved market conditions for refrigerant gases, particularly in the United States, and for acrylics in Asia, but also the quality of the positioning work carried out by the teams. Despite a lower level of demand than last year and the mechanical dilution of the price effect, the **EBITDA margin** reached a historic high for a half-year period, coming in at **21.8%**, up 370 bps compared with H1'21.

Recurring depreciation and amortization were virtually stable year-on-year, totaling €266 million in the period (€268 million in H1'21), with the decrease due to the PMMA divestment offset by the currency effect.

As a result, **recurring operating income (REBIT)** was also up by a strong 86.3% compared with first-half 2021, amounting to **€1,058 million**, and the REBIT margin grew by 510 bps to 17.4% (12.3% in H1'21).

OPERATING INCOME

Operating income amounted to €948 million in first-half 2022, 23.7% lower than the first-half 2021 figure, which included a pre-tax capital gain of close to €950 million arising on the divestment of the PMMA business. The first-half 2022 figure includes €70 million in one-off expenses, corresponding notably to transaction costs related to Ashland's performance adhesives acquisition, asset impairments and restructuring expenses (for further details, see note 5.1 to the condensed consolidated interim financial statements at 30 June 2022).

[1] Calculated excluding Corporate segment sales (€19 million in H1'22 and €14 million in H1'21).

FINANCIAL RESULT

The financial result represented a net expense of €14 million in the first half of 2022, down 50.0% year-on-year, primarily reflecting the impact of actuarial differences on certain provisions for employee benefits.

INCOME TAXES

The income tax expense came to €201 million, down by €62 million compared with the first-half 2021 figure, which included the close-to €170 million tax impact of the divestment of the PMMA business. Excluding this impact, the income tax expense increased in the first half of 2022, in line with the Group's improved operating performance. In the first half, excluding exceptional items, the tax rate came in at 21% of recurring operating income, *versus* 20% last year, reflecting the geographic mix of the Group's earnings.

NET INCOME – GROUP SHARE AND ADJUSTED NET INCOME

Net income – Group share totaled €730 million (€950 million in H1'21), and net earnings per share amounted to €9.80.

Excluding the post-tax impact of non-recurring items, adjusted net income came in at €819 million, representing €11.07 per share.

1.4.2 Analysis of results by segment

As a reminder, 2021 data has been restated following the reclassification of upstream PVDF to the Advanced Materials segment (from the Intermediates segment).

ADHESIVE SOLUTIONS (24% OF TOTAL GROUP SALES)

(In millions of euros)	First-half 2022	First-half 2021	YoY change
Sales	**1,449**	**1,130**	**+28.2%**
EBITDA	**201**	**168**	**+19.6%**
EBITDA margin	13.9%	14.9%	
Recurring operating income (REBIT)	**165**	**136**	**+21.3%**
REBIT margin	11.4%	12.0%	
Other income and expenses	-32	-29	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	-28	-24	
Operating income	**105**	**83**	**+26.5%**

Sales in the Adhesive Solutions segment totaled **€1,449 million**, up 28.2% compared with first-half 2021, driven by a 16.6% positive price effect in response to very high raw materials, energy and logistics cost inflation. The scope effect was a positive 12.1%, with the segment benefiting from the successful integration of Ashland's performance adhesives as from March, as well as Poliplas in the first quarter and Edge Adhesives Texas for the full six months. Volumes decreased by 5.4% compared with last year's high comparison base. They were up strongly in the United States but impacted by the slowdown in the construction and DIY market in Europe that began at the end of the first quarter, and by raw materials shortages, which eased in the second quarter. The currency effect was a positive 4.9% in the period.

At **€201 million**, **EBITDA** was up significantly by almost 20% compared with first-half 2021 (€168 million), driven in particular by the discipline in adjusting selling prices in the face of cost inflation, the evolution of the product mix toward higher value-added solutions, as well as by the very good performance of Ashland's adhesives right from the first months of integration. The **EBITDA margin** was **13.9%** (14.9% in H1'21), despite the mechanical dilutive effect of price increases of some 200 bps.

Recurring operating income (REBIT) amounted to €165 million (€136 million in H1'21), including €36 million in recurring depreciation and amortization, up €4 million compared with first-half 2021, mainly due to the integration of acquisitions. REBIT margin stood at 11.4% in the period (12.0% in H1'21).

Operating income came to €105 million (€83 million in H1'21), including €28 million in depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses, up €4 million year-on-year following the integration of bolt-on acquisitions. It also included €32 million in net other expenses, corresponding mainly to acquisition costs for Ashland's adhesives and restructuring expenses.

ADVANCED MATERIALS (36% OF TOTAL GROUP SALES)

(In millions of euros)	First-half 2022	First-half 2021	YoY change
Sales	**2,188**	**1,537**	**+42.4%**
EBITDA	**556**	**326**	**+70.6%**
EBITDA margin	25.4%	21.2%	
Recurring operating income (REBIT)	**422**	**191**	**+120.9%**
REBIT margin	19.3%	12.4%	
Other income and expenses	-22	-142	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	-9	-7	
Operating income	**391**	**42**	**+831.0%**

Up by a very strong 42.4% compared with first-half 2021, **sales** in the Advanced Materials segment amounted to **€2,188 million**. Volumes decreased moderately by 3.0% year-on-year, impacted by the slowdown in Europe, logistics disruptions and lockdowns in China. With the exception of the automotive market, which continued to be impacted by component shortages, demand remained well oriented in most of the segment's key end markets. The price effect, coming in at +38.8%, was highly positive in both of the segment's Business Lines, reflecting the Group's increased selling prices in a highly inflationary context for raw materials, energy and transportation costs, as well as the product mix improvement toward innovative, high performance solutions in batteries, lightweighting, sports, bio-based materials, healthcare, electronics, etc. The 0.6% negative scope effect was attributable to the divestment of the epoxides business in December 2021, partly offset by the acquisition of Agiplast. The currency effect was a positive 7.2%.

At **€556 million**, the segment's **EBITDA** was up by a strong 70.6% on the prior-year period, and the EBITDA margin reached the high level of **25.4%**, reflecting mainly the growth in demand for solutions coming from the Group's innovation, the strength of positions developed in the United States and in China which benefited from favorable exchange rates, and a particular tightness in the availability of certain product lines.

In line with the increase in EBITDA, recurring operating income (REBIT) came to €422 million, including €134 million in recurring depreciation and amortization, which are stable compared with first-half 2021.

Operating income amounted to €391 million (€42 million in H1'21), including €22 million in net other expenses, which corresponded mainly to asset impairments and start-up costs. In the first half of 2021, net other expenses totaled €142 million and notably included the exceptional impairment of assets in the hydrogen peroxide business linked to the downward trend in European markets.

COATING SOLUTIONS (30% OF TOTAL GROUP SALES)

(In millions of euros)	First-half 2022	First-half 2021	YoY change
Sales	**1,822**	**1,279**	**+42.5%**
EBITDA	**399**	**235**	**+69.8%**
EBITDA margin	21.9%	18.4%	
Recurring operating income (REBIT)	**336**	**177**	**+89.8%**
REBIT margin	18.4%	13.8%	
Other income and expenses	0	-13	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	-3	-3	
Operating income	**333**	**161**	**+106.8%**

Sales in the Coating Solutions segment grew by 42.5% year-on-year and came in at **€1,822 million**, around one third of which were in acrylic monomers. At a positive 33.4%, the price effect was very high and consistent across all the segment's activities. In an environment of high raw materials, energy and transportation cost inflation, this reflects the Group's selling price increases to offset the impact of higher costs, and more favorable market conditions in upstream acrylics. Benefiting from a significant increase in the United States, volumes rose by 1.7% during the period, but were nevertheless impacted by logistics difficulties in the first quarter, as well as by the slowdown in Europe and lockdowns in China in the second quarter. The currency effect increased segment sales by 7.4%.

The segment's **EBITDA** amounted to **€399 million**, up by a very significant 69.8% compared with the prior year, which was impacted in the first quarter by the consequences of winter storm Uri in the United States. Both upstream acrylics and downstream activities were up significantly. **EBITDA margin** reached an excellent level at **21.9%**. Moreover, the segment's performance was driven by the product mix improvement toward higher value-added and more environmentally friendly solutions, particularly photocure resins in new energies, electronics and 3D printing, as well as powders and rheology additives.

Recurring operating income (REBIT) totaled €336 million (€177 million in H1'21), including recurring depreciation and amortization of €63 million, up €5 million year-on-year, mainly due to the currency effect.

Operating income came in at €333 million in first-half 2022. In the first half of 2021, it amounted to €161 million and included €13 million in net other expenses, corresponding mainly to the consequences of winter storm Uri in Texas.

INTERMEDIATES (10% OF TOTAL GROUP SALES)

(In millions of euros)	First-half 2022	First-half 2021	YoY change
Sales	**593**	**661**	**-10.3%**
EBITDA	**223**	**156**	**+42.9%**
EBITDA margin	37.6%	23.6%	
Recurring operating income (REBIT)	**193**	**117**	**+65.0%**
REBIT margin	32.5%	17.7%	
Other income and expenses	-2	904	
Depreciation and amortization related to the revaluation of assets as part of the allocation of the purchase price of businesses	-	-	
Operating income	**191**	**1,021**	**-81.3%**

Sales in the Intermediates segment amounted to **€593 million**, down by 10.3% year-on-year, reflecting in particular a 29.8% negative scope effect relating to the divestment of the PMMA business on 3 May 2021. Benefiting from more favorable market conditions in acrylics in Asia and positive momentum in refrigerant gases, particularly in the United States, the price effect was a positive 26.0%. Volumes were down by 14.1%, impacted by the mechanical effect of quotas in the United States in fluorogases, and by the impact in acrylics of lockdown measures in China. The currency effect was a positive 7.6%.

In this context, the segment's **EBITDA** grew by a significant 42.9% compared with first-half 2021 at **€223 million**, despite a negative scope effect of around €45 million during the period. The **EBITDA margin** reached **37.6%** (23.6% in H1'21), reflecting the much-improved performance of refrigerant gases compared with the low comparison base of last year, and tightness in upstream acrylics in Asia.

Recurring operating income (REBIT) totaled €193 million (€117 million in H1'21), including €30 million in recurring depreciation and amortization, down €9 million year-on-year following the divestment of PMMA. REBIT margin stood at 32.5% for the first half of 2022.

Operating income came in at €191 million for the period and included €2 million in net other expenses. In first-half 2021, operating income was €1,021 million and primarily included a pre-tax capital gain of close to €950 million relating to the divestment of PMMA on 3 May 2021, as well as exceptional asset impairments, and restructuring and environmental contingency expenses in Fluorogases.

1.4.3 Group cash flow analysis

(In millions of euros)	First-half 2022	First-half 2021
Cash flow from operating activities	531	433
Cash flow from investing activities	-1,850	760
Net cash flow	**-1,319**	**1,193**
Of which net cash flow from portfolio management operations	-1,507	896
Free cash flow	**188**	**297**
Of which non-recurring cash flow including exceptional capital expenditure	-73	-1
Recurring cash flow	**261**	**298**
Cash flow from financing activities	**384**	**-350**

EBITDA can be reconciled to free cash flow as follows:

(In millions of euros)	First-half 2022	First-half 2021
EBITDA	**1,324**	**836**
Taxes	-218	-117
Cash items included in the financial result	-26	-27
Change in working capital	-529	-205
Change in fixed asset payables (1)	-99	-35
Recurring capital expenditure	-171	-165
Other	-20	11
Recurring cash flow	**261**	**298**
Exceptional capital expenditure	-66	-117
Non-recurring cash flow	-7	116
Free cash flow	**188**	**297**

(1) *Excluding cash flows related to non-recurring items and portfolio management operations. These items represented a nil amount in first-half 2022 and a net cash outflow of €1 million in first-half 2021.*

RECURRING CASH FLOW, FREE CASH FLOW AND NET CASH FLOW

Recurring cash flow came to **€261 million** (€298 million in H1'21). It reflects the Group's excellent operating performance and includes the increase in working capital, which was impacted by the strong inflation in raw materials and energy costs, by the higher selling prices, as well as by the first half's traditional seasonality. At end-June 2022, working capital remained well under control and represented 14.9% of annualized sales (11.9% at end-June 2021 in the context of the post-Covid rebound and sourcing difficulties, and 16.0% at end-June 2019). Recurring cash flow also included recurring capital expenditure of €171 million, virtually stable compared to last year (€165 million).

At **€188 million**, **free cash flow** included a strong year-on-year decrease in exceptional capital expenditure at €66 million (€117 million in first-half 2021), due to the upcoming start-up of the two major projects concerned. In 2021, free cash flow also included a non-recurring inflow of €116 million corresponding mainly to tax liabilities related to the capital gains tax on the PMMA divestment.

The net cash outflow from portfolio management operations of €1,507 million in first-half 2022 corresponds essentially to the acquisition of Ashland's performance adhesives finalized on 28 February 2022. In first-half 2021, portfolio management operations generated a €896 million net cash inflow and included in particular the proceeds from the PMMA divestment finalized in May 2021.

CASH FLOW FROM FINANCING ACTIVITIES

The **cash inflow from financing activities** amounted to **€384 million** in first-half 2022 *versus* an outflow of €350 million in the first six months of 2021. The first-half 2022 figure primarily includes an increase in short-term debt of close to €650 million, with no impact on net debt, and a €3 per-share dividend payment for fiscal year 2021 for a total amount of €222 million.

The first-half 2021 figure primarily included a €2.50 per-share dividend payment for fiscal year 2020 for a total amount of €191 million and €104 million in share buyback costs.

1.4.4 Balance sheet analysis

(In millions of euros)	30 June 2022	31 December 2021	Change
Non-current assets*	8,541	6,772	+26.1%
Working capital	1,902	1,185	+60.5%
Capital employed	**10,443**	**7,957**	**+31.2%**
Deferred tax assets	134	144	-6.9%
Assets held for sale	4	4	
Provisions for pensions and employee benefits	376	493	-23.7%
Other provisions	438	429	+2.1%
Total provisions	**814**	**922**	**-11.7%**
Long-term assets covering some provisions	134	127	+5.5%
Total provisions net of non-current assets	**680**	**795**	**-14.5%**
Deferred tax liabilities	362	342	+5.8%
Other non-current liabilities	15	14	+7.1%
Net debt (excluding hybrid bonds)	**2,089**	**477**	**+337.9%**
Shareholders' equity	**7,301**	**6,350**	**+15.0%**

** Excluding deferred tax and including pension assets.*

Between 31 December 2021 and 30 June 2022, non-current assets increased by €1,769 million. This change was primarily due to:

- the impact of acquisitions for an amount of €1,437 million, corresponding essentially to the integration of Ashland's performance adhesives assets, which notably led to the recognition of €1,191 million in provisional goodwill (for further details, see note 3.1, "Business Combinations" to the condensed consolidated interim financial statements at 30 June 2022);
- €237 million in capital expenditure, including €171 million in recurring capital expenditure and €66 million in exceptional capital expenditure;
- a €42 million increase in right-of-use assets related to the Group's lease commitments under IFRS 16;
- €326 million in depreciation and amortization mainly including (i) €266 million in recurring depreciation and amortization, of which €33 million arising from the application of IFRS 16, (ii) €40 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) €20 million in exceptional write-downs of industrial and intangible assets (including goodwill); and
- a €354 million positive currency translation effect, mainly linked to the strong depreciation of the euro against the US dollar at 30 June.

At 30 June 2022, working capital was €717 million higher than at 31 December 2021. This increase mainly reflects activity levels and traditional seasonality, high selling prices, as well as strong inflation in raw materials and energy costs.

It also includes a positive currency effect of €30 million. At 30 June 2022, working capital remained well under control, representing 14.9% of annualized sales (11.9% at end-June 2021 in the context of the post-Covid rebound and sourcing difficulties, and 16.0% at end-June 2019).

As a consequence, the Group's capital employed increased by €2,486 million between 31 December 2021 and 30 June 2022 to €10,443 million at 30 June 2022.

Deferred tax assets amounted to €134 million at 30 June 2022, down €10 million compared with 31 December 2021.

Gross provisions totaled €814 million. Some of these provisions, accounting for an aggregate €102 million, are covered mainly by the guarantee facility granted by Total and described in note 9.1.2 to the condensed consolidated interim financial statements at 30 June 2022 (see section 2 of this document) and therefore by long-term assets recognized in the balance sheet. These essentially consist of provisions related to former industrial sites in the United States. At 30 June 2022, provisions net of these non-current assets were down €115 million to €680 million, with the decrease essentially due to a reduction in employee benefit obligations.

Net provisions can be analyzed as follows by type:

(In millions of euros)	**30 June 2022**	**31 December 2021**
Pension liabilities	232	324
Other employee benefit obligations	130	158
Environmental contingencies	116	120
Restructuring	46	49
Other	156	144

Between 31 December 2021 and 30 June 2022, net provisions for pension liabilities decreased by €92 million primarily due to a very significant increase in the discount rates applied in all regions. This resulted in a decrease in pension obligations, partially offset by the revaluation of plan assets in the United States and the United Kingdom. The currency effect was a positive €9 million in first-half 2022. Provisions for other employee benefit obligations (healthcare costs, welfare costs and long-service awards) decreased by €28 million. The decrease in these provisions was also due primarily to the much higher discount rates applied in all regions. The increase in provisions for litigation and claims mainly related to legal fees for ongoing proceedings in the United States.

Net debt and hybrid bonds amounted to €2,789 million at 30 June 2022 (€1,177 million at 31 December 2021), representing 1.3 times last-twelve-months EBITDA. This increase primarily reflects the payment for the acquisition of Ashland's performance adhesives of close to €1.5 billion and the payment of the dividend of €3.0 per share for a total amount of €222 million.

Shareholders' equity amounted to €7,301 million *versus* €6,350 million at 31 December 2021. The €951 million increase primarily relates to (i) €732 million in net income for the period, and (ii) the payment of a €3.0 per-share dividend for a total amount of €222 million. In first-half 2022, a €96 million actuarial gain was recognized in equity for provisions for pension liabilities and other post-employment benefit obligations, as well as a positive €327 million translation adjustment.

1.5 Transactions with related parties

Transactions between consolidated companies have been eliminated in the consolidation process. Moreover, 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 Significant events since 30 June 2022

1.6.1 Acquisitions and divestments

On 1 July 2022, Arkema finalized the acquisition of Permoseal in South Africa, a leader in adhesive solutions for DIY, packaging and construction. Permoseal has a strong presence in retail channels and generated sales of €43 million in 2021. This acquisition will enable Bostik to complete its offering in the region and strengthen its positions in South Africa's and Sub-Saharan Africa's dynamic industrial, construction and DIY markets.

On 21 July 2022, the Group announced the planned acquisition of Polimeros Especiales, a leading player in solvent-free waterborne acrylic resins in Mexico, which will enable Arkema to strengthen its position in this fast-growing region. The company employs 230 people and achieved sales of around US$40 million in 2021.

1.6.2 Financing

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. Following this amendment, the financial commitment to respect a certain ratio of net debt/EBITDA no longer appears among the criteria for early payment. In addition, the CSR indicators take into account the Group's new objectives. 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.

1.6.3 Corporate Social Responsibility

On 7 July 2022, Arkema reinforced its commitment to fight global warming by publishing its new climate plan. In line with the expectations of the Paris Agreement to contain global warming to 1.5°C above pre-industrial levels by the end of the century, the Group has set itself an ambitious target, based on an SBT (Science Based Target) approach, to reduce its scope 1 and 2 greenhouse gas (GHG) emissions and its scope 3 emissions by 46% by 2030 relative to 2019. Thus, the Group has raised its level of commitment from a trajectory well below 2°C for scopes 1 and 2 to a 1.5°C trajectory across its entire value chain.

This decarbonization target is based on energy efficiency and the evolution of the energy mix for scopes 1 and 2, as well as, for scope 3, on the reduction of the most emissive activities, innovation contributing to a reduction in greenhouse gas emissions and suppliers' commitment to climate action. Moreover, this target will be supported by an increase in investments contributing to decarbonization, which could reach €400 million by 2030 and which will be included in the Group's recurring capital expenditure envelope.

1.7 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 2021 Universal Registration Document filed with the French financial markets authority (*Autorité des marchés financiers* – AMF) on 29 March 2022 under number D.22-0185. 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 contingent liabilities is provided in the notes to the condensed consolidated interim financial statements at 30 June 2022.

1.8 Outlook

The second half is marked by a context of risks of lockdowns in China, geopolitical tensions linked to the war in Ukraine, concerns regarding the availability and price of natural gas and electricity in Europe, as well as the significant increase in the level of inflation, which are all factors that could weigh on demand going forward.

In this context, the Group will benefit from its balanced geographic presence and will remain attentive to the evolution of market conditions. Moreover, it will ensure to take inflation into account in its selling prices, strictly manage its fixed costs and inventories and pursue its innovation in high performance materials.

Despite the uncertain macroeconomic environment and the decline in volumes observed in Europe, Arkema is raising its annual targets and now aims to achieve in 2022, excluding further significant disruptions of the global context, annual EBITDA growth at constant scope of 17% to 22% compared with the record level of 2021 (*vs.* “slight growth” previously), representing an EBITDA of around €2,100 million.

The Group is also reaffirming its confidence in its ability to achieve the ambitious targets it has set for 2024 and will continue to implement its strategic roadmap for sustainable development. Arkema will thus leverage its bolt-on acquisition policy, its industrial capacity expansions to support its customers’ growth in high-potential markets, its numerous initiatives in CSR, and lastly the strength of its innovation which should enable the company to generate €1.5 billion of new revenues from 2019 to 2030 around its five large R&D platforms.

2 Condensed consolidated interim financial statements at 30 June 2022

CONSOLIDATED INCOME STATEMENT

(In millions of euros)	***Notes***	**1st half 2022**	**1st half 2021**
Sales	*(4.8 & 4.9)*	**6,071**	**4,621**
Operating expenses		(4,485)	(3,581)
Research and development expenses		(133)	(119)
Selling and administrative expenses		(435)	(387)
Other income and expenses	*(5.1)*	(70)	708
Operating income	*(4.8)*	**948**	**1,242**
Equity in income of affiliates		(1)	1
Financial result	*(10.1)*	(14)	(28)
Income taxes	*(7)*	(201)	(263)
Net income		**732**	**952**
Attributable to non-controlling interests		2	2
Net income – Group share		**730**	**950**
Earnings per share (in euros)	*(11.6)*	*9.80*	*12.38*
Diluted earnings per share (in euros)	*(11.6)*	*9.76*	*12.31*

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(In millions of euros)	***Notes***	**1st half 2022**	**1st half 2021**
Net income		**732**	**952**
Hedging adjustments		16	(25)
Other items		—	—
Deferred taxes on hedging adjustments and other items		(3)	—
Change in translation adjustments	*(11.5)*	327	92
Other recyclable comprehensive income		**340**	**67**
Impact of remeasuring unconsolidated investments		(1)	(2)
Actuarial gains and losses	*(6.1)*	115	67
Deferred taxes on actuarial gains and losses		(19)	(14)
Other non-recyclable comprehensive income		**95**	**51**
TOTAL INCOME AND EXPENSES RECOGNIZED DIRECTLY THROUGH EQUITY		**435**	**118**
Total comprehensive income		**1,167**	**1,070**
Attributable to non-controlling interests		3	3
Total comprehensive income – Group share		**1,164**	**1,067**

CONSOLIDATED BALANCE SHEET

(In millions of euros)	***Notes***	**30 June 2022**	**31 December 2021**
ASSETS			
Goodwill	*(8.1)*	3,259	1,925
Other intangible assets, net	*(8.2)*	1,712	1,517
Property, plant and equipment, net	*(8.3)*	3,231	3,031
Investments in equity affiliates		29	29
Other investments		52	52
Deferred tax assets		134	144
Other non-current assets		258	218
TOTAL NON-CURRENT ASSETS		**8,675**	**6,916**
Inventories		1,662	1,283
Accounts receivable		1,945	1,432
Other receivables and prepaid expenses		208	181
Income taxes recoverable		88	91
Current financial derivative assets		63	109
Cash and cash equivalents		1,342	2,285
Assets held for sale	*(3.2)*	4	4
TOTAL CURRENT ASSETS		**5,312**	**5,385**
TOTAL ASSETS		**13,987**	**12,301**
LIABILITIES AND SHAREHOLDERS' EQUITY			
Share capital	*(11.1)*	743	767
Paid-in surplus and retained earnings		5,973	5,598
Treasury shares	*(11.3)*	(34)	(305)
Translation adjustments		569	243
SHAREHOLDERS' EQUITY – GROUP SHARE		**7,251**	**6,303**
Non-controlling interests		50	47
TOTAL SHAREHOLDERS' EQUITY		**7,301**	**6,350**
Deferred tax liabilities		362	342
Provisions for pensions and other employee benefits	*(6.1)*	376	493
Other provisions and non-current liabilities	*(9.1)*	453	443
Non-current debt	*(10.2)*	2,698	2,680
TOTAL NON-CURRENT LIABILITIES		**3,889**	**3,958**
Accounts payable		1,400	1,274
Other creditors and accrued liabilities		456	430
Income taxes payable		173	155
Current financial derivative liabilities		35	52
Current debt	*(10.2)*	733	82
Liabilities associated with assets held for sale	*(3.2)*	—	—
TOTAL CURRENT LIABILITIES		**2,797**	**1,993**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**13,987**	**12,301**

CONSOLIDATED CASH FLOW STATEMENT

(In millions of euros)	*Notes*	1st half 2022	1st half 2021
Operating cash flows			
Net income		732	952
Depreciation, amortization and impairment of assets		326	421
Other provisions and deferred taxes		(22)	47
(Gains)/losses on sales of long-term assets		(4)	(949)
Undistributed affiliate equity earnings		2	(1)
Change in working capital	*(5.2)*	(518)	(43)
Other changes		15	6
CASH FLOW FROM OPERATING ACTIVITIES		**531**	**433**
Investing cash flows			
Intangible assets and property, plant and equipment additions	*(4.3)*	(237)	(285)
Change in fixed asset payables		(99)	(36)
Acquisitions of operations, net of cash acquired	*(3.1)*	(1,493)	(42)
Increase in long-term loans		(40)	(16)
Total expenditures		**(1,869)**	**(379)**
Proceeds from sale of intangible assets and property, plant and equipment		6	6
Proceeds from sale of operations, net of cash transferred	*(3.2)*	—	1,120
Proceeds from sale of unconsolidated investments		—	4
Repayment of long-term loans		13	9
Total divestitures		**19**	**1,139**
CASH FLOW FROM INVESTING ACTIVITIES		**(1,850)**	**760**
Financing cash flows			
Issuance (repayment) of shares and paid-in surplus	*(11.1)*	—	—
Purchase of treasury shares	*(11.3)*	(2)	(104)
Issuance of hybrid bonds	*(11.2)*	—	—
Redemption of hybrid bonds	*(11.2)*	—	—
Dividends paid to parent company shareholders	*(11.4)*	(222)	(191)
Interest paid to bearers of subordinated perpetual notes	*(11.2)*	(5)	(4)
Dividends paid to non-controlling interests		(1)	(1)
Increase in long-term debt		3	6
Decrease in long-term debt		(37)	(26)
Increase/(Decrease) in short-term debt		648	(30)
CASH FLOW FROM FINANCING ACTIVITIES		**384**	**(350)**
Net increase/(decrease) in cash and cash equivalents		(935)	843
Effect of exchange rates and changes in scope		(8)	(15)
Cash and cash equivalents at beginning of period		2,285	1,587
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**1,342**	**2,415**

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

(In millions of euros)	Share capital	Paid-in surplus	Hybrid bonds	Retained earnings	Translation adjustments	Treasury shares	Shareholders' equity – Group share	Non-controlling interests	Shareholders' equity
At 1 January 2022	**767**	**1,272**	**700**	**3,626**	**243**	**(305)**	**6,303**	**47**	**6,350**
Cash dividend	—	—	—	(227)	—	—	(227)	(1)	(228)
Issuance of share capital	—	—	—	—	—	—	—	—	—
Capital reduction by cancellation of treasury shares	(24)	(246)	—	—	—	270	—	—	—
Purchase of treasury shares	—	—	—	—	—	(2)	(2)	—	(2)
Grants of treasury shares to employees	—	—	—	(3)	—	3	—	—	—
Share-based payments	—	—	—	13	—	—	13	—	13
Issuance of hybrid bonds	—	—	—	—	—	—	—	—	—
Redemption of hybrid bonds	—	—	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—	1	1
Transactions with shareholders	**(24)**	**(246)**	**—**	**(217)**	**—**	**271**	**(216)**	**—**	**(216)**
Net income	—	—	—	730	—	—	730	2	732
Total income and expenses recognized directly through equity	—	—	—	108	326	—	434	1	435
Total comprehensive income	**—**	**—**	**—**	**838**	**326**	**—**	**1,164**	**3**	**1,167**
At 30 June 2022	**743**	**1,026**	**700**	**4,247**	**569**	**(34)**	**7,251**	**50**	**7,301**

(In millions of euros)	Share capital	Paid-in surplus	Hybrid bonds	Retained earnings	Translation adjustments	Treasury shares	Shareholders' equity – Group share	Non-controlling interests	Shareholders' equity
At 1 January 2021	**767**	**1,272**	**700**	**2,486**	**(32)**	**(6)**	**5,187**	**48**	**5,235**
Cash dividend	—	—	—	(195)	—	—	(195)	(1)	(196)
Issuance of share capital	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	—	—	—	—	—	(104)	(104)	—	(104)
Grants of treasury shares to employees	—	—	—	(1)	—	1	—	—	—
Share-based payments	—	—	—	8	—	—	8	—	8
Issuance of hybrid bonds	—	—	—	—	—	—	—	—	—
Redemption of hybrid bonds	—	—	—	—	—	—	—	—	—
Other*	—	—	—	(226)	—	—	(226)	2	(224)
Transactions with shareholders	**—**	**—**	**—**	**(414)**	**—**	**(103)**	**(517)**	**1**	**(516)**
Net income	—	—	—	950	—	—	950	2	952
Total income and expenses recognized directly through equity	—	—	—	26	91	—	117	1	118
Total comprehensive income	**—**	**—**	**—**	**976**	**91**	**—**	**1,067**	**3**	**1,070**
At 30 June 2021	**767**	**1,272**	**700**	**3,048**	**59**	**(109)**	**5,737**	**52**	**5,789**

** Including the Group's residual commitment of €224 million under the 2021 share buyback program, with a corresponding entry in current debt.*

Notes to the consolidated financial statements at 30 June 2022

Note 1: Highlights

1.1. PORTFOLIO MANAGEMENT

On 28 February 2022, the Group finalized the acquisition of Ashland's Performance Adhesives business, which was announced on 31 August 2021 based on a US$1,650 million enterprise value. This operation marks a major step in Arkema's strengthening of its Adhesive Solutions segment. This activity, which employs approximately 330 people and operates 6 production plants, mainly in North America, offers excellent commercial, technological and geographic complementarities with Bostik.

Moreover, the Group expanded its offer of engineering adhesives with the acquisition, finalized on 1 April 2022, of Shanghai Zhiguan Polymer Materials (PMP) in China, specialized in hot-melt adhesives for the consumer electronics market.

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

1.2. OTHER HIGHLIGHTS

Following the completion on 24 November 2021 of the €300 million share buyback program, the Board of Directors decided on 24 January 2022 to reduce Arkema's share capital by 3.19%, by canceling 2,450,435 treasury shares acquired at a total cost of €270 million. Following this operation, Arkema's share capital amounted to €742,860,410, divided into 74,286,041 shares with a par value of €10.

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 2021. 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 2022 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 28 July 2022.

The condensed consolidated interim financial statements at 30 June 2022 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 2022 and the IFRS endorsed by the European Union at 30 June 2022.

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 2022 are identical to those used in the consolidated financial statements at 31 December 2021, 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 2022 (and which had not been applied early by the Group), namely:

Amendments to IFRS 3	Reference to the conceptual framework	Adopted by the European Union on 2 July 2022
Amendments to IAS 16	Property, plant and equipment – Proceeds before intended use	Adopted by the European Union on 2 July 2022
Amendments to IAS 37	Onerous contracts – Cost of fulfilling a contract	Adopted by the European Union on 2 July 2022
Annual improvements	2018-2020 cycle	Adopted by the European Union on 2 July 2022

Application of these amendments had no significant impact on the financial statements at 30 June 2022.

A reform of the main interest rate benchmarks is currently underway, with the Interbank Offered Rates (IBORs) being replaced by alternative risk-free rates. The Group has taken steps to ensure a gradual transition to risk-free rates and is keeping a close eye on market practices and publications by the relevant bodies. The reform is mainly operational in scope and has no material impact on the interim financial statements at 30 June 2022.

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 2022 (and which have not been applied early by the Group) are:

Amendments to IAS 1	Classification of liabilities as current or non-current	Not adopted by the European Union at 30 June 2022
Amendments to IAS 1	Disclosure of accounting policies	Adopted by the European Union on 3 March 2022
Amendments to IAS 8	Definition of accounting estimates	Adopted by the European Union on 3 March 2022
Amendments to IAS 12	Income taxes – Recognition of deferred tax assets for unrealized losses	Not adopted by the European Union at 30 June 2022
Amendments to IFRS 17	Initial application of IFRS 17 and IFRS 9 – Comparative information	Not adopted by the European Union at 30 June 2022
IFRS 17	Insurance contracts	Adopted by the European Union on 23 November 2021

The Group does not expect application of these amendments and this standard 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 interim financial statements therefore take into consideration in particular the current Covid-19 health crisis and the 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 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 the variations in results and working capital from one quarter of the year to another.

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 2022 concerned the acquisition of Ashland’s Performance Adhesives business and of Shanghai Zhiguan Polymer Materials (PMP).

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

The amount recorded in the financial statements at 30 June 2022 for the identifiable assets acquired and liabilities assumed for Ashland’s Performance Adhesives business at the acquisition date can be analyzed as follows:

(In millions of euros)	**Fair value of Ashland’s Performance Adhesives business**
Intangible assets	166
Property, plant and equipment	66
Total non-current assets	**232**
Inventories	41
Accounts receivable	43
Total current assets	**84**
Long-term provisions	2
Non-current debt	1
Total non-current liabilities	**3**
Accounts payable	21
Other current liabilities	2
Total current liabilities	**23**
Fair value of net assets	**290**
Goodwill	**1,191**

Intangible assets correspond to technology for €132 million and the trademark for €34 million.

The goodwill of €1,191 million recognized for Ashland's Performance Adhesives business at 30 June 2022 is provisional and a portion of this goodwill is amortizable for tax purposes in the United States. 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 the purchase price allocation for Poliplas, Agiplast and the Edge Adhesives business in Texas

The Group has finalized the purchase price allocation for Poliplas, Agiplast and the Edge Adhesives business in Texas.

Intangible assets stated at fair value primarily comprise technologies and customer relations and amount to €27 million.

Final goodwill totals €17 million for the three acquisitions and mainly corresponds to the value of future technologies and expected business development. Goodwill amortizable for tax purposes amounts to €4 million.

3.2 ASSETS HELD FOR SALE

The finalization of the divestment of the PMMA business was announced on 3 May 2021. In the income statement for the first half of 2021, the provisional capital gain before deduction of disposal costs amounted to €947 million before tax and is included in "Other income and expenses" in 2021 (see note 5.1 "Other income and expenses").

The price received is included in "Proceeds from sale of operations, net of cash transferred" in the cash flow statement in 2021.

As part of the divestment of the PMMA activity, Arkema signed an agreement with Hanwha on 6 May 2021 providing for the shutdown of production at the Jinhae site (South Korea) and the sale of the land in the third quarter of 2022. These assets are presented in "Assets held for sale" at 31 December 2021 and 30 June 2022.

3.3. 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 €58 million at 30 June 2022 (€89 million at 31 December 2021). 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 2022	1st half 2021
OPERATING INCOME		**948**	**1,242**
- 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		(40)	(34)
- Other income and expenses	*(5.1)*	(70)	708
RECURRING OPERATING INCOME (REBIT)		**1,058**	**568**
- Recurring depreciation and amortization of property, plant and equipment and intangible assets		(266)	(268)
EBITDA		**1,324**	**836**

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

(In millions of euros)	*Notes*	1st half 2022	1st half 2021
Depreciation and amortization of property, plant and equipment and intangible assets (including goodwill)	*(8.1 & 8.2 & 8.3)*	**(326)**	**(421)**
Of which: Recurring depreciation and amortization of property, plant and equipment and intangible assets		(266)	(268)
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		(40)	(34)
Of which: Impairment included in other income and expenses	*(5.1)*	(20)	(119)

4.2 ADJUSTED NET INCOME AND ADJUSTED EARNINGS PER SHARE

(In millions of euros)	*Notes*	1st half 2022	1st half 2021
NET INCOME – GROUP SHARE		**730**	**950**
- 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		(40)	(34)
- Other income and expenses	*(5.1)*	(70)	708
- 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		8	8
- Taxes on other income and expenses		7	(158)
- One-time tax effects		6	—
ADJUSTED NET INCOME		**819**	**426**
Weighted average number of ordinary shares		73,954,187	76,338,552
Weighted average number of potential ordinary shares	*(11.6)*	74,286,041	76,736,476
ADJUSTED EARNINGS PER SHARE (IN EUROS)		**11.07**	**5.58**
DILUTED ADJUSTED EARNINGS PER SHARE (IN EUROS)		**11.02**	**5.55**

4.3 RECURRING CAPITAL EXPENDITURE

(In millions of euros)	1st half 2022	1st half 2021
INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT ADDITIONS	**237**	**285**
- Exceptional capital expenditure	66	117
- Investments relating to portfolio management operations	—	—
- Capital expenditure with no impact on net debt	0	3
RECURRING CAPITAL EXPENDITURE	**171**	**165**

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 the two periods presented, 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 2022	1st half 2021
Cash flow from operating activities	531	433
+ Cash flow from investing activities	(1,850)	760
NET CASH FLOW	**(1,319)**	**1,193**
- Net cash flow from portfolio management operations	(1,507)	896
FREE CASH FLOW	**188**	**297**
- Exceptional capital expenditure	(66)	(117)
- Non-recurring cash flow	(7)	116
RECURRING CASH FLOW	**261**	**298**

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”. In first-half 2021, the non-recurring cash inflow corresponded mainly to tax liabilities relating to the capital gains tax on the PMMA divestment. The tax was recorded in net cash flow from portfolio management operations in first-half 2021 and was disbursed in second-half 2021.

4.5 NET DEBT

(In millions of euros)	***Notes***	**30 June 2022**	**31 December 2021**
Non-current debt	*(10.2)*	2,698	2,680
+ Current debt	*(10.2)*	733	82
- Cash and cash equivalents	*(10.2)*	1,342	2,285
NET DEBT		**2,089**	**477**
+ Hybrid bonds	*(11.2)*	700	700
NET DEBT AND HYBRID BONDS		**2,789**	**1,177**

4.6 WORKING CAPITAL

(In millions of euros)	***Notes***	**30 June 2022**	**31 December 2021**
Inventories		1,662	1,283
+ Accounts receivable		1,945	1,432
+ Other receivables including income taxes recoverable		296	272
+ Current financial derivative assets		63	109
- Accounts payable (operating suppliers)		1,400	1,274
- Other liabilities including income taxes		629	585
- Current financial derivative liabilities		35	52
WORKING CAPITAL		**1,902**	**1,185**

4.7 CAPITAL EMPLOYED

(In millions of euros)	***Notes***	**30 June 2022**	**31 December 2021**
Goodwill, net	*(8.1)*	3,259	1,925
+ Intangible assets (excluding goodwill) and property, plant and equipment, net	*(8.2 & 8.3)*	4,943	4,548
+ Investments in equity affiliates		29	29
+ Other investments and other non-current assets		310	270
+ Working capital		1,902	1,185
CAPITAL EMPLOYED		**10,443**	**7,957**

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 and PVDF[2] ; 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 [2];
  - PMMA; 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.

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

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[1] *Business Lines are activities or groups of activities.*

[2] *As of 1 January 2022, upstream PVDF has been reclassified from the Intermediates segment (formerly Fluorogases) to the Advanced Materials segment (High Performance Polymers). The comparative segment information presented for the period ended 30 June 2021 has been restated accordingly.*

The segment information includes the PMMA activity until its divestment, announced on 3 May 2021.

1st half 2022 *(In millions of euros)****	**Adhesive Solutions**	**Advanced Materials**	**Coating Solutions**	**Intermediates**	**Corporate**	**Total**
Sales	**1,449**	**2,188**	**1,822**	**593**	**19**	**6,071**
EBITDA*	**201**	**556**	**399**	**223**	**(55)**	**1,324**
Recurring depreciation and amortization of property, plant and equipment and intangible assets*	(36)	(134)	(63)	(30)	(3)	(266)
Recurring operating income (REBIT)*	**165**	**422**	**336**	**193**	**(58)**	**1,058**
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	(28)	(9)	(3)	—	—	(40)
Other income and expenses	(32)	(22)	(0)	(2)	(14)	(70)
Operating income	**105**	**391**	**333**	**191**	**(72)**	**948**
Equity in income of affiliates	—	(1)	—	0	—	(1)
Intangible assets and property, plant and equipment additions	27	160	39	5	6	237
Of which: Recurring capital expenditure**	27	94	39	5	6	171

* See note 4.1 “Recurring operating income (REBIT) and EBITDA”.

** See note 4.3 “Recurring capital expenditure”.

*** As of 1 January 2022, upstream PVDF has been reclassified to the Advanced Materials segment (from the Intermediates segment). Data for 2021 has been restated accordingly.

1st half 2021 *(In millions of euros)****	**Adhesive Solutions**	**Advanced Materials**	**Coating Solutions**	**Intermediates**	**Corporate**	**Total**
Sales	**1,130**	**1,537**	**1,279**	**661**	**14**	**4,621**
EBITDA*	**168**	**326**	**235**	**156**	**(49)**	**836**
Recurring depreciation and amortization of property, plant and equipment and intangible assets	(32)	(135)	(58)	(39)	(4)	(268)
Recurring operating income (REBIT)*	**136**	**191**	**177**	**117**	**(53)**	**568**
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	(24)	(7)	(3)	—	—	(34)
Other income and expenses	(29)	(142)	(13)	904	(12)	708
Operating income	**83**	**42**	**161**	**1,021**	**(65)**	**1,242**
Equity in income of affiliates	—	1	—	(0)	—	1
Intangible assets and property, plant and equipment additions	28	211	25	14	7	285
Of which: Recurring capital expenditure**	28	94	22	14	7	165

* See note 4.1 “Recurring operating income (REBIT) and EBITDA”.

** See note 4.3 “Recurring capital expenditure”.

*** As of 1 January 2022, upstream PVDF has been reclassified to the Advanced Materials segment (from the Intermediates segment). Data for 2021 has been restated accordingly.

4.9 INFORMATION BY GEOGRAPHICAL AREA

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

1st half 2022 *(In millions of euros)*	**France**	**Rest of Europe**	**NAFTA***	**Asia**	**Rest of the world**	**Total**
Sales	449	1,590	2,098	1,708	226	**6,071**

1st half 2021 *(In millions of euros)*	**France**	**Rest of Europe**	**NAFTA***	**Asia**	**Rest of the world**	**Total**
Sales	384	1,364	1,400	1,293	180	**4,621**

** NAFTA: USA, Canada, Mexico.*

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 2022			1st half 2021		
(In millions of euros)	Expenses	Income	Net	Expenses	Income	Net
Restructuring and environment	(17)	—	(17)	(27)	3	(24)
Goodwill impairment	—	—	—	(41)	—	(41)
Asset impairment (excluding goodwill)	(16)	—	(16)	(107)	—	(107)
Litigation and claims	(6)	—	(6)	(26)	—	(26)
Gains (losses) on sales and purchases of assets	(27)	2	(25)	(42)	965	923
Other	(6)	—	(6)	(17)	—	(17)
TOTAL OTHER INCOME AND EXPENSES	**(72)**	**2**	**(70)**	**(260)**	**968**	**708**

In the first half of 2022, restructuring and environment expenses mainly concern the Corporate and Adhesive Solutions segments. Specific asset impairments have mainly been recognized in the Hydrogen Peroxide activities for the Jarrie site in France (see note 8.3 "Property, plant and equipment"). Expenses related to litigation and claims mainly concern legal fees for ongoing proceedings in the United States. The income and expenses relating to sales and purchases of assets are mainly attributable to the acquisition of Ashland's Performance Adhesives business. 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").

In the first half of 2021, restructuring and environment expenses mainly concerned the Adhesive Solutions segment and the Thiochemicals and Fluorogases activities in France. The goodwill in the Hydrogen Peroxide Cash Generating Unit (CGU) has been fully impaired as have certain other assets in the CGU. Asset impairments were also recognized for Asia, mainly in the Fluorogases activities, and on a debt receivable from Canada Fluorspar NL Inc. (CFI). Expenses related to litigation and claims mainly concerned the consequences of Winter Storm Uri in Texas in the first quarter of 2021, and 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 divestment of the PMMA activity. The item "Other" primarily included the impact of taking into account the dispensation from work mechanism in France over the long term in the Group's financial statements.

The total impairment (including goodwill impairment) included in other income and expenses amounts to a net expense of €20 million at 30 June 2022 compared with a net expense of €119 million at 30 June 2021.

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 €518 million in cash flow from operating activities and €99 million in cash flow from investing activities.

(In millions of euros)	31 December 2021	Changes in scope	Monetary flows in the cash flow statement (operating and investing activities)	Translation adjustment	Reclassifications	30 June 2022
Inventories	1,283	41	282	54	2	1,662
+ Accounts receivable, excluding fixed asset receivables	1,432	44	406	65	(2)	1,945
+ Other receivables, including income taxes recoverable	272	—	29	9	(14)	296
- Accounts payable, excluding fixed asset payables	1,034	21	166	36	(6)	1,251
- Other liabilities, including income taxes	574	3	33	15	(9)	628
TOTAL OPERATING CATEGORIES	**1,379**	**60**	**518**	**78**	**1**	**2,024**
- Other creditors and fixed asset payables	251	—	(99)	8	—	149
TOTAL INVESTING CATEGORIES	**(251)**	**—**	**99**	**(8)**	**—**	**(149)**
+ Current financial derivative assets and liabilities	57	—	(2)	(39)	11	27
TOTAL WORKING CAPITAL	**1,185**	**60**	**615**	**32**	**12**	**1,902**

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 2022**	**31 December 2021**
Guarantees granted	140	110
Comfort letters	—	—
Contractual guarantees	2	4
Customs and excise guarantees	31	42
TOTAL	**173**	**156**

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, bank guarantees given to Nutrien in connection with the partnership project in the Fluorogases activity in the United States, and 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.

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 2022. Only the irrevocable portion of outstanding future purchases has been valued, and the corresponding amounts are included in the table below at 30 June 2022.

The total amount of the Group's financial commitments is €1,311 million at 30 June 2022, maturing as follows:

(In millions of euros)	**30 June 2022**	**31 December 2021**
Y	214	257
Y+1	139	104
Y+2	112	85
Y+3	96	71
Y+4	95	72
Y+5 until expiry of the contracts	655	483
Total	**1,311**	**1,072**

The increase in the Group's commitments is mainly due to the signing of a long-term raw materials supply contract in connection with the expansion in 1233ZD production capacity in the United States.

Note 6: Provisions for pensions and other employee benefits

6.1 PROVISIONS FOR PENSIONS AND OTHER EMPLOYEE BENEFITS

(In millions of euros)	**30 June 2022**	**31 December 2021**
Pension obligations	246	335
Healthcare and similar coverage	50	59
Dispensation from work	17	19
Post-employment benefits	**313**	**413**
Long service awards	63	80
Other long-term benefits	**63**	**80**
Provisions for pensions and other employee benefits	**376**	**493**

(In millions of euros)	**30 June 2022**	**31 December 2021**
Provision recognized in liabilities	376	493
Amount recognized in assets	(14)	(11)
Net provisions for pensions and other employee benefits	**362**	**482**

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

Pension obligations, healthcare and similar coverage	**France**	**Germany**	**UK**	**Rest of Europe**	**USA**
At 30 June 2022	3.40	3.45	3.80	3.30	4.60
At 31 December 2021	1.40	1.50	2.00	1.20	2.65

The present value of benefit obligations at the end of 2021 has been adjusted at 30 June 2022 on the basis of sensitivity analysis tables prepared by the Group's external actuaries in the context of the full-year 2021 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 2022. 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 2022 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	**324**	**59**	**19**	**402**
Provision recognized in liabilities	*335*	*59*	*19*	*413*
Amount recognized in assets	*(11)*	—	—	*(11)*
(Income)/Expense for the period	11	—	—	11
Net contributions and benefits paid by the employer	(8)	—	(2)	(10)
Changes in scope	1	—	—	1
Actuarial gains and losses recognized in shareholders' equity	(103)	(12)	—	(115)
Translation adjustments	7	3	—	10
Other	—	—	—	—
Net liability (asset) at end of period	**232**	**50**	**17**	**299**
Provision recognized in liabilities	*246*	*50*	*17*	*313*
Amount recognized in assets	*(14)*	—	—	*(14)*

6.2 SHARE-BASED PAYMENTS

6.2.1. Free share grants

On 9 November 2021, 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.

Movements in the free share grant plans existing at 30 June 2022 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 2022	Number of shares canceled in 1st half 2022	Total number of shares still to be granted at 30 June 2022
2018-1, 2	2 May 2018	4 years	-	**35,654**	-	59.31	32,123	5,129	-
2018-4	5 Nov. 2018	4 years	-	**127,665** (1)	111,235	64.15	-	1,450	93,088
2019-1	29 Oct. 2019	3 years	2 years	**237,945** (2)	225,015	57.73	-	1,395	230,380
2019-2	29 Oct. 2019	4 years	-	**131,035** (3)	112,740	59.76	-	1,845	122,830
2020-1, 2	5 May 2020	3-4 years	0-3 years	**9,129**	-	10.09-20.94	-	-	9,115
2020-3	4 Nov. 2020	3 years	2 years	**238,550** (4)	226,000	52.58	-	1,430	232,090
2020-4	4 Nov. 2020	4 years	-	**128,245** (5)	111,365	54.33	-	1,910	123,180
2021-1	9 Nov. 2021	3 years	2 years	**239,575** (6)	227,387	81.91	-	1,200	238,285
2021-2	9 Nov. 2021	4 years	-	**124,713** (7)	105,293	83.92	-	360	123,723

(1) May be raised to 138,789 in the event of outperformance.
(2) May be raised to 282,948 in the event of outperformance.
(3) May be raised to 153,583 in the event of outperformance.
(4) May be raised to 283,750 in the event of outperformance.
(5) May be raised to 150,518 in the event of outperformance.
(6) May be raised to 285,052 in the event of outperformance.
(7) May be raised to 145,772 in the event of outperformance.

The amount of the IFRS 2 expense recognized in respect of free shares at 30 June 2022 is €13 million (€12 million at 30 June 2021).

Note 7: Income taxes

The income tax expense breaks down as follows:

(In millions of euros)	**1st half 2022**	**1st half 2021**
Current income taxes	(201)	(262)
Deferred income taxes	(0)	(1)
TOTAL INCOME TAXES	**(201)**	**(263)**

The income tax expense amounts to €201 million for the first half of 2022, compared with €263 million for the first half of 2021.

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 CGUs that are subject to impairment tests as soon as any indicators of potential impairment are identified. Impairment tests are performed at least annually, following the methodology described in note 8.5 “Asset value monitoring”.

	30 June 2022			**31 December 2021**
(In millions of euros)	**Gross book value**	**Accumulated amortization and impairment**	**Net book value**	**Net book value**
Goodwill	3,907	(648)	3,259	1,925

The breakdown by segment is as follows:

Goodwill by segment	**30 June 2022 Net book value**	**31 December 2021 Net book value**
Adhesive Solutions	2,344	1,038
Advanced Materials	494	475
Coating Solutions	377	368
Intermediates	44	44
Corporate	—	—
TOTAL	**3,259**	**1,925**

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

(In millions of euros)	**2022**
At 1 January	**1,925**
Acquisitions	1,182
Impairment	—
Disposals	—
Translation adjustments	152
Reclassifications	—
At 30 June	**3,259**

For 2022, the “Acquisitions” item corresponds to new goodwill recognized for Ashland’s Performance Adhesives business and Shanghai Zhiguan Polymer Materials (PMP) offset by the reduction in goodwill following the finalization of the Poliplas and Agiplast purchase price allocation.

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”.

(In millions of euros)	30 June 2022 Gross book value	Accumulated amortization and impairment	Net book value	31 December 2021 Net book value
Patents and technologies	615	(249)	366	240
Trademarks	636	(3)	633	595
Software and IT licenses	427	(354)	74	84
Capitalized REACH costs	76	(48)	28	28
Other capitalized research expenses	21	(18)	3	4
Capitalized contracts	91	(73)	18	23
Asset rights	77	(50)	28	27
Customer relations	336	(77)	259	243
Other intangible assets	102	(45)	57	54
Intangible assets in progress	271	(25)	246	219
TOTAL	**2,652**	**(940)**	**1,712**	**1,517**

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)	**2022**
At 1 January	**1,517**
Acquisitions	20
Amortization	(64)
Impairment	(1)
Disposals	0
Changes in scope	188
Translation adjustments	47
Reclassifications	5
At 30 June	**1,712**

The item “Changes in scope” includes the intangible assets for Ashland’s Performance Adhesives business described in note 3.1.1 “Business combinations during the period”.

8.3. PROPERTY, PLANT AND EQUIPMENT

(In millions of euros)	30 June 2022 Gross book value	Accumulated depreciation and impairment	Net book value	31 December 2021 Net book value
Land and buildings	2,233	(1,507)	726	716
Complex industrial facilities	3,866	(3,270)	596	583
Other property, plant and equipment	3,832	(2,842)	990	957
Construction in progress	790	(49)	741	618
TOTAL PROPERTY, PLANT AND EQUIPMENT EXCLUDING RIGHTS OF USE	**10,721**	**(7,668)**	**3,053**	**2,874**
Rights of use	346	(168)	178	157
TOTAL PROPERTY, PLANT AND EQUIPMENT	**11,067**	**(7,836)**	**3,231**	**3,031**

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

(In millions of euros)	**2022**
At 1 January	**2,874**
Acquisitions	217
Depreciation	(211)
Impairment	(20)
Disposals	(2)
Changes in scope	66
Translation adjustments	134
Other	—
Reclassifications	(5)
At 30 June	**3,053**

Impairment at 30 June 2022 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 2022, the net book value of rights of use related to leases is €178 million.

	30 June 2022			**31 December 2021**
(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)	81	(48)	33	38
Rights of use: industrial assets (factories, land, warehouses)	54	(14)	40	39
Rights of use: logistics assets (trucks, containers, trolleys)	187	(93)	94	69
Rights of use: other assets (cars, etc.)	24	(13)	11	11
Total rights of use	**346**	**(168)**	**178**	**157**

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

(In millions of euros)	**2022**
At 1 January	**158**
Acquisitions	44
Depreciation	(33)
Disposals	(2)
Changes in scope	1
Translation adjustments	10
Reclassifications	—
At 30 June	**178**

The IFRS 16 debt amounts to €190 million at 30 June 2022 (see note 10.2 “Debt”). The total non-discounted value of the Group’s future lease payments amounts to €205 million at 30 June 2022, maturing as follows:

(In millions of euros)	**30 June 2022**
Within one year	57
1-5 years	92
After 5 years	56
TOTAL	**205**

At 30 June 2022, the cash outflows associated with leases amount to €33 million. The financial expenses related to the IFRS 16 debt amount to €2 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 executive 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. In 2021, the terminal value was determined on the basis of a perpetuity annual growth rate of 1.5% and mid-cycle cash flow. The after-tax rate used to discount future cash flows and the terminal value is the Group's weighted average cost of capital, estimated at 7.5% in 2021. 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).
Sensitivity analyses carried out at 31 December 2021, 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 these assumptions would lead to asset impairments of between €40 million and €70 million.

At 30 June 2022, the Group considered that the assumptions used to determine the value of property, plant and equipment and intangible assets at 31 December 2021 had not changed to an extent that would require new impairment tests on the CGUs for the period, in particular given the sensitivity assumptions used for weighted average cost of capital rates described in the financial statements at 31 December 2021.

EBITDA and capital expenditure sensitivities are now considered sufficient to take into account any climate-related impacts, and in particular the Group's target to reduce its Scope 1 and 2 greenhouse gas (GHG) emissions and its Scope 3 emissions by 46% by 2030 relative to 2019. This target will be supported by an increase in investments contributing to decarbonization, which could reach €400 million by 2030 and which will be included in the Group's recurring capital expenditure envelope. In addition, the Group believes that climate issues have no impact on the useful lives of assets and that no additional impairment is required.

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

9.1 OTHER PROVISIONS AND OTHER NON-CURRENT LIABILITIES

9.1.1 Other non-current liabilities

Other non-current liabilities amount to €15 million at 30 June 2022 versus €14 million at 31 December 2021.

9.1.2 Other provisions

(In millions of euros)	Environmental contingencies	Restructuring	Other	Total
At 1 January 2022	**202**	**49**	**178**	**429**
Increases in provisions	2	2	31	35
Reversals of provisions on use	(13)	(3)	(8)	(24)
Reversals of unused provisions	(1)	(3)	(17)	(21)
Changes in scope	0	—	—	0
Translation adjustments	9	1	9	19
Other	—	0	(0)	(0)
At 30 June 2022	**199**	**46**	**193**	**438**

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

(In millions of euros)	Environmental contingencies	Restructuring	Other	Total
Total provisions at 30 June 2022	**199**	**46**	**193**	**438**
Portion of provisions covered by receivables or deposits	64	—	37	101
Deferred tax asset related to amounts covered by the Total indemnity	19	—	—	19
Provisions at 30 June 2022 net of non-current assets	116	46	156	318
For information: **Provisions at 1 January 2022 net of non-current assets**	**120**	**49**	**144**	**313**

Provisions for environmental contingencies

Provisions for environmental contingencies are recognized to cover expenses related to soil and water table clean-up, mainly:

- in France for €83 million (€88 million at 31 December 2021);
- in the United States for €105 million (€102 million at 31 December 2021), of which €83 million in respect of former industrial sites covered 100% by the Total group indemnity (receivable recognized in “Other non-current assets” for an amount of €64 million and €19 million recognized in deferred tax assets).

Restructuring provisions

Restructuring provisions are mainly in respect of restructuring measures in France for €25 million (€26 million at 31 December 2021), in Europe excluding France for €6 million (€7 million at 31 December 2021) and in the United States for €11 million (€13 million at 31 December 2021).

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 €193 million and mainly comprise:

- provisions for labor litigation for €81 million (€80 million at 31 December 2021);
- provisions for commercial litigation and warranties for €57 million (€46 million at 31 December 2021);
- provisions for tax litigation for €35 million (€33 million at 31 December 2021); and
- provisions for other risks for €20 million (€19 million at 31 December 2021).

9.2 LIABILITIES AND CONTINGENT LIABILITIES

Liabilities and contingent liabilities are described in note 10.2 to the consolidated financial statements at 31 December 2021. There was no development in liabilities and contingent liabilities during the first half of 2022 with an actual or potential material effect on the Group’s consolidated financial statements, outside of the developments outlined below.

Presence of perchlorate in the groundwater around Geneva (Arkema France)

By order of 26 January 2022, the Administrative Court of Grenoble granted the Swiss authorities' request for an expert assessment of this matter. The assessment is currently underway.

CFI (Arkema France)

On 21 February 2022, CFI and Canada Fluorspar, Inc. (CFI's parent company) were placed into receivership by the Supreme Court of Newfoundland and Labrador, which placed an automatic hold on Arkema France's litigation, as described in note 5.1.

Harvey (Arkema Inc.)

Among the twenty-five lawsuits that were filed against Arkema Inc. since September 2017, one of them has been certified as a class action, and Arkema Inc. has sought to leave to appeal that certification.

Perfluorinated substances (Arkema Inc. and Arkema France)

Arkema Inc. and in some instances Arkema France, along with numerous other users and multiple fluorogas manufacturers, have been sued in the United States in a substantial number of cases involving per- and poly-fluoroalkyl substances. The majority of these concern fluorinated substances used in firefighting foams. Many have been filed in or transferred to a single multi-district litigation action pending in federal court in South Carolina. There is also a class action filed in federal court in Ohio, on behalf of all persons in the United States who have been exposed to such substances. In March 2022, the District Court issued a decision certifying the following class: *"Individuals subject to the laws of Ohio who have .05 parts per trillion (ppt) of PFOA (C-8) and at least .05 ppt of any other PFAS in their blood serum."* Defendants (including Arkema Inc. and Arkema France) have filed a petition for leave to appeal that class certification decision. Additionally, there are similar claims filed in other various state and federal courts. There are also cases involving a former operating site in New Jersey for which Arkema Inc. is indemnified by Legacy Site Services, LLC as more fully described in note 10.3 "Commitments received". The two companies are vigorously defending against the allegations of these lawsuits. The Group is not, as at the date of these financial statements, in a position, having regard to the information available to it, to estimate the amount of the claims that might finally be upheld against it by the various competent courts after the exhaustion of any avenues of appeal. Therefore, although the uncertain nature of the existing legal and factual circumstances involved lead the Group to the overall assessment that it cannot, at this time, reasonably estimate the probability or amount of any financial impact associated with these contingent liabilities, the Group has taken provisions for the expected costs of defense associated with these ongoing legal matters.

COEM (Arkema France)

In a decision handed down on 19 May 2022, the Versailles Court of Appeal upheld the 6 May 2020 ruling dismissing Industrie Generali's claims.

9.3 COMMITMENTS RECEIVED

Commitments received from Total in 2006

In connection with the Spin-Off of Arkema's Businesses, Total S.A. and certain Total 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 (formerly Total S.A.) 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 (formerly Total S.A.) group companies.

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

In March 2006, Arkema Amériques SAS 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 Amériques SAS, 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 Amériques SAS 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 Amériques SAS 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$139 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 2022**	**1st half 2021**
Cost of debt	(20)	(23)
Spot/forward exchange rate difference and foreign exchange gain/loss on unhedged financing	(5)	(3)
Financial income/expenses on provisions for pensions and employee benefits	12	(1)
Capitalized interest	1	1
Interest expenses on leases	(2)	(2)
Other	0	0
FINANCIAL RESULT	**(14)**	**(28)**

10.2 DEBT

Group net debt amounted to €2,089 million at 30 June 2022, taking account of cash and cash equivalents of €1,342 million.

10.2.1. Analysis of net debt by category

(In millions of euros)	**30 June 2022**	**31 December 2021**
Bonds	2,541	2,539
Bank loans	0	2
Other non-current debt	21	21
Non-current debt excluding IFRS 16 debt	**2,562**	**2,562**
Bonds	—	—
Syndicated credit facility	—	—
Negotiable European Commercial Paper	641	—
Other bank loans	22	9
Other current debt	15	23
Current debt excluding IFRS 16 debt	**678**	**32**
Debt excluding IFRS 16 debt	**3,240**	**2,594**
Non-current IFRS 16 debt	136	118
Current IFRS 16 debt	55	50
Debt	**3,431**	**2,762**
Cash and cash equivalents	1,342	2,285
Net debt	**2,089**	**477**

Bonds

- In December 2013, the Group issued a €150 million bond that will mature on 6 December 2023, with a fixed coupon of 3.125%.

  At 30 June 2022, the fair value of this bond is €153 million.

- 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 2022, the fair value of this bond is €685 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 2022, the fair value of this bond is €845 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 2022, the fair value of this bond is €415 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%.

  At 30 June 2022, the fair value of this bond is €272 million.

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

IFRS 16 liabilities

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 2022	31 December 2021
Euros	3.203	2.571
US Dollars	17	9
Other	20	14
TOTAL DEBT EXCLUDING IFRS 16 DEBT	**3,240**	**2,594**

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 2022 the swapped portion, mainly in US dollars, represented approximately 28% 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 2022	31 December 2021
Less than 1 year	700	45
Between 1 and 2 years	184	184
Between 2 and 3 years	729	30
Between 3 and 4 years	21	731
Between 4 and 5 years	1,218	319
More than 5 years	518	1,429
TOTAL DEBT EXCLUDING IFRS 16 DEBT	**3,370**	**2,738**

Note 11: Shareholders' equity and earnings per share

At 30 June 2022, Arkema's share capital amounted to €743 million, divided into 74,286,041 shares with a par value of €10.

11.1 CHANGES IN SHARE CAPITAL AND PAID-IN SURPLUS

Following the completion on 24 November 2021 of the €300 million share buyback program, the Board of Directors decided on 24 January 2022 to reduce Arkema's share capital by 3.19%, by canceling 2,450,435 treasury shares acquired at a total cost of €270 million. Following this operation, Arkema's share capital amounted to €742,860,410, divided into 74,286,041 shares with a par value of €10.

	1st half 2022	2021
Number of shares at 1 January	**76,736,476**	**76,736,476**
Issuance of shares following the capital increase reserved for employees	—	—
Issuance of shares following the exercise of subscription options	—	—
Share capital reduction	(2,450,435)	—
Number of shares at end of period	**74,286,041**	**76,736,476**

11.2 HYBRID BONDS

At 30 June 2022, the total nominal value of Arkema's perpetual hybrid bonds is €700 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%

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 purchased 20,000 treasury shares in 2022. In the first half of 2022, 32,123 free shares vested to Arkema Group employees (see note 6.2 "Share-based payments"). Following the completion on 24 November 2021 of the €300 million share buyback program, the Board of Directors decided on 24 January 2022 to reduce Arkema's share capital by 3.19%, by canceling 2,450,435 treasury shares acquired at a total cost of €270 million.

	1st half 2022	2021
Number of treasury shares at 1 January	**2,779,553**	**59,756**
Purchase of treasury shares	20,000	3,033,726
Grants of treasury shares	(32,123)	(313,929)
Share capital reduction	(2,450,435)	—
Number of treasury shares at end of period	**316,995**	**2,779,553**

11.4 DIVIDENDS

The combined annual general meeting of 19 May 2022 approved the distribution of a €3 dividend per share in respect of the 2021 financial year, or a total amount of €222 million. This dividend was paid out on 25 May 2022.

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 2022	1st half 2021
Weighted average number of ordinary shares	73,954,187	76,338,552
Dilutive effect of stock options	0	0
Dilutive effect of free share grants	331,854	397,924
Weighted average number of potential ordinary shares	74,286,041	76,736,476

(In millions of euros)	1st half 2022	1st half 2021
Net income – Group share	730	950
Interest on subordinated perpetual notes, net of tax	(5)	(5)
Net income used in calculating earnings per share	725	945

	1st half 2022	1st half 2021
Earnings per share *(in euros)*	9.80	12.38
Diluted earnings per share *(in euros)*	9.76	12.31

Note 12: Subsequent events

On 1 July 2022, Arkema finalized the acquisition of Permoseal in South Africa, a leader in adhesive solutions for DIY, packaging and construction. Permoseal has a strong presence in retail channels and generated sales of €43 million in 2021. This acquisition will enable Bostik to round out its offering in the region and strengthen its positions in South Africa's and Sub-Saharan Africa's dynamic industrial, construction and DIY markets.

On 21 July 2022, the Group announced the planned acquisition of Polimeros Especiales, a leading player in solvent-free waterborne acrylic resins in Mexico, to strengthen Arkema's position in this fast-growing region. The company employs 230 people and achieved sales of around US$40 million in 2021.

On 28 July 2022, the Group amended and extended its syndicated credit facility maturing on 29 July 2024. The amount of the facility was increased to €1.1 billion and its maturity was extended to 28 July 2027, with two 1-year extension options subject to the lenders' approval.

The amendment also removed the financial covenant to stay below a specified net debt to EBITDA ratio to avoid triggering early repayment. In addition, the CSR indicators take into account the Group's new objectives.

The purpose of the facility is to finance the Group's general corporate purposes and serve as a back-up facility for the commercial paper program.

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 LP		United States	50.00	JO
American Acryl NA, LLC		United States	50.00	JO
Arkema		South Korea	100.00	FC
Arkema		France		FC
Arkema Ameriques SAS		France	100.00	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.		China	100.00	FC
Arkema (Changshu) Fluorochemical Co., Ltd.		China	100.00	FC
Arkema Chemicals India Private Limited		India	100.00	FC
Arkema (Changshu) Polyamides Co., Ltd.		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 Europe	(b)	France	100.00	FC
Arkema France		France	100.00	FC
Arkema GmbH		Germany	100.00	FC
Arkema (Hong Kong) Co., Limited		Hong Kong	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 Holding Limited		United Kingdom	100.00	FC
Arkema Mexico S.A. de C.V.		Mexico	100.00	FC
Arkema Mexico Servicios S.A. de C.V.		Mexico	100.00	FC

Arkema Participations	(a)	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 SAU		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	75.00	FC
ArrMaz Morocco, LLC		United States	75.00	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 LL		United States	49.00	JV
Bostik AB		Sweden	100.00	FC
Bostik Adhesives Limited		United Kingdom	100.00	FC
Bostik Aerosols GmbH		Germany	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.		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 Findley (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.		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 A.S		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 Technology GmbH		Germany	100.00	FC
Bostik Romania S.r.l		Romania	100.00	FC
Bostik SA		France	100.00	FC
Bostik S.A.		Spain	100.00	FC
Bostik (Shanghai) Management Co., Ltd.		China	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.		China	100.00	FC
Changshu Haike Chemical Co., Ltd.		China	49.00	FC
CJ Bio Malaysia Sdn. Bhd.		Malaysia	14.00	SI
Coatex Asia Pacific Inc.		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 France	(b)	France	100.00	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 16		France	100.00	FC
DIFI 17		France	100.00	FC
DIFI 18		France	100.00	FC
ERPRO 3D FACTORY		France	10.00	SI
Febex SA		Switzerland	96.77	FC
FIXATTI		Belgium	100.00	FC
FIXATTI (CHINA) POLYMER SPECIALTIES Co LTD		China	100.00	FC
Fixatti AG		Switzerland	100.00	FC
FIXATTI GmbH		Germany	100.00	FC
Fixatti Holding AG		Switzerland	100.00	FC
IDEAL WORK Srl		Italy	100.00	FC
Ishedu 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
POLIPLAS SELANTES E ADESIVOS LIMITADA	(b)	Brazil	100.00	FC
Prochimir		France	100.00	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	(d)	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
Termoplastic 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 2022.

(b) Companies merged in 2022.

(c) Companies liquidated in 2022.

(d) Companies consolidated for the first time in 2022.

(e) Companies for which the percentage ownership changed in 2022, with no change in control.

(f) Companies for which the percentage ownership changed in 2022, with change in control.

(g) Companies deconsolidated in 2022.

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 2022

I declare that, to the best of my knowledge, the condensed consolidated interim financial statements for the six months ended 30 June 2021 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 3 to 14, presents a fair review of the major events that occurred in the first six months of the year and of their impact on the financial statements, as well as the main related-party transactions, and that the said management report provides a description of the main risks and uncertainties for the remaining six months of the financial year.

Colombes, 28 July 2022

Thierry Le Hénaff
Chairman and Chief Executive Officer

KPMG Audit
Département de KPMG S.A.

ERNST & YOUNG Audit

Arkema S.A.
For the period from January 1 to June 30, 2022

Statutory Auditors' Review Report
on the Half-yearly Financial Information 2022

KPMG Audit
Département de 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 S.A.
For the period from January 1 to June 30, 2022

Statutory Auditors' Review Report on the Half-yearly Financial Information 2022

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 S.A., for the period from January 1 to June 30, 2022,
- 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.

I. 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.

II. 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 28th 2022

The Statutory Auditors

French original signed by

KPMG Audit *Département de KPMG S.A.*	ERNST & YOUNG Audit
Eric Dupré François Quédiniac	Christine Vitrac

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