ANNUAL **REPORT** 2022

Buzzi Unicem

Buzzi Unicem is an international multiregional, “heavy-side“ group, focused on cement, ready-mix concrete and aggregates.

The company’s dedicated management has a long-term view of the business and commitment towards a sustainable development, supported by high quality assets.

Buzzi Unicem pursues value creation through lasting, experienced know-how and operating eff iciency of its industrial operations.

Vision

Contents

This document, issued in Italian (original version) and English (non-binding version), is in PDF format to facilitate reading and does not represent the official version in ESEF format, established by the European Commission Regulation 815/2019 to fulfil the disclosure requirements set by the Directive 2004/109/EC (so-called Transparency Directive)

Fusion process at the Built laboratory, Vercelli - Italy (Tommaso Buzzi)

Directors and statutory auditors

Alessandro BUZZI	Honorary Chairman

Boards of Directors

Veronica BUZZI[1]	Chairman
Michele BUZZI[2]	Chief Executive Operations
Pietro BUZZI[2]	Chief Executive Finance
Paolo BURLANDO[3]	Director
Luigi BUZZI	Director
Elsa FORNERO	Director
Aldo FUMAGALLI ROMARIO[3]	Director
Linda Orsola GILLI	Director
Antonella MUSY[3]	Director
Mario PATERLINI	Director
Gianfelice ROCCA	Director
Giovanna VITELLI	Director

Collegio sindacale

Fabrizio Riccardo DI GIUSTO	Chairman
Paola Lucia GIORDANO	Statutory Auditor
Giorgio ZOPPI	Statutory Auditor
Daniela BAINOTTI	Alternative Auditor
Giulia DE MARTINO	Alternative Auditor
Domenico FAVA	Alternative Auditor

[1] appointed Chairman by the Board of Directors on May 8, 2020;


New headquarters of the Domaine Claude Bentz winery, Remich - Luxembourg (Studio Jil Bentz)

Review of operations

Shares, Shareholders and Performance indicators

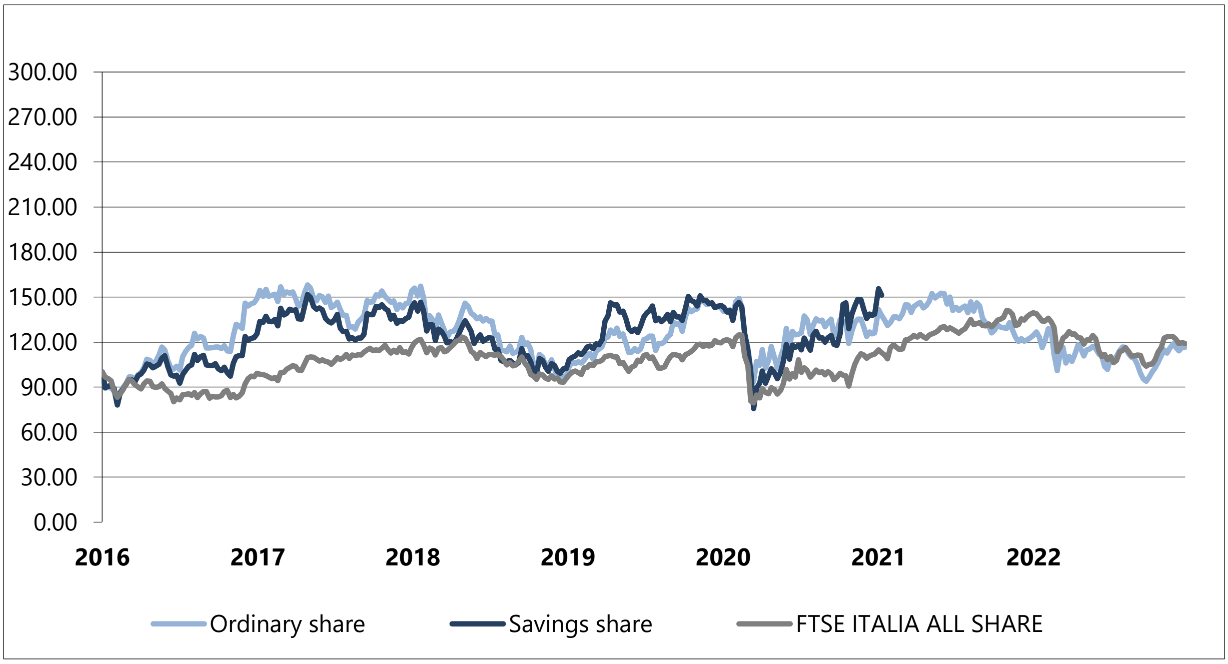
The ordinary shares of Buzzi Unicem have been listed on the Milan Stock Exchange since September 1999. Market capitalization as at 31 December 2022 was €3,470 million. Each ordinary share is entitled to one vote.

Trading in Buzzi Unicem shares

	Ordinary shares	Savings shares	Ordinary shares	Savings shares
Reference period	**number**	**number**	**€m**	**€m**
Year 2016	207,469,441	20,588,786	3,489.0	200.2
Year 2017	184,745,315	22,056,405	4,207.8	284.3
Year 2018	195,237,204	20,433,371	3,818.7	221.6
Year 2019	173,589,804	20,591,261	3,313.2	256.9
Year 2020	179,692,420	35,465,394	3,434.5	425.5
Year 2021	160,292,352	1,933,395	3,402.8	27.5
Year 2022	**136,519,656**	**-**	**2,367.0**	**-**

Price trend of Buzzi Unicem shares

(base January 2016= 100)



Distribution of shareholdings*

(ordinary shares)

	No. Shareholders	in %	No. Shares	in %
1 - 1.000	18,052	84.58	4,792,234	2,49
1.001 - 10.000	2,716	12.73	7,410,009	3,85
10.001 - 100.000	435	2,04	14,010,568	7,27
100.001 -	139	0,65	166,413,343	86,39

* Referred to the ex-dividend date (25 May 2022)

A total of 55,361,292 ordinary shares - corresponding to approximately 29% of the voting capital - are held by foreign investors.

Market capitalization

As at 31 December 2022 (milions of euro)

2016	4,210
2017	4,258
2018	2,872
2019	4,265
2020	3,755
2021	3,652
2022	**3,470**

Capital structure

As at 31 December 2022 (in %)

Presa SpA (Buzzi Family)	82,747,000	42,96
Fimedi SpA (Buzzi Family)	19,252,563	9,99
Free Float	83,132,275	43,16
Treasury shares	7,494,316	3,89
Totale azioni	**192,626,154**	**100,00**

Key per-share data

Key per-share data (euro)	2016	2017	2018	2019	2020	2021	2022
Basic eps (ordinary)	0.70	1.90	1.86	1.88	2.72	2.82	**2.46**
Shareholders' equity per share	13.47	13.81	15.77	17.90	17.49	22.71	**25.50**
Price/earnings ratio	32,3x	11,9x	8,1x	12,0x	7,2x	6,7x	**7,6x**
Price at year-end							
ordinary shares	22.62	22.59	15.00	22.42	19.50	18.96	**18.01**
savings shares	11.55	12.84	9.62	13.72	13.04	-	**-**
Dividend per share[1]							
ordinary shares	0.10	0.12	0.13	0.15	0.25	0.40	**0.45**
savings shares	0.10	0.20	0.15	0.17	-	-	**-**
Yield							
ordinary shares	0.40%	0.50%	0.83%	0.67%	1.28%	2.11%	**2.50%**
savings shares	0.90%	1.60%	1.55%	1.27%	-	-	**-**

[1] 2022: proposed to shareholders at the Annual General Meeting

Financial Performance Indicators

Performance Indicators (in %)	2022	2021	2020
EBITDA margin[1]	**22.1**	23.1	24.2
Return on sales (ROS)	**12.4**	15.8	16.3
Return on Equity (ROE)[2]	**9.3**	12.4	15.6
Return on Capital Employed (ROCE)[3]	**7.8**	8.7	9.2
Debt/Equity	**52.8**	58.2	77.3

[1] Ratio between EBITDA and Sales, it expresses the result of a company's typical business operations;
[2] Ratio between Net Profit and Shareholders' equity, which expresses the profitability of the latter;
[3] Ratio between EBIT and the difference between Total Assets and Current Liabilities. It indicates the efficiency and profitability of a company's capital investments.

Alternative performance measures

Buzzi Unicem uses in its financial disclosure some alternative performance measures that, although widespread, are not defined or specified by the accounting standards that are applicable to the preparation of the annual financial statements or interim consolidated reports.
Pursuant to Consob Communication no. 92543/2015 and the guidelines ESMA/2015/1415 set out below are the definitions of such measures.

- **EBITDA:** subtotal presented in the financial statements; please refer to the consolidated income statement for the calculation.

- **EBITDA recurring**: it is calculated starting from the subtotal presented in the financial statements named EBITDA and applying to it the following adjustments (non-recurring income/expense):
    - restructuring costs, in relation to defined and significant plans
    - write downs/ups of current assets except trade receivables greater than €1 million
    - addition to/release of provisions for legal, fiscal or environmental risks greater than €1 million
    - dismantling costs greater than €1 million
    - gains/losses from the sales of fixed assets and non-instrumental real estate greater than €3 million
    - other sizeable non-recurring income or expenses (greater than €3 million), or rather attributable to significant events unrelated to the usual business.

The reconciliation between EBITDA and EBITDA recurring for the two comparative periods is as follows:

(millions of euro)	2022	2021
Ebitda	**883.7**	**794.6**
Additions to provisions for risks	-	1.3
Other expenses	8.7	-
EBITDA recurring	**892.4**	**795.9**

- **Operating profit (EBIT)**: subtotal presented in the financial statements; please refer to the consolidated income statement for the calculation.

- **Net financial position**: it is a measure of the capital structure and corresponds to the difference between financial liabilities and financial assets, both short and long term. Therefore, it includes all interest-bearing liabilities or assets and those connected to them, such as derivative financial instruments and accruals.

- **Net debt**: it is a measure of the capital structure corresponding to the difference between financial liabilities, both short and long term, and short-term financial assets. Therefore, it includes all liabilities, a part of the interest-bearing assets and related items, such as derivative financial instruments and accruals. The measure complies with the guidelines ESMA32-382-1138.

Business review

The unfavorable economic situation that slowed down the expansion pace of the world economy in the first half of 2022 was amplified, during the third and fourth quarters, by increased geopolitical uncertainties, by high and persistent inflation, as well as by the tightening of financial conditions. Russia attacks on Ukraine continued to destabilize commodity markets, fueling volatility in energy prices. In the main advanced economies, the slowdown in economic activity that occurred in 2022 is mainly attributable to the start of a monetary tightening cycle, aimed at countering inflationary pressures and cooling demand.

Global trade, after showing good resilience in the first half of 2022, with the negative effects of the conflict in Ukraine and persistent supply-side bottlenecks, lost momentum in the third and fourth quarters, mainly due to weak demand in advanced economies.

The latest forecasts for 2022, therefore, indicate a slowdown in world GDP growth (+3.4%). Based on these projections, the global economy should confirm its weakening, albeit remaining expansionary, also in 2023 (+2.9%), reflecting a significant drop in growth in mature countries.

In the United States, economic activity, already slowing down in the first part of 2022, was characterized in the fourth quarter by a general weakness in domestic demand, accompanied with high inflation and a further rise in interest rates, which continued to erode the purchasing power and real income of households, holding back consumption. Furthermore, the more difficult accessibility and higher cost of credit weighed on private investments, mainly those in residential construction.

In the Eurozone, economic development, after a slight growth in the third quarter (+0.3%), supported by the expansionary dynamics of investments and private consumption, stagnated during the autumn months. High inflation and more restrictive financing conditions slowed down manufacturing production and household spending. In a context characterized, therefore, by persistent uncertainty linked to the evolution of the conflict in Ukraine and by the risks deriving from potential interruptions in energy supplies, the weakening of the growth dynamics, already evident in the industrial sector, also extended to the services. Investments in residential construction fell during the second half of the year: after the decline recorded in the third quarter, activity in the sector continued to weaken also in October and November.

In Italy, GDP growth continued also in the summer quarter, thanks to the strong expansion of domestic demand. Both household consumption and investment spending, the latter diminishing due to the lower contribution from the construction sector, contributed to growth. In the fourth quarter, on the other hand, activity weakened, weighed down by the effect of persistent increases in energy prices and by the slowdown in the recovery in the sectors most impacted by the pandemic, such as trade, tourism and transport.

As far as emerging economies are concerned, in China, the difficulties associated with the crisis in the residential sector and the new wave of infections, following the lifting of all containment measures, caused a marked deterioration in the economic situation. In Russia, after the clear decrease in GDP in the second and third quarters, the economy entered a recession: the country recorded a smaller drop in exports than previously forecast, while imports suffered a sharp setback as a direct consequence of international sanctions.

As regards the market of energy goods, starting from mid-October both the price of oil and that of natural gas decreased, following the slowdown in global demand. In particular, the price of natural gas traded on the Dutch TTF market definitely improved, while remaining at historically high levels. This reduction is the result of a milder climate than expected, as well as the decline in industrial production in Europe which, together with the stability of gas supply flows, allowed to keep stocks close to maximum levels.

In November and December, in line with what had already been done in the first half, the Federal Reserve raised the benchmark rates by further 75 and 50 basis points respectively, indicating further increases with a labor market still under pressure. At the same time, the ECB also increased the benchmark interest

rates by 75 and 50 basis points in October and December, assessing that these will still have to rise to allow a timely return to price stabilization. However, the Governing Council established that future rate decisions will also be weighed on the basis of growth and inflation prospects.
The central banks of emerging countries, on the other hand, adopted more heterogeneous approaches: in Brazil, the monetary authorities interrupted the sequence of increases, while in China, in a context of moderate inflation, monetary conditions remained accommodating, also to mitigate the real estate crisis.

Construction investments, to which the evolution of demand for cement and concrete is closely related, after a first half growing, lost traction in the third and fourth quarters both in the United States of America and in the Eurozone, due to the increase in construction costs and restrictive monetary policies, which have made access to credit more expensive.

Consolidated net sales increased from €3,445.6 to €3,995.5 million. During the year no changes occurred in the scope of consolidation, while the exchange rate variances, mainly consisting of the appreciation of the ruble and the dollar, were overall favorable for €219.5 million. Like for like net sales would have improved by 9.6% compared to 2021.
Ebitda amounted to €883.7 million, up 11.2% compared to €794.6 million of last year. The 2022 figure includes non-recurring costs of €8.7 million, while in 2021 they were equal to €1.3 million.
After amortization and depreciation of €388.9 million, Ebit stood at €494.8 million, versus €545.6 million in 2021. Net financial costs decreased from €34.4 to €23.1 million: the improvement was essentially determined by the increase in interest revenues, despite the unfavorable variance in the net balance of non-cash items, in particular exchange gains or losses. Profit before tax was €589.3 million compared to €635.3 million in 2021. After current and deferred income tax of €130.5 million (€93.0 million in 2021), the income statement closed with a net profit of €458.8 million, same as the portion attributable to the owners of the company.
Net financial position at year-end 2022, including long-term assets, is positive and amounts to €288.2 million, up €52.7 million compared to the figure as at 31 December 2021. In 2022 capital expenditures of €270.8 million were carried out and dividends of €73.4 million were distributed. The debt/equity ratio was 53% (58% at year-end 2021).

Operating and financial performance

In 2022, cement sales at consolidated level came in at 28.3 million tons, down 9.2% compared to 2021. The generalized slowdown in deliveries, which has been already highlighted during the first half of the year, accentuated during the following quarters, particularly in Italy, Eastern Europe and the United States, where in addition to the weaker demand referring to the residential sector, there were also some logistical problems along the Mississippi River. In Central Europe, on the other hand, sales volumes showed some stability.
Ready-mix concrete sales amounted to 11.5 million cubic meters, down 5.2% compared to 2021. Sales volumes improved slightly only in Central Europe, while in Eastern Europe, the United States of America and Italy they showed a more evident contraction.

Consolidated net sales increased from €3,445.6 to €3,995.5 million. During the year no changes in scope were recorded, while the exchange rate effect was favorable for €219.5 million. Like for like net sales would have improved by 9.6%.

In Italy cement sales, after sharply declining in the first six months, slowed down further during the second half, suffering from the difficult situation of the domestic market and the renunciation of the export market. The decline in volumes also extended to the ready-mix concrete sector. Average selling prices, both in cement and ready-mix concrete, showed a favorable trend. This is the reason why, in the year as a whole, consolidated net sales in Italy stood at €726.2 million, up 20.1%.

In the United States of America, after an improving first half, our cement sales contracted in the second half of 2022. The slowdown, which was more evident in the fourth quarter, was caused by the weakening of cement demand, in addition to the logistical difficulties due to the low water level in the Mississippi River, which lasted until mid-November and influenced the dynamics of our shipments. Therefore, throughout the year, sales volumes, both in cement and ready-mix concrete, stood at slightly lower levels than in 2021. Conversely, selling prices strengthened further during the fourth quarter. Overall net sales stood at €1,591.8 million, up 19.7% versus €1,329.6 million of 2021. The appreciation of the dollar (+11.0%), which occurred above all in the first part of the year, positively impacted on the translation of the results into euro: at constant exchange rates net sales would have been up 6.6%.

As for the Central European countries, in Germany, our hydraulic binders shipments closed 2022 slightly progressing, despite some slowdown recorded both in the third and fourth quarters, due to a greater weakness in demand and a harsher winter. Selling prices confirmed the good levels already achieved in the first nine months, also during the last quarter. In Luxembourg and the Netherlands, the weakening of demand, already evident starting from the second quarter, continued in the following quarters. However, cement volumes closed the year slightly up compared to 2021, with sales prices showing robust growth. The same dynamics also extended to volumes of ready-mix concrete which closed slightly up in Luxembourg and the Netherlands and were stable in Germany. The turnover of Central Europe increased from €880.3 to €993.5 million, up 12.9%. Net sales improved both in Germany (+12.8%, from €708.1 to €798.8 million) and in Benelux (+12.8%, from €201.1 to €226.9 million).

Looking at the Eastern European markets, in Poland, our cement and ready-mix concrete sales volumes, after a first half of growth, mainly thanks to the progress recorded at the start to the year, significantly lost ground in the third and fourth quarters, closing clearly down. Sales prices, on the other hand, showed a very favorable development. In such market context, net sales in euro amounted to € 141.3 million, increasing (+11.8%) compared to 2021. The depreciation of the zloty (-2.6%) had a negative impact on the translation of results: at constant exchange rates, revenues would have been up 14.7%.

In the Czech Republic, cement sales, after a first semester progressing, showed a rather negative trend in both the third and fourth quarters, closing 2022 at lower levels than the previous year. Selling prices, in local currency, definitely improved. The ready-mix concrete sector, including Slovakia, recorded similar dynamics, both in terms of volumes and selling prices. Overall net sales, thanks also to the appreciation of the Czech koruna (+4.2%), came in at €201.2 million, up 13.4% compared to 2021. At constant exchange rates the turnover would have been up 9.1%.

In Ukraine, following the outbreak of war at the end of February, we were initially forced to suspend production and sales activities in both of our plants. Subsequently, at the end of March, with the repositioning of the conflict in the eastern and south-eastern part of the country, activity resumed at the Volyn plant in the north-west, while at the Nikolayev plant, in the south, it continued to remain interrupted, due to the lack of demand and the operational risks associated with the proximity to the combats. In December, the already complex operating situation was penalized by some interruptions in the supply of electricity. Therefore, the year 2022 closed with sales volumes more than halved, and prices rising sharply, driven by inflation. Net sales came in at €59.8 million, down 53.0% compared to 2021. The depreciation of the local currency (-5.5%) penalized the translation of the results into euro: at constant exchange rates the turnover would have decreased by 50.4%.

In Russia, following the decision taken in May to cease all operational involvement in the activity of the subsidiary SLK Cement, the information available to us regarding the trend in demand and the construction market is very limited. In 2022, volumes sold decreased compared to the previous year. However, the decline was less pronounced than initially expected. Selling prices showed a favorable trend. Net revenues amounted to €290.4 million, up 40.0% compared to €207.4 million of the previous year. The appreciation of the ruble (+15.3%) had a positive effect on turnover: at constant exchange rates, revenues would have increased by 18.6%.

Overall net sales of Eastern Europe came in at €691.9 million, up 8.6% compared to €637.2 million of 2021. Like for like, they would have been up 1.5%.

The consolidated Ebitda stood at €883.7 million, up 11.2% compared to €794.6 million of the previous year. The foreign exchange effect was positive for €71.8 million. The figure for the year under review includes non-recurring costs of €8.7 million (while in 2021 they were €1.3 million). Excluding the non-recurring items Ebitda rose from €795.9 to €892.4 million, with Ebitda to sales margin standing at 22.3% (23.1% in 2021). The strengthening of operating results in the United States of America, resulting from the favorable exchange rate effect, in Italy and the Czech Republic, more than offset the slowdown recorded in Central Europe, Poland and Ukraine.

After amortization of €259.3 million, versus €244.0 million in 2021, and impairment in fixed assets of €129.6 million, €122.5 million thereof referring to the Russia goodwill, Ebit came in at €494.8 million, down compared to €545.6 million in 2021. Net finance costs decreased from €34.4 to €23.1 million, mainly due to the increase in interest income. In the year under review no gains on sale of investments were recorded (they amounted to €18 million in 2021), while equity in earnings of associates increased from €106.1 to €117.6 million. As such, profit before tax amounted to €589.3 million, down compared to €635.3 million of the previous year. The tax burden for the financial year was €130.5 million, versus €93.0 million in 2021. The higher tax rate of 2022, equal to 22% of the profit before tax (15% in 2021), was affected by the presence of some considerable non tax-deductible items, such as the goodwill impairment. Therefore, the income statement for 2022 closed with a net profit of €458.8 million (€542.3 million in 2021). Net profit attributable to the owners of the company also amounts to €458.8 million.

Consolidated net financial position as at 31 December 2022 was confirmed as positive, setting at €288.2 million, versus €235.5 million at year-end 2021. Compared to the economic performance, the improvement in the net financial position was penalized by a strong absorption of working capital, largely due to the price effect on the value of inventories. In 2022 the group distributed dividends of €73.4 million and paid total capital expenditures of €270.8 million, €51.2 million thereof devoted to the decarbonization of production process and performance improvements. Projects to increase the production of cements with a lower clinker content, the greater use of alternative fuels and the in-house production of electricity belong to the first category. An amount of €9.1 million was allocated to capacity expansion projects, among which the construction of a new clinker storage in San Antonio, Texas (€5.0 million) and a new natural aggregates quarry in Austin, always in Texas (€1.6 million).

As at 31 December 2022, total equity, inclusive of non-controlling interests, stood at €4,911.5 million versus €4,375.2 million at 2021 year-end. Consequently, the debt/equity ratio decreased to 53% from 58% in the previous year.

Italy

The Italian economy, thanks to the positive contribution of domestic demand and investments, continued to expand during the third quarter (+0.5%), exceeding the levels prior to the pandemic. However, in the last months of 2022 there was a weakening of the cyclical phase, caused by persistent and high inflation, of the energy factors in particular, as well as a slowdown in growth in the services sector. These dynamics were also reflected in the activity of the industrial sector: the economic decline in the first quarter was followed by a recovery in the second one, while a further slowdown was recorded in the third and fourth quarters, which, in addition to energy price increases, were affected by the continuing difficulties in the procurement of raw materials and semi-finished products. After the expansion in the first half, exports remained almost stable during the summer months, held back by the marked slowdown in the sales of goods and services. Trade with countries outside the eurozone, the United States and China in particular, more than compensated for the slowdown in exports to countries of the common market.
According to the most recent estimates, GDP increased by 3.7% at the end of 2022. After the peak reached in the autumn, inflation decreased slightly in December, closing the year at definitely high levels (+8.1%).

During 2022 the dynamics of investments remained robust, albeit slowing down in the third and fourth quarters, reflecting, on the one hand, the reduction in construction spending, and on the other, an acceleration in plant and machinery spending. In particular, as regards investments in the construction sector, the trend was confirmed positive also in 2022 (+12.7% compared to 2021), despite the slowdown in the construction industry during the second part of the year, held back by inflation, by rising interest rates and by concerns about a potential recession. The residential renovation sector was the driving force behind investments in the sector. The persistent inflationary pressures on the prices of energy and non-energy raw materials, in addition to the delays in the implementation of the PNRR, diluted the contribution of public works. Domestic cement consumption is estimated to decrease by around 8%, with an increasing share represented by imports.

Our hydraulic binders and clinker volumes, which were already clearly contracting in the first six months of the year, further slowed down during the second half, suffering the difficult situation of the domestic market and the withdrawal from the export. Referring to the whole of the year, they decreased by 16.0%. These dynamics also included the ready-mix concrete sector, down 8.1%. Average selling prices, both for cement and ready-mix concrete, showed a clearly favorable trend in the year as a whole.
Such trend in volumes and prices led to net sales of €726.2 million, up 20.1% (€604.7 million in 2021). Ebitda achieved €82.0 million, doubled compared to €40.8 million of last year. The figure for the year under review includes non-recurring costs of €8.7 million, thus causing the recurring Ebitda to achieve €90.7 million.

However, it should be remembered that the figure for the year under review benefited from the tax credit effect dedicated to energy-intensive companies, for an amount of around €38 million. Despite this benefit, the cost of electricity almost doubled compared to 2021 levels. Fuel costs followed a similar trend, too. Therefore, in 2022, the unit production costs, both as regards the variable and the fixed components, visibly worsened.

(millions of euro)	2022	2021	22/21
Net sales	726.2	604.7	20.1%
EBITDA	82.0	40.8	n.s.
EBITDA recurring	90.7	40.8	n.s.
% of net sales	12.5	6.8	
Capital expenditures	26.5	26.5	0.0%
Headcount at year end n.	1,538	1,555	-1.1%

Total capital expenditures made in 2022 amounted to €26.5 million. During the period, €7.7 million were invested for the decarbonization of the production process, including projects to increase the production of cement with a lower clinker content and the greater use of alternative fuels, as well as investments for the production of energy from renewables. In addition, €8.7 million were capitalized for energy and technological efficiency measures. The expenditure for the expansion of raw materials reserves, overburden removal and improved safety of the quarry fronts amounted to €4.2 million. In ready-mix concrete sector, on the other hand, €2.6 million were invested for the modernization of some batching plants.

United States of America

Despite a better-than-expected result in the third quarter (+3.2%), thanks to the stability of consumer spending and non-residential investments, the US economy slowed down during the last three months (+2.7%). Domestic demand continued to grow, but at a much more moderate pace than at the beginning of the year, while investments in residential building declined, strongly penalized by monetary policy decisions which made it more expensive and more difficult to access credit. The demand for employment remained almost saturated, despite a slight easing following the rise in interest rates, and many sectors still suffered from the shortage of workforce. This dynamic caused an increase in wages, further amplifying inflation (+8.1% on average in 2022), albeit down overall in the fourth quarter, driven by energy. In this context, the most recent forecasts on the performance of the US economy indicate that GDP could grow by 2.0% in 2022.

Investments in residential construction, the main driver of demand starting from 2020, lost ground in the second half of 2022, impacted by the rise in building materials and the increase in interest rates. The high inflation also diluted the potential of investments in public works, which are expected to contract at the end of 2022 (-4%). Overall for the year, therefore, despite a generalized drop in the level of construction investments (-2% in 2022), domestic cement consumption is estimated to remain substantially stable (+0.3%).
During the fourth quarter, our cement sales contracted more than forecast. The generalized slowdown in cement demand, in addition to the logistical problems due to the low water level in the Mississippi River, which lasted until mid-November, influenced the dynamics of our shipments. In the year as a whole, therefore, cement volumes sold decreased by 4.5% compared to 2021, while ready-mix concrete

ones, mainly present in Texas, decreased by 8.8%. Conversely, selling prices further strengthened during the fourth quarter, showing a good development year over year.

Total net sales amounted to €1,591.8 million, up 19.7% compared to €1,329.6 million of 2021, while Ebitda increased from €455.1 to €497.5 million (+9.3%). The appreciation of the dollar (+11.0%) had a positive impact on the translation of the results into euro: at constant exchange rates net sales would have increased by 6.6%, while Ebitda would have been down 2.7%. It should be remembered that the figure for last year included a non-recurring item of € 1.3 million: net of non-recurring items and at constant exchange rate, Ebitda would have been down 3.0%.

The clearly unfavorable dynamics of energy costs, fuels in particular, together with a worsening of fixed costs, negatively impacted the Ebitda margin, which is confirmed, however, at the highest levels of the group (31.3%), albeit decreasing compared to 2021.

(millions of euro)	2022	2021	22/21
Net sales	1,591.8	1,329.6	19.7%
EBITDA	497.5	455.1	9.3%
EBITDA recurring	497.5	456.4	9.0%
% of net sales	31.3	34.3	
Capital expenditures	123.3	95.3	29.4%
Headcount at year end n.	2,274	2,246	1.2%

Total capital expenditures realized in 2022 amounted to €123.3 million, approximately €20 million thereof regarding the improvement of environmental performance and the decarbonization of the production process, including initiatives to increase the output of cements with a lower clinker content, the greater use of alternative fuels and the completion of the photovoltaic power station at San Antonio (Texas), for which €8.0 million were spent during the year. Furthermore, during the year, investments in technological and energy efficiency reached €13 million, while the expansion and modernization of the distribution network, among which it is worth mentioning the works at the terminals of Joliet (Illinois), Wichita (Kansas), Cincinnati (Ohio) and New Orleans (Louisiana), amounted to approximately €10 million. On the other hand, as regards investments for the expansion of production capacity and raw material reserves, €5.0 million were capitalized for the clinker storage at San Antonio (Texas), €1.6 million for the completion of the new natural aggregates quarry in Austin (Texas) and €3.8 million for the overburden removal of quarry fronts. Purchases of new quarry and plant equipment, instead, were €13.4 million. Finally, in the ready-mix concrete sector capital expenditures concerned the expansion of some batching plants, technological optimization works and the purchase of new mixer-trucks for a total of €16.6 million.

Germany

The slowdown in GDP, which has been already underway in the first half of the year and which is mainly attributable to the effects linked to the outbreak of the war in Ukraine, continued in the third and fourth quarters of 2022, too. High inflation and the drop in consumer and business confidence slowed down the recovery of domestic demand, which had previously benefited from the lifting of the pandemic containment measures and the high level of savings. Industrial production, both in the manufacturing and construction sectors, as well as the investment decisions of companies and individuals, were held back by increased uncertainty and shortages of raw materials and semi-finished products. Inflation, which peaked in October (+11.6%) due to the gradual elimination of government fuel subsidies, further pushed up production costs. In this context, GDP is expected to grow by 1.9% in 2022.

The explosion in costs, the growing fears of recession and the increase in interest rates led to a marginal slowdown in construction investments (-0.5%), more evident in the commercial sector (-1.7%) and in public works (-1.0%). The residential building component (about 60% of investments), on the other hand, is expected to remain stable (+0.2%), thanks also to government subsidies for the efficiency of buildings. Our deliveries of hydraulic binders closed the year slightly up (+2.7%), despite some slowdown recorded both in the third and fourth quarters, due to higher weakness in demand and to a harsher winter. The same dynamics extended also to the ready-mix concrete volumes, which however remained stable (-0.1%). Selling prices, both for cement and ready-mix concrete, confirmed the good levels achieved in the first nine months of the year also in the last quarter.

Overall net sales thus increased from €708.1 to €798.8 million (+12.8%) while Ebitda decreased from €127.5 to €120.5 million (-5.5%). The cost increases for fuel and electricity led to a worsening of unit production costs.
In 2022 the business incurred operating costs of €18.6 million for CO_2 emission rights (€23.6 million in 2021).

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**798.8**	708.1	12.8%
EBITDA	**120.5**	127.5	-5.5%
% of net sales	**15.1**	18.0	
Capital expenditures	**59.7**	41.4	44.2%
Headcount at year end n.	**1,796**	1,780	0.9%

Total capital expenditures realized in 2022 amounted to €59.7 million, €10.5 million thereof for the improvement of environmental performance and the decarbonization of the production process, among which it is worth mentioning the investments to increase the output of cements with a lower clinker content and the greater use of waste derived fuels. In addition, €6.2 million were capitalized for energy and technological efficiency measures. In the ready-mix concrete sector, €5.3 million were dedicated to the modernization of the batching plants, as well as the purchase of new concrete pumps and other mobile equipment.

Luxembourg and the Netherlands

In Luxembourg, after a lively start to the year, economic activity slowed down: although the country is relatively protected from the direct consequences of the war in Ukraine, given the limited trade with the countries involved, the economy was not immune from the indirect impacts, such as rising uncertainty and inflation. Business and consumer confidence gradually deteriorated over the course of the year, while manufacturing and activity in the construction sector slowed down visibly in the second half of 2022. Inflation, after the peak recorded in June (+10.6%), initially driven by the energy component, fell slightly during the last quarter (+8.8% in October), however remaining high and widespread. In this context, GDP is expected to grow by 1.6% in 2022 as a whole.

In the Netherlands, after a first half progressing, economic activity slowed down considerably during the second half of the year. High inflation, which after the peak recorded in October (+16.8%) slowed down in December, greatly reduced the purchasing power of households. Tightening financial conditions, labor shortages and rising production costs weighed on business investment. Economic activity decreased in the third quarter (-0.2%), while it is expected to stagnate in the fourth. Annual growth in 2022 is expected to be 4.5%.

The weakening of demand for cement, which was already evident in the third quarter, was also confirmed during the last months of the year. However, the positive trend in the first semester was able to compensate for the slowdown that occurred in the following quarters. Sales volumes, therefore, closed slightly up on 2021 (+1.4%). The ready-mix concrete sector recorded more evident growth (+5.1%): the sales progress in the Netherlands offset the negative trend in Luxembourg. Selling prices showed robust growth, driven by production cost inflation.
Net sales came in at €226.9 million, up 12.8% compared to the previous year (€201.1 million). However, Ebitda stood at €7.0 million, clearly contracting compared to €16.5 million in 2021. Unit production costs considerably increased, impacted by the negative dynamics of energy costs, which more than doubled. Fixed costs, instead, proved somehow stable.
During the year the business incurred operating costs of €6.5 million for CO_2 emission rights (€2.4 million in 2021).

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**226.9**	201.1	12.8%
EBITDA	**7.0**	16.5	-57.6%
% of net sales	**3.1**	8.2	
Capital expenditures	**12.5**	9.0	38.1%
Headcount at year end n.	**294**	301	-2.3%

Total capital expenditures made in 2022 amounted to €12.5 million, of which €4.4 million were directed to the decarbonization of the production process and, in particular, to increase energy efficiency. Moreover, €2.8 million were invested for the expansion of the rail link at our plant in Rumelange. In the ready-mix concrete sector, on the other hand, €0.7 million were capitalized for the modernization of some batching plants.

Poland

The outbreak of the war in Ukraine led the Polish economy to contract during 2022. Already in the second quarter, the GDP was only slightly higher than at the end of 2021 and, in the following quarters, the growth prospects further deteriorated. The favorable trend in domestic consumption, fueled by the post-pandemic recovery and the flow of refugees from neighboring Ukraine, was offset by a sharp slowdown in investments, both in the industrial and construction sectors. In a context of high inflation (+15.7% in September), driven by increases in energy and food prices, consumer confidence and industrial production also weakened. Based on the most recent estimates, GDP growth in 2022 is expected to settle at +3.8%.

The impact of the war on the construction sector was evident, especially regarding the availability and prices of building materials. In this context, after the progress recorded in 2021 (+3.7%), investments in the sector continued to show an expansionary trend in the first part of 2022, then weakening during the second half of the year. By the end of 2022, investments are estimated to grow by 4.5% compared to 2021, while cement consumption is expected to decline.
These dynamics also influenced our cement sales volumes which, after a first half of growth, mainly thanks to the progress recorded at the start to the year, significantly lost ground in the third and fourth quarters, closing clearly down (-10.4%). In the ready-mix concrete sector, on the other hand, the slowdown was less evident (-0.2%). Sales prices, in general, showed a very favorable development.

Net sales increased from €126.4 to €141.3 million (+11.8%) while Ebitda fell from €31.3 to €27.2 million (-13.1%). However, it should be remembered that the depreciation of the local currency (-2.6%) impacted the translation of the results into euro: at constant exchange rates net sales would have been up 14.7% and Ebitda down 10.8%. The unit production costs in local currency visibly increased, penalized by the electric power, which almost doubled, and the fuels, which more than doubled. During 2022 the business incurred operating costs of €9.6 million for CO_2 emission rights (€8.7 million in 2021).

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**141.3**	126.4	11.8%
EBITDA	**27.2**	31.3	-13.1%
% of net sales	**19.2**	24.7	
Capital expenditures	**9.1**	7.7	18.5%
Headcount at year end n.	**348**	350	-0.6%

Total capital expenditures made in 2022 amounted to €9.1 million, of which €3.9 million referring to the improvement of environmental performance and to the decarbonization of the production process, among which it is worth mentioning the investments to increase the use of alternative fuels, as well as energy and technological efficiency measures and improvemenst of workplace safety. In the ready-mix concrete business €1.6 million were capitalized for the modernization of some batching plants and for the purchase of new concrete pumps and quarry mobile equipment.

Czech Republic and Slovakia

Economic activity was held back by the consequences of the war in Ukraine also during the third and fourth quarters. Supply chain disruptions and ongoing commodity inflation limited output in the manufacturing sector. Additionally, weakening economies of major trading partners slowed down exports. Therefore, in a context of high uncertainty and inflation (+15.1% in October), in addition to the risks associated with the energy crisis, the confidence of businesses and households dropped, causing a contraction in domestic demand. The most recent estimates indicate that GDP growth in 2022 should reach 1.9%.

Investments in construction grew (+1.4%), benefiting from the high volume of building permits after the end of the pandemic. The positive development of activity in the non-residential sector, mostly concentrated in the main urban centers of the country, offset the weakness in the residential sector and in public works, impacted by the sharp rise in interest rates and inflation. Cement sales, after a first half progressing, showed a rather negative trend both in the third and fourth quarters, closing 2022 with lower volumes versus the previous year (-5.4%). Selling prices, in local currency, considerably increased. The ready-mix concrete sector, which includes Slovakia, recorded similar dynamics (-6.3%) both for volumes and selling prices.

Consolidated net sales amounted to €201.2 million (€177.5 million in 2021, +13.4%) and Ebitda increased from €51.3 to €56.8 million (+10.7%). The appreciation of the Czech koruna (+4.2%) had a positive impact on the translation of the results into euro: at constant exchange rates, the variance of net sales would have been 9.1%, while the one of Ebitda 6.0%.
The trend in fuel costs, which more than doubled, and to a lesser extent, in electricity costs, caused a clear increase in unit production costs. The fixed component showed a meaningful upward trend, too. During the year the business incurred operating charges of €8.5 million for CO_2 emission rights (€6.6 million in 2021).

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**201.2**	177.5	13.4%
EBITDA	**56.8**	51.3	10.7%
% of net sales	**28.2**	28.9	
Capital expenditures	**11.4**	7.5	52.1%
Headcount at year end n.	**700**	720	-2.8%

Total capital expenditures realized in 2022 amounted to €11.4 million, of which €5.0 million for the decarbonatization of the production process and, in particular, for higher energy efficiency, among which it is worth mentioning the installation of a photovoltaic power plant. Moreover, €2.5 million were capitalized in the ready-mix sector for the modernization of some batching plants and for new truck mixers and pumps.

Ukraine

The economic and humanitarian repercussions caused by the conflict with Russia were substantial. The damage to homes, infrastructures and production facilities led to a dramatic reduction in the output of goods and services and to a consequent increase in costs for businesses. In addition, there was a collapse in private investment and exports. The most recent estimates indicate that the contraction of GDP for 2022 will be 35%. The generalized increase in prices, especially for energy, pushed inflation above 30%, from around 10% before the conflict.

Our production activity, even in the fourth quarter, continued essentially at the Volyn plant (north-west of the country), while at the Nikolayev facility (south of the country) it is mostly suspended, due to the lack of demand and to the operational risks associated with the proximity to the fighting. In December, the already complex operating situation was penalized by some interruptions in the power supply. Therefore, 2022 closed with sales volumes drastically decreasing (-62.8% in cement and -71.4% in ready-mix concrete) and sharply increasing prices, driven by inflation.

Net sales stood at €59.8 million, more than halved compared to €127.0 million achieved in 2021. The operational complexities and the level of production achieved during 2022 were not able to cover fixed costs, leading to an Ebitda of -€6.8 million (it was positive and equal to €13.3 million in 2021). The depreciation of the local currency (-5.5%) further negatively influenced the translation of the results into euro: at constant exchange rates the turnover would have been down 50.4% and Ebitda even more negative.

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**59.8**	127.0	-53.0%
EBITDA	**-6.8**	13.3	n.s.
% of net sales	**-11.4**	10.5	
Capital expenditures	**1.9**	6.9	-72.4%
Headcount at year end n.	**981**	1,266	-22.5%

Total capital expenditures made in 2022 amounted to €1.9 million, mainly referring to works aimed at improving environmental performance as well as increasing occupational safety.
We specify that, at the balance sheet date, the book value of net assets in Ukraine amounts to €15 million.

Russia

GDP, which contracted sharply in the second quarter and stabilized in the third one, is expected to slow down by 2.3% in 2022 as a whole: the figure is definitely worse compared to the situation prior to the conflict, but still better than previously estimated. The dynamics were heterogeneous in the various sectors of the economy: growth was recorded in the agricultural sector and in the mining and extractive industry, while manufacturing and commerce recorded a clear slowdown. The sanctions amplified inflation which, after exceeding the 20% threshold in June, fell to 12%.

Following the decision taken in May to cease all operational involvement in the activity of the subsidiary SLK Cement, the information available to us regarding the trend in demand and the construction market is very limited. In 2022, the volumes sold decreased compared to the previous year (-5.2%). Selling prices showed a favorable trend.

Net sales amounted to €290.4 million, up compared to €207.4 million of the previous year (+40.0%) and Ebitda increased from €58.6 to €99.6 million (+70.0%). The appreciation of the ruble (+15.3%) favorably influenced the translation of the results into euro: at constant exchange rates, net sales and Ebitda would have been up 18.6% and 44.0% respectively.

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**290.4**	207.4	40.0%
EBITDA	**99.6**	58.6	70.0%
% of net sales	**34.3**	28.2	
Capital expenditures	**26.4**	23.3	13.0%
Headcount at year end n.	**1,556**	1,446	7.6%

Total capital expenditures made in 2022 amounted to €26.4 million. At the same time as the decision to cease all operational involvement in the operations carried out by our subsidiary, all strategic initiatives in the country were also suspended.
At the balance sheet date, the book value of net assets in Russia amounts to €334 million, after having impaired the entire goodwill (€122 million).

Mexico

(valued by the equity method)

After robust growth in the first nine months of 2022, supported by the positive momentum in the services sector and the strength of manufacturing, economic activity showed some signs of a slowdown in the last months of 2022. Exports lost traction, mainly due to the weakening of demand in the United States, the country's largest trading partner. In the mining and construction industries, production also contracted. According to the most recent forecasts, GDP is expected to grow by 2.1% in 2022. Inflation remained widespread and high (+8.4% in October) making both monetary and fiscal policy interventions necessary. In particular, the Government introduced a series of measures to limit fuel price increases and to protect the most vulnerable households and businesses. At the moment, public investments seem to be more oriented towards social spending, rather than towards the infrastructural development of the country.

The sales of our joint venture closed 2022 below the level reached last year (-5.8%), albeit well recovering starting from August and during the whole fourth quarter. Prices, in local currency, confirmed also in the second part of the year the clearly positive levels already achieved during the first semester. Ready-mix concrete sales, instead, showed a more negative trend (-34.0%), with prices in local currency also increasing.

Net sales, referring to 100% of the joint venture, stood at €768.5 million, up 16.2% on the previous year, while Ebitda came in at €305.8 million, up compared to €282.7 million of 2021. The Mexican peso showed an appreciation of 11.7%. At constant exchange rates net sales would have been up 4.0% and Ebitda down 3.2%. The unit production costs sharply worsened, impacted by energy increases, in particular fuels, and by higher fixed costs. Ebitda to sales margin, however, is still on high levels (39.8%).
The equity earnings referring to Mexico, included in the line item that encompasses the investments valued by the equity method, amount to €70.4 million (€63.9 million in 2021).

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**768.5**	661.6	16.2%
EBITDA	**305.8**	282.7	8.2%
% of net sales	**39.8**	42.7	
Capital expenditures	**32.0**	17.2	86.5%
Headcount at year end n.	**1,225**	1,376	-11.0%

Brazil

(valued by the equity method)

In 2022, the Brazilian economy is expected to grow at a moderate pace (+2.8%), thanks to the good performance of the manufacturing and services sectors. Exports, especially in the agri-food industry, also showed marked progress. The expansionary fiscal policies implemented by the government mainly focused on measures to support households and businesses to counter high energy prices, as well as an increase in funds allocated to the Auxílio Brasil social, health and employment assistance program. Inflation, at 11.9% in June, decreased in the second half of the year thanks to both the drop in the prices of energy goods and the significant tax cuts, remaining however high (8.2% in October). At the same time, the Central Bank confirmed its restrictive stance, in an attempt to limit the impact of inflationary pressures on the real economy.

The sales of our joint venture closed 2022 markedly improving (+10.5%) with prices also clearly progressing. Like for like, however, sales volumes would have been stable compared to 2021.

Net sales stood at €400.2 million, equal to +57.9% compared to €253.4 million of the previous year, while Ebitda reached €118.7 million, markedly up compared to €80.9 million of 2021. The appreciation of the Brazilian real impacted on the translation of the results into euro (+14.7%): like for like, net sales and Ebitda would have been up 22.0% and 18.3% respectively. The increase in variable costs, which was particularly evident for fuels, and in fixed items led to the worsening of unit production costs.
The equity earnings referring to Brazil, included in the line item that encompasses the investments valued by the equity method, amount to €31.3 million (31.8 million in 2021).

(millions of euro)	**2022**	**2021**	**22/21**
Net sales	**400.2**	253.4	57.9%
EBITDA	**118.7**	80.9	46.7%
% of net sales	**29.7**	31.9	
Capital expenditures	**17.9**	177.0	-89.9%
Headcount at year end n.	**1,236**	1,227	0.7%

Algeria

(valued by the equity method)

In Algeria, the economy confirmed also during the second half the expansive trend that had been already observed during the first six months of the year. Economic activity, estimated to grow by 4.7% overall in 2022, was certainly supported by robust output in the hydrocarbon sector, as well as by the recovery in services, while in the agricultural sector the upswing was only partial. Thanks to robust global demand and high quotations on global hydrocarbon markets, oil production recovered to pre-pandemic levels. However, excluding the contribution of the hydrocarbon sector, economic development was more moderate: the increase in inflation (+9.7% on average in 2022) reduced the purchasing power of households, penalizing domestic consumption. At the same time, private investments also showed some weakness.
In 2022, the construction sector is expected to grow in line with GDP, largely supported by public investments in infrastructure and, to a lesser extent, by residential construction.

During 2022, no further expansions were announced, therefore, the production capacity remained stable at around 39 million tons. Domestic cement consumption in 2022 is estimated to come in at approximately 17 million tons, strongly contracting. On the other hand, clinker exports almost doubled and are expected to reach 10 million tons in 2022 (against 6 million tons in 2021). The export of clinker is mainly directed to the countries of sub-Saharan Africa, but lastly also to some southern European countries.

During 2022, cement sales on the domestic market from the Hadjar Soud plant suffered a sharp contraction (-26%), while clinker exports well increased (+21%). The revamping project, aimed at streamlining and optimizing the production process, unfortunately experienced a further delay due to the complex and bureaucratic procedure for assigning and implementing the initiative.
The Sour El Ghozlane plant, instead, recorded a positive development in both volumes sold on the domestic market (+5% for cement) and in clinker exports, clearly up (+69%).

With reference to 100% of both associates and their individual financial statements, the 2022 financial year closed with net sales of €63.7 million, slightly better compared to €61.7 million in the previous year (+3.3%). The appreciation of the Algerian dinar versus the euro (+6.3%) impacted the variance. Ebitda marginally improved, amounting to €23.4 million (+3.5%). Ebitda to sales margin remained stable compared to 2021, however at interesting levels (37%).

The equity earnings referring to Algeria, included in the line item that encompasses the investments valued by the equity method, amount to €1.5 million (-2.3 million in 2021).

Slovenia

(valued by the equity method)

During the first half of the year, despite inflationary pressures, the deterioration of economic conditions in the main trading partners and declining business and consumer confidence, the Slovenian economy continued to expand, thanks to the progress of domestic demand and the solidity of investments. In the third quarter, however, economic activity visibly slackened, penalized by the slowdown in trade and industrial production. In the last months of 2022, there was a partial recovery in confidence indicators, thanks also to a high level of employment. Overall GDP in 2022 is expected to grow by 5.7%, while inflation averaged 8.9%.

Domestic cement consumption is estimated at approximately 1.2 million tons. Buzzi Unicem operates through the associate Salonit Anhovo, a subsidiary of the Wietersdorfer group (Austria), which is the main cement producer in the country. The company owns a full-cycle cement plant with a production capacity of approximately 1.3 million tons/year, 3 batching plants and 3 natural aggregates quarries. In 2022 the hydraulic binders production remained stable compared to the previous year, standing at approximately 1.3 million tons. With reference to 100% of the associate, the 2022 financial year closed with net sales of €132.8 million (+35.5% compared to 2021), and Ebitda of €39.6 million, also clearly up (+63.5%).
The equity earnings referring to Slovenia, included in the line item that encompasses the investments valued by the equity method, amount to €6.7 million (€3.1 million in 2021).

Human Resources

The different and articulated needs of the territories where Buzzi Unicem operates have always characterized the international organization of a multi-regional group. Human resources are considered as a constant factor of company growth and the valorization of human capital has always been a pillar on which the competitive development of the company is based. We interpret the different skills, also resulting from various cultures, as a drive for continuous improvement in order to motivate and maximize the commitment and loyalty within the group.

In **Italy**, staff management was characterized by the completion of the training and coaching activities devoted to the apprentices of the second level University Specialization Master TAGCem (Advanced Techniques for the Management of Cement Production Plants).
It is a project launched in 2020, in which the company and the Politecnico di Torino strongly believed. During the two years of the Master, the 14 participants had the opportunity to grow both professionally and personally, demonstrating a great ability to react and adapt to adverse and imponderable events that occurred in these years characterized by the pandemic. As scheduled, the company tutors assigned each apprentice a specific topic that the learners analyzed during the second year of the course, developing 14 Project Works on Buzzi Unicem's processes and activities. Thanks to the collaboration with the professors of the Politecnico di Torino, the company could also refine and improve its internal training plans. Some employees in fact helped the learners, becoming internal teachers and trainers. The company believes that in the future these roles will be increasingly important and fundamental for developing other similar businesses. In 2022, at the end of their training course, the 14 apprentices presented their Project Works at a meeting held at the Casale Monferrato headquarters, in the presence of relatives, tutors, colleagues and professors from the Politecnico. In May, they received their diplomas at the Politecnico di Torino on the occasion of a dedicated ceremony. Subsequently, they were assigned to the cement plants, covering the roles and responsibilities for which they were trained.
On 15 March 2022, in Rome, am agreement was reached for the renewal of the National Collective Bargaining Agreement of the Cement, Lime, Plaster and Mortar Industry, which expired last December, for the three-year period 2022/2024.
Among the innovations introduced by the bargaining, it is worth mentioning the establishment of the day for worker safety in the industry, on 28 April.
Even in a context being strongly conditioned by unfavorable energy costs dynamics, which are further penalized by the current international crisis situation, the signing of the renewal agreement confirms the Social Responsibility of the sector towards its people, in a constructive climate of industrial relations.

In **Germany**, a communication campaign was launched in September in each plant aimed at accident prevention and occupational health and safety issues. Furthermore, since June 2022 an agreement has been reached between the company and a circuit of gyms with the aim of improving the well-being of employees.
Since 2019, a campaign to promote the rental of electric bicycles has been underway, with insurance paid by the company. In 2023, a new skills model will be implemented, which will replace the one that has been in force for 11 years.

In the **Czech Republic** and **Slovakia**, the focus was on occupational health and safety training and accident prevention. Also in **Poland** training was mainly focused on the improvement of occupational health and safety.

In the **United States of America**, the main challenge in the year continued to be the acquisition of new talents, also by participating in career days at high schools and universities. In 2022, a gift package distribution campaign was launched for all employees who gave birth to children, with a 3-month supply of diapers and wet wipes. As regards training, the implementation of the Skillsoft platform continued. Finally, the 5-year collective agreements were renegotiated for the plants in Maryneal (TX) and Cape Girardeau (MO).

As regards recruitment, training and development, during 2022, at group level, 1,446 people were hired (1,242 men, 204 women) and a total of 295,557 hours of training were offered, 136,634 hours thereof concerning occupational health and safety training.

Headcount by country at year end

	2022	2021
Italy	1,538	1,555
United States of America	2,274	2,246
Germany	1,796	1,780
Luxembourg	181	184
Netherlands	113	117
Poland	348	350
Czech Republic and Slovakia	700	720
Ukraine	981	1,266
Russia	1,556	1,446
Total	**9,487**	**9,664**

The table below provides the main Human Resource management data of the group.

	2022	2021
Turnover[1]	18.4%	15.4%
Days of absence[2]	94,882	89,611
Training days[3]	36,945	40,284

[1] Ratio of outgoing employees to workforce at Dec 31, 2022;
[2] Total days of illness and accident, etc.
[3] Total days of internal and external training.

Research and development

Buzzi Unicem devotes particular consideration to applied research and thanks to continuous and intense experimentation it is able to pursue innovation in both its production process and products. For this purpose, the company participates as an industrial partner in national and international research projects, contributing to the development of new materials and technologies and the creation of knowledge networks with excellent facilities in the field of scientific research.

In the year under review, Built, the new group's technological innovation laboratory, was inaugurated in Vercelli. Built (Buzzi Unicem Innovation Lab and Technology
https://www.youtube.com/watch?v=aM5kaDBLDIE)
is the highest evolutionary stage of the company's Research & Development activity and joins other already existing realities such as the plant labs and the Wilhelm Dyckerhoff Institut in Wiesbaden (Germany).
Built is located in Vercelli, within the campus of the Università del Piemonte Orientale and is organized on two floors with a large room dedicated to concrete tests, a chemical-physical laboratory equipped with numerous cutting-edge instruments for the characterization of materials, a chemical laboratory and a mortar laboratory accredited according to ISO/IEC 17025:2018. Furthermore, curing chambers with controlled temperature and humidity have been provided for the curing of the specimens as well as specific areas for mills and crushers. There are currently 12 employees working inside the laboratory, including chemical technicians and scientific researchers.
As part of the scientific partnership with the Università del Piemonte Orientale, joint research activities began in 2022 involving a researcher and a doctoral student working at the above-mentioned University in Vercelli.

During 2022, the projects aimed at studying and developing cements containing natural (limestone and pozzolans) or artificial additions (calcined clays) have continued too, with the aim of reducing the clinker content and, at the same time, keeping performance unchanged.
Currently, the replacement of clinker in cement mixtures is carried out through the use of blast furnace slag (from the cast iron production sector) and fly ash (from coal-fired power plants), which, especially in 2022, considering the energy crisis that led to the reopening of numerous coal-fired plants in Europe, are once again available on the market. The development and use of calcined clay cements is to be understood as a technical solution to reduce the dependence of the cement sector on other industries, in the procurement of supplementary materials to the clinker. The industrial trials by Buzzi Unicem were conducted internally and in cooperation with some academic institutions, among which it is worth mentioning the University of Lehigh (USA).
The calcined clay cement research was carried out in parallel with the studies conducted on the optimization of natural pozzolan-based cements. Buzzi Unicem has a deep expertise in this sector as it has been producing pozzolanic cements in Italy and Germany for several years. In particular, the regions of Southern Italy are characterized by the presence of numerous natural pozzolan reserves of volcanic origin which are used for the production of cements where the pozzolan replaces clinker even in significant quantities (up to 45% addition). Cements containing natural pozzolans allow a significant saving of clinker, do not require any thermal activation process and are therefore advantageous compared to calcined clays.
The know-how which has been developed over the years on cement components has allowed the creation of the Green line, our family of products with reduced environmental impact, formulated in compliance with the growing sustainability requirements to offer suitable construction solutions, according to the most advanced environmental standards.

The Green line of cements is the natural evolution of our hydraulic binders, respecting the long tradition of quality products and high performance.

2022 was very significant from a technical point of view for the progress of CO_2 capture projects. As a matter of fact, the CO_2 capture tests continued with the pilot scale plant located in the Vernasca facility (Piacenza, Italy) and developed within the project Cleanker (www.cleanker.eu), financed by the European Commission. The project involves 13 partners for a total budget of about €9 million and aims at testing on an industrial scale at the Vernasca plant the capture of a fraction of the CO_2 emitted by the plant, through a technology called Calcium Looping. The experiments carried out demonstrated, for the first time ever, the technical feasibility of capturing CO_2 with a Calcium Looping plant integrated in a cement plant. Unlike other plants based on similar technology, the one in Vernasca, indeed, allows to exploit the existing synergies between the clinker production process and the CO_2 capture one. The numerous experimentation campaigns conducted in 2022 in fact highlighted the limits and advantages of this technology, laying the foundations for the development of modern factories, capable of exploiting CO_2 capture technologies more and more efficiently. The project is being carried out not only from a technical and scientific point of view but also under the aspects of stakeholder engagement, helping to create a culture of decarbonization in our industrial sector and around our plants.

During 2022, work continued on the research consortium called "CI4C - Cement Innovation for Climate", which aims to test the practical application of CO_2 capture based on Oxyfuel technology in clinker production. In addition to Buzzi Unicem, the research consortium is made up of three more European cement producers. Contracts were signed with the main plant suppliers and the preparation of the land where the pilot plant will be built began, at the Mergelstetten cement plant of Schwenk Zement GmbH, one of the project partners.

Also in 2022, the Flashphos project https://flashphos-project.eu/, funded by the European Commission, continued, with the aim of developing a thermochemical technology for the recycling of sewage sludge. The technology developed in the project will make it possible to recover and enhance the phosphorus (considered as a critical raw material) found within the purification sludge and at the same time make available a fuel and a calcium slag which can be potentially used by cement plants, contributing to the reduction of CO_2. The first experiments within this project are very positive.

Buzzi Unicem is also involved in the Smartincs project https://smartincs.ugent.be/index.php/about-us, funded by the European Commission as part of the "*Marie Curie action*" to train a new generation of researchers in the field of concrete technologies. The young PhD students financed under this project have had numerous opportunities to get in touch with industrial realities in the sector, also contributing with their ideas to the future development of the cement and concrete industry.

Buzzi Unicem is one of the founding partners of the Innovandi research platform
https://gccassociation.org/innovandi/gccrn/
which is an initiative of GCCA (Global Cement and Concrete Association) fully funded by industrial resources involving more than 40 university partners and cement production companies. Innovandi was created to stimulate and enhance forms of pre-competitive research between universities and companies operating in the construction materials sector all over the world. The consortium finances pre-competitive research projects in the field of new construction materials, cements, concretes, CO_2 capture technologies. During 2022 the projects funded by the Innovandi consortium continued, where Buzzi Unicem participates as an industrial partner in projects that target technologies for the electrification of the cement sector, the capture of CO_2, the development of new knowledge on cements with reduced clinker content and the use of demolition waste from concrete.

Buzzi Unicem is also active in research relating to concrete digitization technologies: in this regard, it is worth mentioning the participation in the innovative Hinfra startup, which developed an automated technology for the structural restoration of tunnels. The patented ETLR (Extruded Tunnel Lining Regeneration) technology is based on the extrusion of high-performance concrete with controlled reactivity. The experimentation phase continues rapidly and we expect to soon arrive at a first construction site application.

During 2022, as part of a strategy strongly oriented towards "Open Innovation", numerous contacts were developed with start-ups and specialized companies, dedicating some resources of the R&D team to this activity. The contacts made allowed first of all the creation of a corporate culture oriented towards a greater involvement of external interlocutors but also the launch of some projects, supporting start-ups to industrially experiment some of the technologies they own and allowing to understand the potential benefits of adopting these technologies in our industry. The main areas in which these contacts were initiated are in the field of CO_2 capture, storage and use and in the utilization of artificial intelligence.
Lastly, Buzzi Unicem's successful participation in European tenders in the context of Horizon Europe should be underlined, with the granting of funds for an important project called "Herccules", which envisages industrial experimentation of the entire CO_2 capture, transport and storage in submarine geological sites in Italy and Greece, with the participation of industrial and academic partners of primary importance.

Research and development activities – concrete
The overall sustainability of buildings is increasingly linked to the technical characteristics of the concrete used: not only for its direct environmental footprint, but above all for its technical properties which, if properly chosen and guaranteed, allow the way of building to be rethought in a sustainable key. Buzzi Unicem intends to exercise a key player role in this sense, trying, among other things, to spread awareness among designers by all means that an intelligent use of advanced concretes is essential to obtain structures with a minimum overall carbon and environmental footprint, from the cradle to the grave.

In this context, Buzzi Unicem has directed the majority of its research and development activities towards the industrialization of increasingly sustainable concretes, with the use of cements with a minimal carbon footprint, but above all suitable for satisfying the growing needs of structural design being innovative and sustainable.

In 2022 the commitment was focused on a few technological and industrial lines of development:

Efficient use of new low-clinker cements in concrete. The trend of the market, and of Buzzi Unicem in particular, to introduce cements with an increasingly lower carbon footprint and progressively poorer in clinker, must necessarily be accompanied by a strong experimental research and formulation development activity, to allow the concrete market to use them competently and efficiently, without negative repercussions on the performance and operations of the construction sites. With this objective, we carried out an experimental project in the Settimello research laboratory aimed at developing new test methods for evaluating the concrete functionality of new sustainable cements.

These are tests to be performed regularly on the innovative cements that Buzzi Unicem is developing or has just introduced on the market. They consist of characterization tests that necessarily go beyond the common regulatory standards, applicable to cements as they are, to some mixture components and to the concretes that can be made with them. All tests are aimed at evaluating possible solutions for the use of cements, in terms of industrial feasibility in the ready-mix world and robustness on site and in place. In addition to facilitating the ready-mix labs in identifying the best concrete formulation techniques with the new cements, the tests will be able to provide the Buzzi Unicem plants with direct technical feedback on the new products, from the point of view of users or potential buyers.

Concretes with a reduced environmental footprint. Buzzi Unicem concretes already make massive use of cements with minimal clinker content and with a reduced carbon footprint, anticipating what will be the market trends of the coming years. The research continues to focus on the possibility of further pushing the reduction of CO_2 through innovative mix design solutions that make us ready for future developments, when regulations remove current formulation constraints, to facilitate the achievement of sustainability objectives.

At the same time, the experimental activities have developed towards the acquisition of the maximum predictive capacity in the formulation process, favoring expeditious tests on the components and quick tests on fresh concrete, which allow each laboratory and local plant to use sustainable cements and the advanced additives gradually placed on the market with minimum lead time.

In terms of recycling, the significant applied research activity on the specific topic and the related diffusion of technological skills in the local units allowed to manage in a controlled and effective way the considerable increase in the volume of concrete made with recycled components, which more than tripled compared to the previous year.

Contribution to the optimization of technical aspects of production. During the year the research also focused on the goal of optimizing the aspects of the production process that are influenced by technological factors.

Firstly, the "H2NO 2.0 Project" was launched, aimed at further perfecting the process of loading and blending the mixtures. Long experimental sessions in the field, coordinated by the Settimello research laboratory, allowed the progressive refinement of the batching chain and its procedures, guaranteeing significant savings on operating times, but above all allowing the adoption of innovative and more flexible solutions for the addition of additives, which may be differentiated and/or postponed. This will be able to increase the rheological strength of the mixes and will allow in many situations to achieve the same performance with a slightly lesser use of cement and/or additives, indirectly obtaining a certain advantage also in terms of sustainability.

Secondly, the "Performance Project" was launched, aimed at making the performance control activity of the concrete produced and supplied to the construction site more rigorous and reliable. Experimental studies on the operational causes of the dispersion of the results and on the effects of the various process variability factors have made it possible to set up an improvement plan to further standardize the control activity in production and minimize the statistical dispersion of data.

Ecology, Environment and Safety

The Ecology, Environment and Safety function has among its objectives that of guaranteeing the constant maintenance of compliance with regulations and the continuous improvement of environmental and safety performance. Among the objectives, increasing the awareness of all employees towards safety and health issues in the workplace, as well as the environmental issues we are facing, remains a priority.

As far as safety is concerned, the multi-year campaign on safety in the workplace continues, with related activities to raise employee awareness, training, as well as investments to minimize residual risks.
Thanks also to these activities, reports of near misses, critical issues and above all suggestions for improvements by employees have increased over the years, with the common goal of improving working conditions, as required by UNI EN ISO 45001.
We are confident that the efforts made with a view to continuous improvement will only increase the awareness of employees and non-employees, allowing a further reduction in the main injury rates.

As for environmental aspects, the activities envisaged by the company roadmap to achieve the decarbonization objectives were launched. In parallel we continue focusing on the actions aimed at reducing emissions into the atmosphere, optimizing continuous monitoring systems, increasing the thermal substitution rate from non-conventional fuels, performing appropriate energy audits in the plants, accurately controlling the incoming raw materials and fuels. In particular, the control of incoming materials is essential to ensure full regulatory compliance and the optimization of the production process.

These analyses led to the definition of some optimization targets in the short and medium term, as well as constant investments in environmental projects, demonstrating that the group's commitments go beyond merely complying with laws and pursue the perspective of a continuous improvement.

All these aspects are discussed in detail in our Sustainability Report.

The international standards UNI EN ISO 14001 and UNI EN ISO 45001 provide for an integrated approach, which is applied throughout the entire life cycle of the product, directly involving a company's customers, suppliers and staff. Involvement and participation that do not end with the numerous training sessions, but which also include periodic safety meetings at all levels during which, in addition to receiving reports, valuable suggestions for improving work activities are also acknowledged.

Over the years, the activities of EES function have been shifting from process management to product sustainability. To assess the impacts of our solutions, specific webtools have been tuned, through which we are able to calculate, with maximum transparency and starting from given data, the environmental performance of our production range and, if necessary, to publish the results of the study on the product life cycle (LCA) in specific Environmental Product Declarations (EPD).
Such tools have many advantages, being a response to the ever-increasing demand for environmental data coming from the market, with a simple interface and the guarantee of a certified and validated information.

Non-financial Statements

The company publishes its Consolidated Non-financial Statements (DNF) and the Business Review in separate documents. The Consolidated Non-financial statements are prepared pursuant to Legislative Decree no. 254/2016, are included in the 2022 Sustainability Report and are available on the company website (buzziunicem.com) wirhin the "Sustainability" section.

The structure of the Sustainability Report, including the Consolidated Non-financial Statements, is prepared following the new version of the Global Reporting Initiative (GRI) standards, according to the option 'with reference to'.

Internal control and risk management system

The internal control and risk management system of Buzzi Unicem is the set of rules, procedures and organizational structures designed to ensure sound and appropriate business conduct through a proper process of identification, measurement, management and monitoring of the main risks in a manner that is consistent with our objectives, so as to ensure the safeguarding of assets, the efficiency and effectiveness of business operations, reliability of financial reporting and compliance with laws and regulations.

The board of directors has ultimate responsibility for the system of internal control and risk management and performs the duties provided by the Corporate Governance Code, with the support of its internal bodies, such as the Control and Risk Committee, the director responsible for the internal control and risk management system and the Internal Audit department.

Buzzi Unicem is an international group operating in Italy and various foreign countries through subsidiaries and associates. Given the complexity of the group, the Internal Audit Department has been adapted to local requirements. It is organic and balanced, is not subject to restrictions and is entitled to unlimited access to information. The audit methods and techniques being used are aligned with international standards.

To reduce the risk of a breach of regulations, laws or contractual agreements, Buzzi Unicem and its subsidiaries apply compliance tools, including the Code of Conduct, the antitrust code, training courses, controls on procedures and, within certain jurisdictions, the use of databases to record any contracts with competitors. These tools are used in the various local businesses based upon the assessment of the specific risks.

As part of the internal control system, our corporate risk management involves a semi-annual procedure of risk inventory-taking, control and reporting, based on a strategy for overall, known and acceptable risk.
The approach to risk in Buzzi Unicem does not aim to eliminate all potential risks, and instead takes into account corporate objectives and seeks to provide a systematic methodology that enables an informed evaluation of risks on the basis of available information on these risks and related issues. The same risks can then be avoided, reduced, transferred as part of the overall management process of risk control.

The operational responsibility for risk limitation is attributed to the heads of central departments and group divisions that are identified as important for risk management. The respective executives are

responsible for all material risks that are foreseeable in their departments, regardless of whether they have been identified in the risk management system.
Risks are evaluated in consideration of the probability of their occurrence and the impact on the company assets and, in accordance with standard criteria, taking into account their respective importance and significance. Risk assessments valuations carried out by the group's departments and divisions are recorded in a central database. Analyses are conducted on the categories relating to the risks underlying all the operations of our companies in terms of production, financial, labor, legal and tax matters.

For the sake of completeness, it should be noted that the risks highlighted by the Enterprise Risk Management system (ERM) and the financial statement provisions are not necessarily mutually consistent, because of the differing purposes of these two instruments (the former concerns prevention and management, while the second relates to correct accounting practice). Indeed, the ERM necessarily takes into account risks that are not included in the financial statement as well as risks the estimation of which (in terms of their probability of occurrence and impact) is not sufficient to report them in the financial statement. In any case, despite being a management tool that is available to senior decision-makers for the evaluation and control of risks, the ERM also has an important role in the recognition of accounting provisions, by providing a more direct and complete knowledge of business events and more accurate valuations when determining an additional contingent liability.

In 2022 a significant decrease of residual risks was observed compared to December 2021, meaning risks after containment measures and net of any accounting provisions. Risks are recognized with reference to a short and a medium-long term horizon. The main short-term risk categories to which the group is exposed are investment, currency, procurement, sales and insurance.

Investment risks: following the conflict between Russia and Ukraine the risk of expropriation or damage to the plants decreased, mainly for an estimate of lower probability of occurrence.

Currency risks: in terms of currency, the risk of negative impact deriving from translation of financial statements in foreign currencies and of bank and intercompany loans is estimated to decrease. In the risks assessment database, we have considered a 10% fluctuation of the local currencies against the euro versus the exchange rate used in the budget. For Poland, the Czech Republic and Ukraine, the net effect of currency exposure referring to EBITDA, liquidity and intercompany loans was stable. Currency risks are further illustrated in note 3 to these consolidated financial statements.

Procurement risks: mainly referring to the increase in the price of CO_2 emission rights. Conversely, we observe a general reduction in the risks of rising energy prices for the subsidiaries operating in Europe.

Sales risks: in the United States, risk of reduction in sales volumes due to a possible slowdown in economic activity and lower spending on public building programs.

Insurance risks: risks for possible uninsured natural catastrophes remain constant in the United States. Such risks have very low probability of occurrence.

Following containment measures that have already been implemented or envisaged by the group's management and the divisions through insurance policies and accounting provisions, the residual risk represents a limited fraction of equity.

As for medium-long term risks, these are linked with the general conditions of politics, economy and the evolution of the markets in which the group operates. Geographical diversification allows to reduce the risk of the economic situation referring to the individual market.

It is worth highlighting the risks relating to the occupied territories in Ukraine and to the sanctions against Russia. These factors will continue to generate political instability and economic weakness, with negative repercussions not only in countries at war but also in all European economies.

Moreover, there are risks associated with climate change, which result from the targets of the energy policy in the EU. In particular, the so-called EU Emission Trading System (EU ETS) as well as the laws and regulations intended to fight global warming could lead to competitive advantages in favor of producers in countries outside the ETS, such as Turkey, Egypt, the Middle East and China.
In the United States, in the next 2-3 years the entry into force of legislation aimed at limiting greenhouse gas emissions, that could have a significant impact on the cement industry, can be assumed. Finally, within a few years there could be a situation of shortage of coal and petcoke, due to international commitment aimed at eliminating the usage of fossil fuels.

Related-party transactions

Transactions carried out with related parties, including intercompany transactions, are not considered either atypical or unusual. These transactions take place in accordance with market conditions, considering the characteristics of the goods and services being supplied. Information on transactions with related parties are provided in note 50 of these consolidated financial statements.

Outlook

According to the most recent forecasts, the elements of uncertainty which have already been observed in 2022 will continue to characterize the macroeconomic context also during 2023. The evolution of the conflict in Ukraine, high inflation and the confirmation of restrictive monetary policies, as well as the uncertainties associated with prices and the supply of energy factors, will attenuate the prospects for economic development throughout the current year.

In 2023, the trend of construction investments is expected to slow down, both in the United States and in Europe, due to higher construction and financing costs. As regards energy prices, the forecasts suggest a progressive stabilization during the year, at levels being in any case higher than in 2022. In such context, however, we believe that our operating results will continue to benefit from an upward trend in selling prices, due both to the carry-over effect and to the probable application of further increases.

In the United States, we expect demand to benefit from the contribution of the infrastructure sector, supported by higher inflows of funds at both the federal and state levels, while in the residential sector the increase in interest rates will significantly slow down the momentum of new buildings realization. In this context, we believe that our sales volumes may confirm the levels reached in 2022 and that, thanks to the stability of demand, the market will be able to accept a further increase in selling prices.

In Italy, we expect the market to weaken further in 2023 due to the slowdown in the residential sector and delays in the implementation of the PNRR. In this scenario, we foresee a contraction in sales volumes, associated however with improving average prices, also thanks to the carry-over effect of the increases achieved at the end of 2022. It is difficult to estimate if any relief will be available from the tax credit intended for energy-intensive industries, which in 2022 contributed to significantly improving the operating result. It will still be hard for domestic producers to compete with the flow of imports from countries where the power cost is lower and there are no restrictions on CO_2 emissions.

In Central Europe and in the other Eastern European countries belonging to the EU, despite the support, at national and European level, for investments in infrastructure and residential renovation, inflation and the uncertainties related to energy supply, in addition to the increase in interest rates, will lead to a slowdown in construction investments and, consequently, also in our sales volume. However, we expect that the commitment of our commercial force in transferring the higher production costs downstream will allow us to completely compensate for the loss of volumes.

The narrative is different about Ukraine, as the currently most credible hypothesis is the one of no agreed solution to the conflict in the short term. In that event, our operations will continue at reduced levels, with the aim to protect the business as much as possible and minimizing negative cash flows.
In the case of Russia, due to the current governance structure, we do not have sufficient elements to provide indications on the results expected for 2023.

In Mexico, activity in the construction sector is expected to perform nicely, thanks to robust residential demand and future investment prospects in the industrial sector related to nearshoring plans to relocate production by several US companies. In this context, we expect our volumes to confirm the levels reached in 2022, associated with improving prices.

In Brazil, we think that our sales volumes can benefit from the stability of demand also during 2023 and that the further improvement in prices can largely offset the increase in production costs.

In conclusion, based on the considerations expressed above, we believe that in the year 2023 our consolidated recurring Ebitda may reach a result similar to the one of the previous period.

As regards the capital expenditures plan approved for 2023, we expect it to be more sizeable than in 2022, due to inflation and the effect of some jobs in progress approved in previous years. The program includes various projects aimed at the continuous improvement of operational efficiency and the reduction of CO_2 emissions, in line with the decarbonization targets set out in the roadmap "Our Journey to Net Zero".

Lörrach Central Hospital - Germany (Daniel Wanders)

Financial Information

Consolidated Income Statement

(thousands of euro)	Note	2022	2021
Net sales	7	**3,995,519**	**3,445,551**
Changes in inventories of finished goods and work in progress		64,521	(21,137)
Other operating income	8	54,744	73,647
Raw materials, supplies and consumables	9	(1,698,338)	(1,334,977)
Services	10	(886,784)	(781,666)
Staff costs	11	(559,985)	(513,335)
Other operating expenses	12	(86,001)	(73,439)
EBITDA		**883,676**	**794,644**
Depreciation, amortization and impairment charges	13	(388,900)	(249,048)
Operating profit (EBIT)		**494,776**	**545,596**
Equity in earnings of associates and joint ventures	14	117,551	106,056
Gains on disposal of investments	15	97	18,000
Finance revenues	16	123,194	63,440
Finance costs	16	(146,322)	(97,840)
Profit before tax		**589,296**	**635,252**
Income tax expense	17	(130,517)	(92,952)
Profit for the year		**458,779**	**542,300**
Attributable to:			
Owners of the company		458,786	541,903
Non-controlling interests		(7)	397

(euro)			
Earnings per share	18		
basic			
ordinary		2.462	2.820

Consolidated Statement of Comprehensive Income

(thousands of euro)	**2022**	**2021**
Profit for the year	**458,779**	**542,300**
Items that will not be reclassified to profit or loss		
Actuarial gains (losses) on post-employment benefits	89,973	49,289
Fair value changes of equity investments	308	216
Income tax relating to items that will not be reclassified	(25,526)	(14,841)
Total items that will not be reclassified to profit or loss	**64,755**	**34,664**
Items that may be reclassified subsequently to profit or loss		
Currency translation differences	203,679	242,065
Share of currency translation differences of associates and joint ventures valued by the equity method	38,338	11,998
Total items that may be reclassified subsequently to profit or loss	**242,017**	**254,063**
Other comprehensive income for the year, net of tax	**306,772**	**288,727**
Total comprehensive income for the year	**765,551**	**831,027**
Attributable to:		
Owners of the company	765,512	830,618
Non-controlling interests	39	409

Consolidated Balance Sheet

(thousands of euro)	Note	31/12/2022	31/12/2021
Assets			
Non-current assets			
Goodwill	19	509,484	608,789
Other intangible assets	19	57,503	59,419
Right-of-use assets	20	77,626	78,627
Property, plant and equipment	21	3,240,124	3,076,662
Investment property	22	17,561	17,697
Investments in associates and joint ventures	23	537,994	462,404
Equity investments at fair value	24	10,595	12,222
Deferred income tax assets	40	64,538	81,967
Defined benefit plan assets	38	4,435	6,905
Derivative financial instruments	25	11,031	6,948
Other non-current assets	26	262,268	270,305
		4,793,159	**4,681,945**
Current assets			
Inventories	27	721,023	500,010
Trade receivables	28	541,675	455,735
Other receivables	29	99,348	74,593
Cash and cash equivalents	30	1,341,488	1,203,611
		2,703,534	**2,233,949**
Assets held for sale	31	6,395	5,889
Total Assets		**7,503,088**	**6,921,783**

(thousands of euro)	Note	31/12/2022	31/12/2021
Equity			
Equity attributable to owners of the company			
Share capital	32	123,637	123,637
Share premium	33	458,696	458,696
Other reserves	34	183,290	(59,094)
Retained earnings	35	4,271,170	3,853,886
Treasury shares	32	(130,917)	(7,699)
		4,905,876	**4,369,426**
Non-controlling interests	36	5,581	5,778
Total Equity		**4,911,457**	**4,375,204**
Liabilities			
Non-current liabilities			
Long-term debt	37	608,150	987,951
Lease liabilities	20	58,132	55,815
Employee benefits	38	268,235	364,845
Provisions for liabilities and charges	39	78,956	86,416
Deferred income tax liabilities	40	401,478	371,131
Other non-current liabilities	41	7,693	6,952
		1,422,644	**1,873,110**
Current liabilities			
Current portion of long-term debt	37	594,028	136,635
Short-term debt	37	12,544	12,476
Current portion of lease liabilities	20	20,260	22,450
Trade payables	42	324,293	294,043
Income tax payables	43	35,038	32,072
Provisions for liabilities and charges	39	61,992	64,626
Other payables	44	120,832	111,167
		1,168,987	**673,469**
Total Liabilities		**2,591,631**	**2,546,579**
Total Equity and Liabilities		**7,503,088**	**6,921,783**

Consolidated Statement of Cash Flows

(thousands of euro)	Note	2022	2021
Cash flows from operating activities			
Cash generated from operations	45	575,435	752,376
Interest paid		(26,821)	(26,345)
Income tax paid		(153,899)	(134,374)
Net cash generated from operating activities		**394,715**	**591,657**
Cash flows from investing activities			
Purchase of intangible assets	19	(1,433)	(3,124)
Purchase of property, plant and equipment	21	(265,305)	(211,323)
Acquisition of subsidiaries, net of cash acquired		-	(639)
Purchase of other equity investments	23, 24	(4,085)	(2,605)
Proceeds from sale of property, plant and equipment		11,694	21,561
Proceeds from sale of equity investments		465	18,001
Changes in financial receivables		17,762	(226,519)
Dividends received from equity investments	16, 23	75,751	59,823
Interest received		23,989	10,789
Net cash generated from (used in) investing activities		**(141,162)**	**(334,036)**
Cash flows from financing activities			
Proceeds from long-term debt	37, 46	200,145	-
Repayment of long-term debt	37, 46	(136,792)	(111,985)
Net change in short-term debt	37, 46	68	(425)
Repayment of lease liabilities	20	(24,525)	(23,283)
Changes in other financial payables	46	5,408	(3,938)
Changes in ownership interests without loss of control	46	(3)	(1)
Purchase of treasury shares	32	(123,218)	-
Dividends paid to owners of the company	46, 47	(73,351)	(191,880)
Dividends paid to non-controlling interests	46	(136)	(59)
Net cash generated from (used in) financing activities		**(152,404)**	**(331,571)**
Increase (decrease) in cash and cash equivalents		**101,149**	**(73,950)**
Cash and cash equivalents at beginning of year		1,203,611	1,218,279
Currency translation differences		36,728	59,282
Cash and cash equivalents at end of year	30	**1,341,488**	**1,203,611**

Consolidated Statement of Changes in Equity

(thousands of euro)	Attributable to owners of the company						Non-con-trolling interests	Total Equity
	Share capital	Share premium	Other reserves	Retained earnings	Treasury shares	Total		
Balance as at 1 January 2021	**123,637**	**458,696**	**(314,922)**	**3,337,796**	**(7,699)**	**3,597,508**	**5,499**	**3,603,007**
Profit for the year	**-**	**-**	**-**	**541,903**	**-**	**541,903**	**397**	**542,300**
Other comprehensive income for the year, net of tax	-	-	254,238	34,477	-	**288,715**	12	**288,727**
Total comprehensive income for the year	**-**	**-**	**254,238**	**576,380**	**-**	**830,618**	**409**	**831,027**
Dividends declared	-	-	-	(48,033)	-	**(48,033)**	(129)	**(48,162)**
Withholding tax on foreign dividends	-	-	-	(6,421)	-	**(6,421)**	-	**(6,421)**
Acquisition of non-controlling interests	-	-	-	144	-	**144**	(1)	**143**
Other changes	**-**	**-**	1,590	(5,980)	-	**(4,390)**	-	**(4,390)**
Balance as at 31 December 2021	**123,637**	**458,696**	**(59,094)**	**3,853,886**	**(7,699)**	**4,369,426**	**5,778**	**4,375,204**
Profit for the year	**-**	**-**	**-**	**458,786**	**-**	**458,786**	**(7)**	**458,779**
Other comprehensive income for the year, net of tax	-	-	242,255	64,471	-	**306,726**	46	**306,772**
Total comprehensive income for the year	**-**	**-**	**242,255**	**523,257**	**-**	**765,512**	**39**	**765,551**
Dividends declared	-	-	-	(74,053)	-	**(74,053)**	(243)	**(74,296)**
Withholding tax on foreign dividends	-	-	-	(28,011)	-	**(28,011)**	-	**(28,011)**
Acquisition of non-controlling interests	-	-	-	1,224	-	**1,224**	-	**1,224**
Purchase of treasury shares	-	-	-	-	(123,218)	**(123,218)**	-	**(123,218)**
Other changes	-	-	129	(5,133)	-	**(5,004)**	7	**(4,997)**
Balance as at 31 December 2022	**123,637**	**458,696**	**183,290**	**4,271,170**	**(130,917)**	**4,905,876**	**5,581**	**4,911,457**

Notes to consolidated financial statements

1. General information

Buzzi Unicem SpA ('the company') and its subsidiaries (together 'the group' or 'Buzzi Unicem') manufacture, distribute and sell cement, ready-mix concrete and aggregates. The group has manufacturing plants in several countries, which also represent the natural outlet for its goods and services. The operations are located mainly in Italy, the United States of America, Germany, Luxembourg, the Netherlands, Poland, the Czech Republic and Slovakia, Ukraine, Russia, Mexico and Brazil.

Buzzi Unicem is a stock corporation organized under the laws of Italy. The registered office and the corporate headquarters are located in Italy at Casale Monferrato (AL), Via Luigi Buzzi 6. The company is listed on Euronext Milan market managed by Borsa Italiana (Euronext Group).

Buzzi Unicem SpA is controlled by Fimedi SpA, which directly and indirectly, through its subsidiary Presa SpA, owns 52.95% of the shares with voting rights.

These consolidated financial statements were authorized for issue by the board of directors on 29 March 2023.

2. Summary of significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The consolidated financial statements of Buzzi Unicem SpA have been prepared in accordance with International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB) and endorsed by the European Commission and with the provisions implementing article 9 of Legislative Decree no. 38/2005. The definition of IFRS also encompasses all valid International Accounting Standards (IAS) as well as all interpretations of the International Financial Reporting Interpretations Committee (IFRIC), including those formerly issued by the Standing Interpretations Committee (SIC).
The consolidated financial statements have been prepared under the historical cost convention, which has been amended, as requested, for the evaluation of financial assets/liabilities at fair value, including derivative instruments, as well as on the going concern basis.

During 2022, despite the spread of the Omicron variant at the beginning of the year, all European and non-European countries removed the remaining restrictions adopted in the previous two years to contain the Covid-19 pandemic, allowing the economic and production activities to fully resume.
In Italy and in the foreign countries where the group operates, however, the macroeconomic situation and geopolitical tensions due to the outbreak of the Russia-Ukraine conflict led to higher commodity prices and a crisis in supply chains on a global scale, resulting in higher inflation. In addition, sanctions measures designed to penalize

the Russian economy caused significant volatility in financial markets and further upward pressure, particularly on commodity and energy prices.
This development impacted financial reporting valuations and estimates, leading to a reassessment of impairment tests in the half-year report, which resulted in the impairment of goodwill allocated to the Russia cash-generating unit (Note 19).
In the second half of the year, as a reaction against inflation, the European Central Bank and the U.S. Federal Reserve revised their respective monetary policies by raising interest rates with the risk of a substantial slowdown in economic growth.

The analysis of financial (Note 3) and environmental risks (chapter "Climate Change, Energy and CO_2 Emissions" in the Sustainability Report) did not reveal any effects on the going concern. In fact, the group continued to generate good cash flows and achieve economic results in line with previous periods.
The financial statements are presented in euro and all amounts have been rounded off to the nearest thousand euro, unless otherwise stated. The format of the financial statements selected by Buzzi Unicem is the following: for the income statement application of the nature of expense method and presentation of two separate schemes, i.e. a traditional income statement and a statement of comprehensive income; for the balance sheet implementation of the current/non-current classification, which is generally applied by industrial and commercial firms; for the statement of cash flows adoption of the indirect method. Where necessary, comparability of content entails a restatement of the prior year amounts. The items presented in these consolidated financial statements have been somewhat adjusted and integrated compared with those previously published, to give a better representation of the financial position and economic performance of the group.
The company does not show in the income statement, balance sheet and cash flow statement the amount of balances with related parties, separately by line item (pursuant to Consob resolution no. 15519 of 27 July 2006). This indication would not be significant for the representation of the financial and economic position of the group; transactions with related parties are disclosed in note 50 of these consolidated financial statements.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the group’s accounting policies.
The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in note 4.

Standards, amendments and interpretations adopted in 2022

The following standards, amendments and interpretations are not relevant for the group and/or have had no impact on the consolidated financial statements presented herein.

- A package of amendments (effective from 1 January 2022) includes narrow-scope revisions to three standards, as well as the Board's Annual Improvements, that clarify the wording or correct minor effects, oversights or conflicts between requirements in the different standards:
  - IFRS 3 Business combinations (amendments): reference to the conceptual framework, it updates a reference in the obsolete standard, without changing the accounting treatment for business combinations.
  - IAS 16 Property, plant and equipment (amendments): proceeds before intended use, it prohibites deducting from the cost of property, plant and equipment any proceeds from selling items produced while bringing an asset into the location and condition necessary for its intended use. Instead, a company will recognize such sales proceeds and related cost in profit or loss.
  - IAS 37 Provisions, contingent liabilities and contingent assets (amendments): onerous contracts – cost of fulfilling a contract, specifying which costs a company includes when assessing whether a contract will be loss-making.
  - Annual Improvements 2018-2020 Cycle: a series of minor amendments to IFRS 1, IFRS 9, IAS 41 and IFRS 16 Leasing illustrative examples.

Standards, amendments and interpretations that are not yet effective and have not been early adopted

- IFRS 10 Consolidated financial statements and IAS 28 Investments in associates and joint ventures (amendments): sale or contribution of assets between an investor and its associates or joint ventures. A full gain (or loss) is recognized when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognized when a transaction involves assets that do not constitute a business, even if those assets are in a subsidiary. At the date of this report the European Union has deferred indefinitely the endorsement process required for the amendment to become effective and since which date.

- IFRS 17 Insurance contracts (effective from 1 January 2023). It replaces the previous standard IFRS 4 Insurance contracts and solves the comparison issues created by the same standard, by requiring all insurance contracts to be accounted for in a consistent manner, to the benefit of both investors and insurance companies. Insurance obligations will be accounted for using current values instead of historical cost.

- IAS 1 Presentation of financial statements (amendments): classification of liabilities as current or non-current (effective from 1 January 2023) and related amendments on the deferral of effective date. The amendments clarify whether to classify payables and other liabilities with an uncertain due date as current or non-current. They are not expected to have a significant impact on the financial statements. At the date of this report the European Union has not yet endorsed the standard.

- IAS 8 Accounting policies, changes in accounting estimates and errors (amendments): Definition of accounting estimates (effective from 1 January 2023). The amendments clarify how companies should distinguish changes in accounting policies from changes in accounting estimates. The distinction is important, because changes in accounting estimates are applied prospectively only to future transactions and other future events, while changes in accounting policies are generally applied retrospectively to past transactions and other past events. At the date of this report the European Union has not yet endorsed the standard.

- IAS 1 Presentation of financial statements and IFRS Practice statement 2 Making materiality judgments (amendments): disclosure of accounting policies (effective from 1 January 2023). The amendments require companies to disclose information about material accounting standards rather than on significant accounting standards, by adding a guidance on how to apply the concept of materiality to the accounting policy disclosures.

- IAS 12 Income Tax (amendments): deferred tax related to assets and liabilities arising from single transaction (effective from 1 January 2023). It specifies how companies should account for deferred tax on transactions such as leases and decommissioning obligation.

- IFRS 17 Insurance contracts (amendments): first time adoption of IFRS 17 and IFRS 9 – comparative information (effective from 1 January 2023). The amendment allows comparative information for certain financial assets to be presented in a manner consistent with IFRS 9 during transition.

- IFRS 16 Leasing (amendments): liability in a sale and leaseback (effective from 1 January 2024). It clarifies the accounting of sale and subsequent lease back. At the date of this report the European Union has not yet endorsed the standard.

- IAS 1 Presentation of Financial Statements (amendments): Non-current Liabilities with Covenants (effective from 1 January 2024). The amendment improves the information an entity provides when its right to defer settlement of a liability for at least twelve months is subject to compliance with covenants. At the date of this report the European Union has not yet endorsed the standard.

2.2 Consolidation

Subsidiaries

These are all entities (including special purpose entities) over which the group has control, meaning is exposed to, or has rights to, variable returns from its involvement with the entity and as the ability to affect those returns through its power over the same entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are deconsolidated from the date that control ceases.

The group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred, and the equity interests issued by the group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the group recognizes any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred. If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognized and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the income statement.

Intercompany receivables and payables, costs and revenues are eliminated. Significant profits and losses resulting from transactions between consolidated companies and not yet realized with third parties are also eliminated. Dividends distributed within the group are eliminated from the consolidated income statement. Accounting policies of subsidiaries have been adjusted where necessary to ensure consistency with those adopted by the group.

Subsidiaries either dormant or immaterial, both from an investment point of view and in terms of their net equity and results, are not consolidated and are valued at fair value through other comprehensive income. When no business plan is available, the valuation at book value of equity is considered to be the closest approximation of the fair value.

Changes in ownership interests in subsidiaries
Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions, that is as transactions with the owners in their capacity as owners.

The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity as long as control continues to exist.
When the group ceases to have control, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to the income statement.

Non-controlling interests in fully consolidated partnerships are included with the line item Other non-current liabilities.

Joint arrangements
Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. Buzzi Unicem has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the group's share of the post-acquisition profits or losses and changes in other comprehensive income. Dividends received reduce the carrying amount of the investment. When the group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any unsecured long-term interests), the group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the joint ventures. Unrealized gains on transactions between the group and its joint ventures are eliminated to the extent of the group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

The group determines at each reporting date whether there is any objective evidence that the investment in the joint venture is impaired. If this is the case, the entire carrying amount of the investment is tested for impairment as a single asset, that is goodwill is not tested separately.

Accounting policies of the joint ventures are adjusted, where necessary, to ensure consistency with the policies adopted by the group.

Associates
Associates are entities over which the group has significant influence but not control or joint control. Generally, a holding of between 20% and 50% of the voting rights indicates significant influence. Investments in associates are usually valued by the equity method, that is the initial carrying amount of the investment is increased or decreased at each reporting date to reflect the investor's share of the associate's net profit or loss, including components of the statement of comprehensive income. Dividends received reduce the carrying amount of the investment. The investment in associates includes goodwill identified on acquisition.

The group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the entire carrying amount of the investment is tested for impairment as a single asset, that is goodwill is not tested separately.

Accounting policies of associates are adjusted, where necessary, to ensure consistency with those adopted by the group.

Investments in other companies
Other corporations or partnerships, normally not listed companies below 20% ownership, are carried at fair value through other comprehensive income, when this can be reliably determined. When no business plan is available, the valuation at book value of equity is considered to be the closest approximation of the fair value. The profits and losses deriving from the changes in the fair value are charged directly to the other components of the statement of comprehensive income.

2.3 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker.
The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the executive directors. Buzzi Unicem's segments are organized based on the geographical areas of operations, featuring similar types of products and services from which revenues are earned.

2.4 Foreign currency translation

Items included in the financial statements of each consolidated entity are measured using the functional currency of the primary economic environment in which the entity operates.

Transactions in foreign currency are translated into the functional currency using the exchange rate prevailing at the dates of the transaction. Foreign exchange gains and losses resulting from the settlement of such transactions are recognized in the income statement. Monetary assets, monetary liabilities, derivative contracts denominated in foreign currencies are translated at the exchange rate ruling at the end of the year. Positive and/or negative differences between the amounts translated at the year-end exchange rate and those recorded at the date of the transactions are also booked to the income statement.
The gain or loss arising on translation of non-monetary items is treated in line with the recognition of the gain or loss on the change in fair value of such items (i.e. currency translation differences on items whose fair value gain or loss is recognized in other comprehensive income or profit or loss are recognized, respectively, in other comprehensive income or profit or loss).

The translation of financial statements denominated in foreign currencies is done at the current rate method. Such method entails translating assets and liabilities at the rates of exchange ruling at the balance sheet date; income statement and cash flows figures are translated at the average exchange rates for the year. On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to other comprehensive income. The difference that arises from converting the balance sheet and the income statement at different exchange rates is also booked to other comprehensive income. When a foreign operation is sold, exchange differences that were recorded in equity are recognized in the income statement as part of the gain or loss on sale.

The results and financial position of all the group entities that have a functional currency different from the presentation currency have been translated using the following exchange rates:

	Year-end		Average	
(euro 1 = Currency)	**2022**	**2021**	**2022**	**2021**
US Dollar	1.0666	1.1326	1.0530	1.1827
Czech Koruna	24.1160	24.8580	24.5659	25.6405
Ukrainian Hryvnia	39.0370	30.9219	34.0249	32.2592
Russian Ruble	78.0346	85.3004	73.8243	87.1527
Polish Zloty	4.6808	4.5969	4.6861	4.5652
Hungarian Forint	400.8700	369.1900	391.2865	358.5161
Mexican Peso	20.8560	23.1438	21.1869	23.9852
Algerian Dinar	146.5049	157.4077	149.6452	159.6527
Brazilian Real	5.6386	6.3101	5.4399	6.3779

2.5 Revenue from contracts with customers

Revenue from contracts with customers is recognized when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the group expects to be entitled in exchange for those goods or services. The group is the principal in its revenue arrangements, because it typically controls the goods or services before transferring them to the customer.

Revenue from contracts is recognized at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods. When a contract includes a variable amount of consideration, the amount of consideration to which the group will be entitled, in exchange for transferring the goods to the customer, is estimated on the basis of the agreed discounts and premiums. The amount of the discounts is determined at the time of the agreement with the customer: usually a discount is offered to customers against delivery of significant quantities. Volume rebates are booked on an accrual basis and classified as a reduction of trade receivables or as other payables when they are settled in a separate transaction with the customer. Any other variable component (penalties and surcharges) is accounted for directly in the invoice upon delivery.

A trade receivable represents the group's unconditional right to an amount of consideration in exchange for goods or services transferred to the customer.

A contract liability (advances received for the sale of cement, ready-mix concrete and aggregate) is the obligation to transfer goods or services to a customer for which the group has received consideration from the customer. If a customer pays consideration before the group transfers goods or services to the customer, a contract liability is recognized when the payment is made. Contract liabilities are recognized as revenue when the group performs under the contract, they are not shown separately in the balance sheet but are classified under other payables.

2.6 Finance revenues

Interest income is recognized on a time-proportion basis, using the effective interest method. Dividend income from equity investments that are not consolidated is recognized when the right to receive payment is established.

2.7 Finance costs

They include interest and other costs, such as amortization of premiums or discounts, amortization of ancillary costs incurred in the arrangement of borrowings, finance charges on leases. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset, one that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets and, therefore, are capitalized until such time as the assets are substantially ready for their intended use or sale. All other borrowing costs are expensed in the period in which they are incurred.

2.8 Government grants

Grants from the government are recognized at nominal value where there is a reasonable assurance that the grant will be received and the group will be able to comply with all attached conditions. The grants are recognized in profit or loss on a systematic basis over the period necessary to match them with the costs that they are intended to compensate.

2.9 Intangible assets

Intangible assets, acquired externally or internally generated, are recognized only if they are identifiable, controlled by the company and able to produce future economic benefit. Intangible assets with definite useful life are booked at the purchase or production cost and amortized on a straight-line basis over their useful lives. Intangible assets with indefinite useful life are not amortized but tested for impairment at least annually and whenever there is an indication of a potential impairment loss.

Goodwill represents the excess of the consideration transferred over the group's interest in the fair value of the net identifiable assets acquired and the fair value of the non-controlling interest in the acquiree. Goodwill is carried at cost less accumulated impairment losses. Goodwill is not amortized and its recoverable amount is tested for impairment annually, or more frequently if events or changes in circumstances indicate that it might be impaired. For the purpose of impairment testing, goodwill is allocated to those cash-generating units or groups of cash generating units that are expected to benefit from the business combination in which the goodwill arose.

Separately acquired trademarks and licenses are capitalized on the basis of the costs incurred. Trademarks, licenses and customers lists acquired in a business combination are recognized at fair value at the acquisition date. Trademarks and licenses have a finite useful life and are amortized using the straight-line method over their estimated useful lives.
Customer lists are amortized using the estimated client churn rate, over a period anyway not exceeding twenty years.

Acquired computer software licenses are capitalized based on the costs incurred to acquire and bring to use the specific software. These costs are amortized over their estimated useful lives of five years. Costs associated with developing or maintaining computer software are recognized as an expense as incurred.

Development costs are capitalized only if and when demonstration of their ability to generate future economic benefits has been established.

Mining rights are amortized in the ratio of quarried volumes to available mineral reserves under concession.

2.10 Leases

Lease contracts relate essentially to land, buildings, plant and machinery, vehicles and other equipment. The contract terms are usually negotiated by assets category and contain a wide range of specifications and different conditions.

Leases are recognized in the balance sheet as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the group. The expenses arising from leases are split between depreciation and finance charges.

Right-of-use assets

They are accounted for at cost, which includes the following:

- initial amount of the lease liability;
- any lease payments made on or before the lease commencement date less incentives received;
- any initial cost directly attributable to the contract;
- restoration costs.

Right-of-use assets are generally depreciated on a straight-line basis over the shorter of the useful life of the asset and the term of the lease. Some leases contain extension and termination options, in most cases exercisable only by the group and not by the respective lessor. If, at the end of the lease contract, ownership of the leased asset is to be transferred or if the cost of the asset subject to the right of use already includes a purchase option, depreciation is calculated on the basis of the expected useful life of the asset. Right-of-use assets are tested for impairment (note 2.13).

Lease liabilities

Lease liabilities are measured at the present value of future lease payments, discounted at the lessee's incremental borrowing rate (IBR) as the implicit interest rate of the lease is not readily determinable. The marginal rate at the reporting date is calculated considering the terms of the lease, geography and group-specific rates. Subsequent to the date of initial recognition, the amount of lease liabilities is increased to take into account the interest accrued and reduced for the lease payments made. Moreover, the book value is remeasured if there is a change in the duration of the lease contract or in the rents.

Lease liabilities include the net present value of the following payments:

- fixed payments, less any lease incentives;
- variable payments that are based on an index or a rate, therefore determinable at the commencement date;
- amounts that the lessee expects to pay as a guarantee on the residual value of the underlying asset;
- exercise price of a purchase option, if the group is reasonably certain to exercise it;
- penalties for termination, if the lease terms reflect the group exercising that option.

Lease payments are allocated between principal and finance costs. The latter are charged to the income statement over the lease period, so as to produce a constant periodic interest rate on the remaining balance of the liability for each year.
The repayment of the financial liability is classified in the cash flow statement within cash flows generated by financing activities, while the portion of interest paid is considered within cash flows from operating activities.

The group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Services
The group applies the exemptions that allow the exclusion of short-term leases and leases for which the underlying asset is less than €5 thousand. These costs are accounted for as services, under the caption operating leases of property and machinery.

Expenses of lease contracts linked to operating parameters (for instance: production quantities, kilometers travelled) are as well charged to the income statement in the period in which the conditions determining their existence occur.

2.11 Property, plant and equipment

They are booked at purchase or production cost, including overheads, less accumulated depreciation and any accumulated impairment losses. Production cost includes the reasonably attributable portion of the direct and indirect costs incurred to bring the asset into service. Subsequent costs are capitalized or recognized as a separate asset, as appropriate, only when future economic benefits will flow to the group. The carrying amount of the replaced part is derecognized. Repairs and maintenance are charged to the income statement during the period in which they are incurred; the most relevant strategic spare parts are capitalized when acquired and their depreciation starts when being brought into service.

Property, plant and equipment include raw material reserves (quarries), carried at cost in accordance with IFRS 6 Exploration for and evaluation of mineral resources. They are depleted in the ratio of the quarried material during the period to extractable minerals. Costs incurred to gain access to raw materials deposits (stripping costs) are capitalized and depreciated using the units of production method over the expected useful life of the identified component of the ore body that becomes accessible as a result of the stripping activity.

Depreciation on other property, plant and equipment is calculated under the straight-line method to allocate the cost of each asset to their residual values over their estimated useful lives, as follows:

Buildings	10 - 40 years
Plant and machinery	5 - 20 years
Transportation equipment	3 - 14 years
Furniture, fittings and others	3 - 20 years

An asset’s carrying amount is written down to its recoverable amount if the book value is greater than its estimated recoverable amount.

2.12 Investment property

Investment property, comprising land and buildings non-strictly pertinent to the business held to earn rental income and/or for capital appreciation, is carried at cost less accumulated depreciation and impairment losses.

2.13 Impairment of non-financial assets

Assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization, included right-of-use assets, are reviewed for impairment losses whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When it is not possible to determine the recoverable amount of a single item, the group tests the recoverable value of the cash-generating unit to which the asset belongs.

Where the carrying values exceed the estimated recoverable amount, the assets or cash-generating units are written-down to their recoverable amount and the impairment loss is charged to income statement. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. Value in use is defined as the present value of the future cash flows expected to be derived through the continued use of an asset or cash-generating unit including its eventual disposal. Cash flows are based on budgets and reasonable and documented assumptions on the future company's results and macro-economic conditions. The discount rate takes into account the specific risks of industry and countries.

If there is an indication that an impairment loss recognized in prior years on an asset other than goodwill may have decreased, the impairment write-down is reversed. After reversal, the carrying amount of the asset shall not exceed the carrying amount that would have been determined (net of depreciation and amortization), had the impairment loss not been recognized.

2.14 Non-current assets held for sale

Non-current assets (or disposal groups) are classified as held for sale when their carrying amount is to be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. They are stated at the lower of carrying amount and fair value less costs to sell.

2.15 Financial assets

The group classifies its financial assets in the following categories: at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss. The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the group's business model for managing them.

With the exception of trade receivables that do not contain a significant financing component and for which the group applies the practical expedient, Buzzi Unicem initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the group has applied the practical expedient are measured at the transaction price.

The group's business model for managing financial assets determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. For purposes of subsequent measurement, financial assets are classified in the categories at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss.

The group measures financial assets at amortized cost if both of the following conditions are met:

- the asset is held within a business model whose objective is to collect contractual cash flows;
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest.

Financial assets at amortized cost

Financial assets at amortized cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired. The financial assets at amortized cost include loans to non-consolidated companies, loans to third parties or to customers and are included under other current and non-current receivables.

Financial assets at fair value through other comprehensive income (equity instruments)

Upon initial recognition, the group can elect to designate irrevocably its equity investments at fair value through other comprehensive income, when they are not held for trading. Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized in the statement of profit or loss when the right of payment has been established. The group classified in this category equity investments in non-consolidated subsidiaries.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, financial assets designated upon initial recognition at fair value through profit or loss, or financial assets mandatorily required to be measured at fair value. The group mainly classifies in this category derivative financial instruments, investment entrusted to asset management firms and trust agreements in connection with retirement obligations in the United States.

Impairment of financial assets

The group recognizes an allowance for expected credit losses (ECLs) for financial assets at amortized cost. Expected credit losses are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the group expects to receive, discounted at an approximation of the original effective interest rate. Expected credit losses are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, an allowance is provided for credit losses that result from default events that are possible within the next 12 months. For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure.

For financial assets at fair value through other comprehensive income, the group applies the low credit risk simplification; at every reporting date, the group evaluates whether the financial asset is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort.

2.16 Derivative financial instruments

The group, if necessary, makes use of derivative contracts for hedging purposes, to reduce currency, interest rate and market price risks.

The put and call option rights on the 50% interest of the jointly controlled company Nacional Cimentos Participações SA (formerly BCPAR SA) represents a derivative financial instrument whose value is equal to the difference between the exercise price of the option and the fair value of the shares to be acquired (note 25).

Derivative financial instruments are initially recognized and subsequently measured in the balance sheet at their fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as hedging instrument and, if so, the nature of the item being hedged.

2.17 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the weighted average method. The cost includes all expenditures incurred in acquiring the inventories and bringing them to their present location and condition. In the case of finished goods and work in progress, cost comprises direct materials, direct labor, other direct costs and attributable production overhead based on normal operating capacity; it excludes borrowing costs. Net realizable value is the estimated selling price in the ordinary course of business, less applicable selling expenses.

As for emission rights, the accounting method followed provides not to value as assets the emission allowances granted free of charge and to recognize only the effects of transactions involving the purchase and/or sale of emission rights. Emission rights acquired against payment and not yet returned are stated at the lower of cost and net realizable value, which matches the market price at the balance sheet date.

2.18 Trade receivables and payables

Trade receivables represent the group's unconditional right to an amount of consideration in exchange for goods sold and services performed in the ordinary course of business. They are recognized at the transaction price, less provision for impairment. To assess the impairment provision, the group applies the simplified approach in calculating expected credit losses. Therefore, it uses a provision matrix that is based on the historical observed default rates, as well as on past due receivables, adjusted by specific predictors on the counterparty risk, type of product and geographical area.

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. They are recognized at transaction cost that, given the short-term maturity, approximates their fair value.

2.19 Cash and cash equivalents

They include cash on hand, deposits held at call with banks, money market securities and other liquid investments with original maturities of three months or less, which are readily convertible to a known amount of cash and are subject to a very low risk of change in value.

2.20 Treasury shares

When the parent or its subsidiaries purchase the company's share capital, the consideration paid is deducted from equity attributable to owners of the company until the shares are cancelled or disposed of. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of treasury shares. Where such shares are subsequently reissued, the consideration received, net of the related income tax effects, is recognized in equity attributable to owners of the company.

2.21 Debt and borrowings

Borrowings are recognized initially at fair value, net of transaction costs incurred, and subsequently carried at amortized cost using the effective interest method.

Fees paid on the establishment of loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalized as a pre-payment for liquidity services and amortized over the period of the facility to which it relates.

Convertible bonds are accounted for as a compound financial instrument made of two components, which are treated separately only if relevant: a liability and a conversion option. The liability is the present value of the future cash flows, based on the market interest rate at the time of issue for an equivalent non-convertible bond. The amount of the option is defined as the difference between the net proceeds and the amount of the liability component and included in equity. The value of the conversion option is not changed in subsequent periods.

Borrowings are classified as current liabilities unless the group has an unconditional right to defer settlement for at least twelve months after the balance sheet date.

2.22 Current and deferred income tax

The tax expense for the period comprises current and deferred tax. Tax is recognized in the income statement except to the extent that it relates to items of other comprehensive income or directly in equity. In this case the related income tax effect is also recognized in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the group operates and generates taxable income. The tax rates applied vary according to the jurisdiction and fiscal situation of each consolidated company. Income tax payables for the period are credited to current liabilities. Significant judgment is required in determining the consolidated provision for income taxes.

There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes liabilities where appropriate on the basis of amounts expected to be paid to the tax authorities. Some Italian companies are members of a controlled group of corporations for domestic income tax purposes, with Fimedi SpA (controlling shareholder of the group) acting as the parent.

Deferred income tax is provided in full using the liability method, on temporary differences arising between the tax base of assets and liabilities and their carrying amount in the consolidated financial statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill and deferred income tax is not accounted for if it arises from initial recognition of an asset or a liability in a transaction other than a business combination that, at the time of the transaction, affects neither accounting nor taxable profit.

Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realized or the deferred income tax liability is settled.

Deferred income tax assets on tax loss carryforwards and timing differences are recognized to the extent that it is probable that future taxable profit will be available against which they can be utilized. Deferred income tax assets are provided on temporary differences arising from investments in subsidiaries, associates and joint arrangements, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Current tax assets and current tax liabilities are offset only if the enterprise has the legal right and the intention to settle on a net basis. Deferred income tax assets and deferred income tax liabilities are offset when the enterprise has the legal right to settle on a net basis and when they are levied by the same taxation authority on the same taxable entity or different taxable entities that intend to realize the asset and settle the liability at the same time.

2.23 Employee benefits

Employee benefits include:

- **Short-term employee benefits**, expected to be settled within twelve months (wages, salaries and social security contributions, allowance in lieu of holidays and sick leave, incentive plans and non-monetary benefits)

- **Post-employment benefits**, such as pensions or lump sum payments upon retirement, as well as other post-employment benefits, such as life insurance and healthcare:
  - *Pension plans*

  Within the framework of post-employment benefits, the companies of the group operate several defined benefit and/or defined contribution pension schemes.

  A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually as a function of one or more factors such as age, years of service and compensation. The liability in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. Independent actuaries calculate the defined benefit obligation and the service cost annually, using the projected unit credit method. In determining the appropriate discount rate, the group considers the interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the terms of the related pension obligation. In countries where there is no deep market in such bonds, the market rates of government bonds are used.

  Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. If the calculation of the balance sheet amount results in an asset, the amount recognized is limited to the present value of economic benefits available in the form of refunds or reductions in future contributions to the plan. The expense related to the discounting of pension liabilities for defined benefit plans are reported separately within finance costs. All other expenses associated with pension plans are allocated to staff costs.

  A defined contribution plan is a pension plan under which a company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis, and will have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all accrued benefits. The contributions are recognized as employees render their services and are included in staff costs.

  The Italian employee severance indemnities (TFR) was classified as a defined benefit plan for those benefits accrued up to 31 December 2006, while after that date the scheme is classified as a defined contribution plan.

  - *Other post-employment benefits*

  Life insurance and health coverage plans are considered defined benefit programs. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as for defined benefit pension plans.

- **Other long-term benefits**, typically consisting of amounts paid upon attaining a specific seniority and deferred compensation plans.

2.24 Provisions for liabilities and charges

They are liabilities of uncertain timing or amount. A provision is recognized when the group has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation and the amount can be estimated reliably. Amounts provided for are reviewed at each balance sheet date and adjusted to reflect the current best estimates.

Restructuring provisions are recognized in the period in which the company formally defines the plan and creates a valid expectation in the interested parties that the restructuring will occur.

Provisions are measured on a present value basis where the effect of discounting is material. The increase in the provision due to passage of time is recognized as interest expense.

As far as emission rights are concerned, the accounting method followed is to recognize a provision only when emissions exceed the allocated allowances, and the deficit will have to be remedied by purchasing the rights on the market.

2.25 Dividend distribution

Dividend distribution is recorded as a liability in the financial statements of the period in which the dividends are approved by the company’s shareholders. Disclosure of dividends proposed but not formally approved for payment is made in the notes.

3. Financial risk management

3.1 Financial risk factors

The group's activities are exposed to a variety of financial risks such as market risk (including currency, price and interest rate), credit risk and liquidity risk. The group uses, infrequently, derivative financial instruments to hedge certain risk exposures. A central treasury and finance department carries out risk management and identifies, evaluates and possibly hedges financial risks in close co-operation with the group's operating units.

The evolution of the macroeconomic scenario following the Russia-Ukraine conflict did not determine any significant changes in the financial risk management, except that the group had to limit its exposure to risks related to ruble liquidity. However, the group did not need to obtain new lines of credit, renegotiate the terms of the existing financial liabilities or ask for extensions on their repayments. During the year, as the group's liquidity was not adversely affected by the conflict, the approach to risk management has not changed and the related procedures have not been modified.

The sustained and continued rise in inflation had no significant impact on the capital market, for the time being, as interest rates in euros and US dollars considerably increased during the year.

Market risk

Buzzi Unicem operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar and the Czech koruna. Foreign exchange risk arises from future commercial transactions, recognized assets and liabilities and net investments in foreign operations. The foreign subsidiaries or joint ventures enjoy a natural hedging on market risk, since all major commercial transactions are made in their functional currency and are not suffering from the foreign exchange fluctuations. Management has introduced a policy to require the group entities to control their residual exposure to exchange rate risk, by using mainly debt instruments or cash in foreign currency, or even derivative contracts negotiated at the company level, such as, for example, currency forwards transacted according to the existing internal policies. The policy considers a hedge for the anticipated cash flows of a significant amount and that are denominated in highly volatile currencies.

The net investment in foreign operations as well as their operating and net result are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the group's foreign operations is managed partially through borrowings denominated in the relevant foreign currency. The group's currency risk management strategy has been affected by the Russia-Ukraine conflict. In fact, for example, as of 31 December 2022 there are no longer assets and liabilities in rubles on the balance sheets of the foreign subsidiaries. In addition, a dollar loan was granted to the subsidiary in Ukraine during 2022.

The recognition of exchange rate risks concerning the financial instruments to which IFRS 7 is applicable shows the following net exposure to foreign currencies:

(thousands of euro)	2022	2021
Euro	(38,216)	(42,292)
US Dollar	(256,253)	(187,803)
Swiss Franc	-	(16)
Czech Koruna	7,995	7,833
Russian Ruble	-	5,599
Ukrainian Hryvnia	9	175
Polish Zloty	359	3,449

Hereinafter are the results of the sensitivity analysis that was conducted considering a revaluation/devaluation of the euro versus the currencies to which the group has a significant exposure, with a direct 10% effect on the net exposure in euros reported in the table above. The potential impact on profit before tax is therefore considered, keeping unchanged all other financial statement items that are not affected by the assumed variance.

At 31 December 2022, with reference to the net exposure in euro reported above, if the euro had strengthened/weakened by 10%, against the major foreign currencies to which Buzzi Unicem is exposed, profit before tax for the year would have been €24,781 thousand higher/lower (2021: €17,075 thousand higher/lower). Profit for the year is especially sensitive to the euro/dollar, euro/czech koruna and euro/polish zloty exchange rates.

Compared to the previous year, the net debt exposure to the dollar increased significantly as new intercompany loans were granted by US subsidiaries to the parent company, although the currency was partly converted into euros. In addition, the net exposure to the ruble recognized in Germany until the previous year was cancelled by closing intra-group positions and selling the rubles held.

Buzzi Unicem has a very limited exposure to the price risks of equity securities because the investments in non-consolidated companies at fair value represent less than 0.1% of total assets. The group is exposed to commodity price risk, in particular to the trend of oil, cost of fuels, electricity, logistics services and CO_2 emission rights. To cope with this risk the group diversifies its sources of procurement by fixing, if possible and economically reasonable, the supply conditions over a sufficiently long-time frame, sometimes greater than one year, at a level deemed appropriate by the management. In consideration of the high price volatility, the strategy of commodity purchases was updated during 2022 also by entering into hedging contracts.

Changes in market interest rates can affect the cost of the various forms of financing or the return on investments in monetary instruments, causing an impact at the level of net finance costs incurred. The interest rate risk arises mainly from long-term debt. Borrowings issued at variable rates expose the group to cash flow interest rate risk, which is partially offset by cash invested at variable rates. Buzzi Unicem's policy is to maintain about 70% of its long-term borrowings in fixed rate instruments. At the balance sheet date, the share of indebtedness at fixed rate is higher, close to 76%, due to the expansive monetary policies that, at least at the beginning of the year, denoted the credit supply. Borrowings at variable rate at the end of 2022 were denominated in euros and in US dollars. Management implements the best strategy about interest rates according to market conditions and, sometimes, the group may enter into derivative financial instruments to hedge the fair value interest rate risk.

Below are the results of the sensitivity analysis on the exposure to interest rates that was conducted considering a 1% rate increase and a 1% decrease on the financial assets and liabilities of the various group entities, net of intercompany positions. We consider the potential impact on profit before tax, keeping unchanged all other financial statement items that are not affected by the assumed variance.

The group analyses its interest rate exposure on a dynamic basis, taking into consideration refinancing, renewal of existing positions, alternative financing and possible hedging. Based on the simulations performed, the impact on profit before tax of a 1% interest rate rise or fall would be an increase or a decrease of €8,163 thousand (2021: increase/decrease of €11,600 thousand). For each simulation, the same interest rate change is used for all currencies. The sensitivity scenarios are run only for assets and liabilities that represent the major interest-bearing positions and for the fair value of interest rate derivatives (if actually outstanding at the balance sheet date). At 31 December 2022, if interest rates on euro-denominated financial assets and financial liabilities had been 1% higher/lower with all other variables held constant, profit before tax for the year would have been €4,148 thousand higher/lower (2021: €6,018 thousand higher/lower). These fluctuations are mainly a result of financial debt that is denominated in euros at the parent company level, partly offset by cash and equivalents euro denominated across the group.

At 31 December 2022, if interest rates on cash and equivalents denominated in US dollars at that date had been 1% higher/lower with all other variables held constant, profit before tax for the year would have been €3,135 thousand higher/lower (2021: €5,101 thousand higher/lower), mainly reflecting a lower cash and cash equivalents balance in US dollar compared to the previous year.

As regards the interest rates applied on the market for future transactions, it should be considered that a process of reform (IBOR reform) of the reference rates for the financial market, aimed at gradually eliminating the LIBOR (in detail, LIBOR GBP, USD, EUR, CHF and JPY) and EONIA rates and replacing them with new rates whose calculation follows the regulatory requirements and criteria established by the main international organizations, in order to strengthen the meaningfulness of the rates themselves, was finalized in 2022. This was a process initiated by the main financial institutions and international regulatory bodies towards a new set of risk-free rates. In particular, the EONIA was no longer quoted from 1 January 2022 and it was replaced by the EuroSTR in accordance with the new international standards. The LIBOR rates will gradually be replaced by the so-called Fallback rates, which are all-in rates consisting of a base rate and a spread different for each maturity and with a new calculation method that provides for fixing at the end of the interest period and not at the beginning as was the case with the LIBOR rates.

In this new scenario, Buzzi Unicem has adopted appropriate initiatives to adapt to the transition to the new reference rates, having also carried out an analysis of the financial contracts in place as of 1 January 2022. From this analysis it is clear that the reform only affected contracts in US dollars indexed to 3-month LIBOR (for Euro rates, apart from EONIA, no updates are foreseen yet) and that there are no material impacts on the consolidated income statement. Any new time deposit transactions in US dollars, for example, have already been contracted considering the new short-term rates. The 3-month LIBOR rate, on the other hand, will continue to be quoted and therefore usable until 30 June 2023.

Credit risk
Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions. For banks and financial institutions, only primary national and international entities with high credit quality are accepted as counterparts. There are specific policies that limit the amount of credit exposure to any financial institution.

The credit management functions assess the quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings. The utilization of credit limits is regularly monitored.

Due to its widespread customer base, typical of the industry, and to active credit management, Buzzi Unicem has no significant concentration of credit risk in trade receivables. There are no customers generating revenues equal or greater than 10% of consolidated net sales.

An assessment of the possible losses is carried out at each closing date using a provision matrix (note 2.18). The maximum exposure to credit risk at the reporting date is the carrying amount of trade receivables presented in note 28. In some countries there are insurance policies or equivalent instruments to cover that risk.

Set out below is the information about the credit risk exposure arising from trade receivables:

	2022			2021		
(thousands of euro)	Trade receivables (gross)	Loss allowance	% loss coverage	Trade receivables (gross)	Loss allowance	% loss coverage
Not overdue	422,933	(1,187)	0.3%	357,508	(1,119)	0.3%
Days past overdue						
30 or less	88,284	(848)	1.0%	76,571	(827)	1.1%
Between 30 and 60	15,899	(135)	0.8%	11,624	(512)	4.4%
Between 61 and 90	4,781	(135)	2.8%	3,466	(108)	3.1%
Between 91 and 180	7,257	(1,494)	20.6%	2,764	(1,019)	36.9%
Over 180	17,147	(10,827)	63.1%	19,281	(11,894)	61.7%
	556,301	**(14,626)**		**471,214**	**(15,479)**	

The group limits its exposure to credit risk on trade receivables by establishing maximum payment terms in the various countries.
During 2022, the group confirmed its policy to limit exposure to the most risky customers, maintaining a specific use of credit insurance coverage.

Liquidity risk
Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed and uncommitted credit facilities and the ability to close out market positions. Due to the dynamic nature of the underlying businesses, the central treasury department aims to maintain flexibility in funding by keeping availability under committed credit lines.

Cash flow forecasting is performed in the operating subsidiaries and aggregated by the central treasury department. Group finance monitors rolling forecasts to ensure there is sufficient cash to meet operational needs while maintaining sufficient headroom on the undrawn committed borrowing facilities.

Estimates and projections, considering the changes that may occur in the profitability trend, show that the group is in a position to operate at the present level of financing. Buzzi Unicem prepares the refinancing of borrowings in due time before the upcoming maturities. The company uses different debt instruments and maintains a regular relationship with the usual and prospective financing institutions about the future needs, from which it appears that renewal may take place under acceptable terms. The analysis of maturity dates for the main financial liabilities is included within note 37.

3.2 Capital management

Buzzi Unicem's objectives when managing capital are to safeguard its ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure.

In order to maintain or modify the capital structure, the group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares, make purchases of treasury shares or sell assets to improve the net financial position.

In the period between 28 February 2022 and 4 March 2022, Buzzi Unicem purchased no. 7,000,000 treasury shares, for a total value of €123.2 million, as part of the authorization resolved by the Shareholders' Meeting on 7 May 2021.

The capital expenditure program for the group is aligned with the long-term objectives and the operating necessities of different geographical units. The executive directors and key managers prioritize the expenditure requirements that are determined by the divisions. Measures aimed at improving efficiency, capacity expansion or new market entries are subject to in-depth profitability analysis to derive their future contribution to operating income.
Consistent with other players in the industry, which is highly capital intensive, the group monitors capital on the basis of the Gearing ratio and the Leverage ratio. The first indicator is calculated as total liabilities divided by equity. The second ratio uses the net financial position as numerator and the EBITDA figure as shown in the income statement as the divisor.

During 2022 the group's long-term strategy, unchanged versus the previous year, was to maintain a Gearing ratio around 50% and a Leverage ratio that, calculated across an adequate period of time (3-5 years), is no higher than 2 times.

The ratios as at 31 December 2022 and 2021 were as follow:

(thousands of euro)	**2022**	**2021**
Debt [A]	2,591,631	2,546,579
Equity [B]	4,911,457	4,375,204
Gearing [A/B]	**53%**	**58%**
Net financial position [C]	(288,199)	(235,516)
EBITDA [D]	883,676	794,644
Leverage [C/D]	**(0.33)**	**(0.30)**

3.3 Fair value estimation

Hereunder an analysis of financial instruments carried in the balance sheet at fair value. The different levels have been defined as follows:

- quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1);
- inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2);
- inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

The following table presents the assets and liabilities that are measured at fair value at 31 December 2022:

(thousands of euro)	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Other non-current assets	10,907	1,041	-	**11,948**
Derivative financial instruments (non-current)	-	-	11,031	**11,031**
Equity investments at fair value	-	-	10,595	**10,595**
Total Assets	**10,907**	**1,041**	**21,626**	**33,574**

The following table presents the assets and liabilities that are measured at fair value at 31 December 2021:

(thousands of euro)	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Other non-current assets	30,945	1,282	-	**32,227**
Derivative financial instruments (current)	-	-	6,948	**6,948**
Equity investments at fair value	-	-	12,222	**12,222**
Total Assets	**30,945**	**1,282**	**19,170**	**51,397**

During the year there were no transfers between the different levels of fair value measurement. No changes occurred either in the valuation techniques adopted across the two periods.

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. The quoted market price used for financial assets is the current bid price. These instruments, when they exist, are included in level 1.

In 2021 the balance of the item other non-current assets included cash investments entrusted to asset management.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These methods maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required are observable, the instrument is included in level 2. If one or more of the significant inputs are not based on observable market data, the instrument is included in level 3.

The investments included in the line item Equity investments at fair value are all booked at fair value through other comprehensive income (OCI) and included in level 3. When a multi-year plan is not available, the valuation at book value of equity is considered as the best approximation of the fair value (note 24).

Level 3 derivatives include the put and call option on the remaining 50% share of Nacional Cimentos Participações SA (formerly BCPAR SA). The value of the derivative financial instrument is based on the calculation method of the exercise price of the option and at the date of this report it is in line with its fair value. The change in the fair value of the derivative has been recognized through the income statement, in accordance with IFRS 9 (note 25).

The group holds several financial instruments which are not measured at fair value in the balance sheet. For the majority of these instruments (trade receivables less provision for impairment, trade payables, other receivables, other payables) the carrying amount is considered to approximate their fair value. The fair value of long-term financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the group for similar financial instruments.

4. Critical accounting estimates and assumptions

The preparation of financial statements in conformity with IFRS requires the use of estimates and assumptions concerning the future that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. By definition the actual results seldom equal the estimated results.

In particular, the estimates and assumptions made in preparing the financial statements for the year ended 31 December 2022 reflect the uncertainties and risks associated with the Russia-Ukraine conflict, which has caused considerable economic and financial distress worldwide and a sharp increase in inflation rates. Management has also considered the issues related to the energy transition and climate change, in particular the transition to a low-carbon economy, the effects of which, where present, are disclosed in the related specific notes to the financial statements.

Further disclosures about Buzzi Unicem exposure to risks and uncertainties are provided in the following notes:

- Capital management (note 3.2)
- Financial risk factors (note 3.1)
- Sensitivity analysis (notes 19, 23 and 38)
- Legal claims and contingencies (note 49)
- Climate change, energy and CO_2 emissions (Sustainability Report)

Impact of climate change

The assessment of risks related to climate change depends heavily on the actions that will, or will not, be taken in the coming decades by the world's governments and the availability of technologies that can support them.
According to the IPCC climate report, the possible scenarios are synthetically represented by the expected value of the planet's average temperature at the end of the century with, at the two extremes, the 1.5°C scenario (maximum commitment to decarbonisation) and the 4.0°C scenario (business as usual).
These possible scenarios outline in one case prevailing transition risks while in the other physical risks. For both, Buzzi Unicem carried out the risk assessment based on the TCFD (Task Force on Climate-Related Financial Disclosures) report. More details can be found in the NFD included in the Sustainability Report.
The cement industry, through its global association (GCCA), is strongly committed to the decarbonisation policies decided at local level in line with the 1.5°C scenario.
Europe, with the approval of the 'Fit for 55' legislative package, has set itself the goal of achieving climate neutrality by 2050 and cutting, within 2030, the greenhouse gas emissions by at least 55% compared to 1990 values.
The Emission Trading System (ETS), one of the pillars of the 'Fit for 55' package, which limits the amount of CO_2 that various companies, including cement companies, can emit, will have stricter requirements on free emission rights allowances, which are set to decrease to zero after 2030. Already today, the free allowances allocated to Buzzi Unicem production units in EU countries are not sufficient to cover all emissions and therefore the missing rights must be purchased on the market.

The so-called 'carbon leakage', i.e. the situation whereby, following the introduction of environmental policies that increase costs, the production of goods moves to other countries, directly affects the 'hard-to-abate' industries, including cement.
To contain this risk, the European Council and Parliament reached an agreement on the proposal for a Carbon Border Adjustment Mechanism (CBAM) in 2022. This system introduces a carbon tax on the imports of certain goods, including cement.
The new regulation will apply as of 1 October 2023, with a transition period until 31 December 2025, in which the obligations of European importers will be limited to reporting.

In line with the requirements of the Paris Agreement on climate change, as well as of the European Green Deal, on 12 May 2022, Buzzi Unicem announced the definition of its CO_2 emission reduction targets valid at group level (for more information, please refer to the Sustainability Report).
In view of the ultimate goal, i. e. carbon neutrality by 2050, our intermediate targets to 2030 have been validated by SBTi, an independent organization whose authority is recognized internationally.

The scenarios envisaged by management, particularly those related to the recoverability of the value of non-current assets, therefore reflect the estimated investments to ensure compliance with regulations and the achievement of the aforementioned targets. Given the many factors of uncertainty, it is only possible to partially determine which the actual and tangible risks will be in the long term.

Estimates and assumptions
Estimates are continually revised according to management's best knowledge of the business and other factors reasonably assumed under the circumstances. The areas involving a high degree of judgment or complexity, or areas where assumptions and estimates can have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are described below:

- *Impairment of non-financial assets*

The information related to the evaluation of non-financial assets is disclosed in note 2.13. The key assumptions used to determine the recoverable amount for the different CGUs, including a sensitivity analysis, are explained in detail in note 19.

- *Current and deferred income tax*

Significant management judgment is required to determine the amount of income taxes, also based upon the likely timing and the level of future taxable profits, together with tax planning strategies. Tax losses of the group to be carried forward are relevant; they relate to the company and some of its subsidiaries. They do not expire and, due to the judgment on their future utilization over the next five years, it is unlikely that they will be fully applied to offset taxable income. Further details on taxes are disclosed in notes 17 and 40.

- *Defined benefit plans (pension plans)*

The cost of the defined benefit pension plan and post-employment medical benefits as well as the present value of the defined benefit pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, salary growth rate, mortality rates and pension growth rate. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. Further details, including a sensitivity analysis, are provided in note 38.

- *Provisions for liabilities and charges*

The provisions result from an estimation process embracing both the use of resources required to settle the obligation and its maturity. The litigations and claims to which the group is exposed are assessed by management with assistance of the internal expertise and with the support of external specialized lawyers. Disclosures related to such provisions, as well as contingent liabilities, also derive from discretionary judgment (note 39).

- *Fair value measurement of financial instruments*

When the fair value of a financial asset or liability recorded in the balance sheet cannot be measured based on quoted prices in active markets, then it is determined by using various valuation techniques, including the discounted cash flow model. The inputs to these models are taken from observable markets, when possible, but when it is not then a certain degree of judgment is required in assessing the fair value. Judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in the assumptions relating to these variables could affect the reported fair value of the financial instrument (note 3.3).

- *Business combinations*

Accounting for business combinations means to measure the identifiable assets acquired and the liabilities assumed by the acquirer, as described in note 2.2. Fair value measurement includes a complex estimation process based on historical experience, assumptions based on available information and the facts and circumstances existing at the measurement date, also thanks to the support of external experts.

- *Lease term and marginal financing rate*

Leases may include extension and termination options. In assessing whether or not it is reasonably certain that the option to extend or terminate the lease will be exercised, all relevant factors that create an economic incentive to exercise the option to extend or terminate are considered. After the commencement date, the lease term is reviewed if a significant event or change that affects the ability to exercise or not the option to renew or terminate the lease occurs.
The implicit interest rate of a lease is not easily determinable, so the incremental borrowing rate (IBR) is used to ascertain the present value of the rental cost. The latter corresponds to the interest rate that would be paid to borrow, for a similar period of time and with a similar guarantee, the amount required to obtain an asset corresponding to the value of the right of use. The group estimates the IBR using observable inputs such as market interest rates.

5. Scope of consolidation

The consolidated financial statements for the year ended at 31 December 2022 include the company and 70 subsidiaries. The total number of consolidated subsidiaries decreased by 4 compared with that at the end of the previous year. Excluded from consolidation are 15 subsidiaries that are either dormant or immaterial.

In the second quarter of 2022, Calcestruzzi Zillo SpA was merged into Unical SpA. During the year, some other mergers took place within the group, in particular in Germany and Russia to continue streamlining and simplifying the organizational structure, without any material effect on the consolidated financial statements.

As a result of the Russia-Ukraine conflict, which led to the imposition of sanctions on Russia by European institutions, we ceased all operational involvement in the business carried out by the subsidiary SLK Cement, although it continues to maintain control from an accounting standards perspective, in accordance with IFRS 10 - Consolidated Financial Statements.

6. Segment information

The chief operating decision-maker identifies with the executive directors, who review the group's internal reporting in order to assess performance and allocate resources. Management has determined the operating segments based on those reports.

The executive directors consider the business by geographical area of operations and from a product perspective they assess in a combined way the performance of "cement" and "ready-mix concrete and aggregates", since the two businesses, vertically integrated, are strictly interdependent. In particular, ready-mix concrete represents essentially a distribution channel for cement and does not require, for the chief operating decision-maker, evidence of separate results. The executive directors assess the performance of the reportable operating segments based, as main reference, on a measure of operating profit. Net finance costs and income tax expense are not included in the result of each operating segment reviewed by the executive directors.

The measurement of economic performance and of capital expenditures by segment is consistent with the one of the financial statements.

The segment named Central Europe consists of Germany, Luxembourg and the Netherlands; Eastern Europe covers Poland, the Czech Republic, Slovakia, Ukraine and Russia.

2022

(thousands of euro)	Italy	Central Europe	Eastern Europe	United States of America	Unallo-cated items and adjust-ments	Total	Mexico 100%	Brazil 100%
Segment revenue	726,216	993,507	691,930	1,591,803	(7,937)	**3,995,519**	768,506	400,213
Intersegment revenue	(7,895)	(42)	-	-	7,937	**-**	-	-
Revenue from external customers	718,321	993,465	691,930	1,591,803	-	**3,995,519**	768,506	400,213
Ebitda	81,964	127,471	176,788	497,453	-	**883,676**	305,776	118,686
Depreciation	(39,348)	(45,981)	(36,611)	(135,561)	(1,751)	**(259,252)**	(29,607)	(36,293)
Impairment charges	(229)	(3,987)	(123,268)	(3,097)	-	**(130,581)**	(271)	-
Write-ups	933	-	-	-	-	**933**	6,490	-
Operating profit (EBIT)	43,320	77,503	16,909	358,795	(1,751)	**494,776**	282,389	82,392
Equity earnings	116,250	1,023	278	-	-	**117,551**	(96)	-
Purchase of intangible and tangible assets	25,910	68,648	48,840	123,340	-	**266,738**	32,012	21,786
Purchase of equity investments	561	3,527	-	-	-	**4,088**	-	-

2021

(thousands of euro)	Italy	Central Europe	Eastern Europe	United States of America	Unallo-cated items and adjust-ments	Total	Mexico 100%	Brazil 100%
Segment revenue	604,690	880,370	637,375	1,329,603	(6,487)	**3,445,551**	661,552	253,426
Intersegment revenue	(6,197)	(116)	(174)	-	6,487	**-**	-	-
Revenue from external customers	598,493	880,254	637,201	1,329,603	-	**3,445,551**	661,552	253,426
Ebitda	41,091	144,206	154,531	455,118	(302)	**794,644**	282,678	80,914
Depreciation	(42,689)	(46,123)	(38,187)	(115,272)	(1,722)	**(243,993)**	(26,541)	(15,249)
Impairment charges	(4,587)	(179)	(177)	(112)	-	**(5,055)**	-	-
Operating profit (EBIT)	(6,185)	97,904	116,167	339,734	(2,024)	**545,596**	256,137	65,665
Equity earnings	102,879	1,941	220	1,016	-	**106,056**	13	-
Purchase of intangible and tangible assets	23,815	49,845	45,495	95,292	-	**214,447**	17,165	12,830
Purchase of equity investments	2,645	600	-	-	-	**3,245**	-	164,126

Revenues from external customers are derived from the sale of cement or concrete and aggregates and are detailed as follows:

2022

(thousands of euro)	Italy	Central Europe	Eastern Europe	United States of America	Total	Mexico 100%	Brazil 100%
Cement	430,421	550,775	500,870	1,264,651	**2,746,717**	708,391	400,213
Concrete and aggregates	287,900	442,690	191,060	327,152	**1,248,802**	60,115	-
					3,995,519	**768,506**	**400,213**

2021

(thousands of euro)	Italy	Central Europe	Eastern Europe	United States of America	Total	Mexico 100%	Brazil 100%
Cement	350,615	480,091	462,924	1,046,405	**2,340,035**	590,960	253,426
Concrete and aggregates	247,878	400,163	174,277	283,198	**1,105,516**	70,592	-
					3,445,551	**661,552**	**253,426**

The group is domiciled in Italy. Revenue from external customers realized in Italy is €667,525 thousand (2021: €558,058 thousand) and total revenue from external customers in foreign countries is € 3,327,994 thousand (2021: €2,887,793 thousand).

The total of non-current assets, other than financial instruments, deferred tax assets and defined benefit plan assets (there are no rights arising under insurance contracts), located in Italy is €1,163,214 thousand (2021: €1,103,428 thousand), while the total of such non-current assets located in foreign countries is €3,549,865 thousand (2021: €3,482,698 thousand).

As for the dependence degree from major clients, no customers exist generating revenues equal or greater than 10% of Buzzi Unicem consolidated net sales.

7. Net sales

Revenues from contracts with customers derive from goods transferred at a specific time and services, whose breakdown by markets is illustrated below:

	2022		
(thousands of euro)	Cement	Concrete and aggregates	Total
Italy	430,421	287,900	**718,321**
Germany	429,195	339,414	**768,609**
Luxembourg and the Netherlands	121,580	103,276	**224,856**
Poland	94,987	45,666	**140,653**
Czech Republic and Slovakia	59,128	141,983	**201,111**
Russia	290,400	-	**290,400**
Ukraine	56,355	3,411	**59,766**
United States of America	1,264,651	327,152	**1,591,803**
	2,746,717	**1,248,802**	**3,995,519**

	2021		
(thousands of euro)	Cement	Concrete and aggregates	Total
Italy	350,615	247,878	**598,493**
Germany	372,909	307,913	**680,822**
Luxembourg and the Netherlands	107,182	92,250	**199,432**
Poland	88,831	37,327	**126,158**
Czech Republic and Slovakia	49,847	126,754	**176,601**
Russia	207,397	-	**207,397**
Ukraine	116,849	10,196	**127,045**
United States of America	1,046,405	283,198	**1,329,603**
	2,340,035	**1,105,516**	**3,445,551**

The 16% increase compared to 2021 is due to favorable market trends for 9.6%, and favorable foreign currency effects for 6.4%.

As regards the cement sector, the economic commitment towards the group arises at the time of delivery of the material and the payment is due within 30-120 days from the delivery date. The same pattern applies to the ready-mix concrete sector. However, in the cement sector, some contracts provide customers with the right to a premium, when a certain purchase volume is achieved.

8. Other operating income

This line item consists of income arising both from the ordinary and the non-recurring course of business that is not attributable to core sales of goods and rendering of services.

(thousands of euro)	**2022**	**2021**
Recovery of expenses	8,963	6,388
Indemnity for damages	3,635	451
Revenue from leased properties	7,539	8,131
Gains on disposal of property, plant and equipment	8,384	11,147
Capital grants	606	610
Release of provisions	1,893	19,265
Internal work capitalized	2,266	1,628
Other	21,458	26,027
	54,744	**73,647**

The caption indemnity for damages mainly refers to a reimbursement of €1,781 thousand for damage to a barge that sank in the United States and €656 thousand for damage caused by third parties maneuvering by the Augusta (Siracusa) jetty.

The caption gains on disposal of property, plant and equipment includes amounts related to the sale of certain land, buildings and other assets located mainly in Germany (€2,682 thousand), Italy (€1,514 thousand), United States (€2,549 thousand) and Czech Republic (€1,428 thousand).

In 2021, the caption release of provisions included €17,717 thousand related to amounts set aside for the restoration of quarries, following a review of recultivation and restoration costs, mainly in Germany.

The caption other includes, among others, the sale of Energy Efficiency Certificates (EEC) in Italy for €3,177 thousand, as well as the proceeds from the concession of certain silos for the storage of fly ash in the United States for €1,205 thousand.

9. Raw materials, supplies and consumables

(thousands of euro)	2022	2021
Raw materials, supplies and consumables	872,715	745,971
Finished goods and merchandise	98,630	80,644
Electricity	332,881	239,359
Fuels	319,217	200,861
Emission rights	43,203	41,175
Other goods	31,692	26,967
	1,698,338	**1,334,977**

From the second half of 2021, and for the whole of 2022, significant increases in the price of raw materials and energy goods, especially electricity and fossil fuels, caused a general step up of the production and distribution costs.

The caption electricity includes the reduction on the cost of power, recognized in Italy to energy-intensive companies in the amount of €37,972 thousand (note 29).

The caption emission rights includes the provisions for the shortage of CO_2 allowances in Germany (€18,566 thousand), Poland (€9,622 thousand), Luxembourg (€6,546 thousand) and the Czech Republic (€8,469 thousand), measured on an accrual basis.

10. Services

(thousands of euro)	2022	2021
Transportation	552,075	492,710
Maintenance and contractual services	166,964	139,838
Insurance	15,357	18,121
Legal and professional consultancy	16,449	12,686
Operating leases of property and machinery	14,146	11,785
Travel	5,877	3,468
Other	115,916	103,058
	886,784	**781,666**

The rise in services, especially transportation, was mainly due to the significant increase in diesel fuel for vehicles, rail, barges, concrete mixers; in fact this is a cost element deeply affecting the distribution and logistics of our products. Maintenance also reflects the effects of the inflationary wave that hit the industry, causing significant increases in the cost of materials, spare parts and of contract work associated with them.

The caption operating leases of property and machinery includes the leasing payments that fall within the exemptions envisaged by IFRS 16, i.e. short-term contracts for €4,272 thousand, low-value assets for €884 thousand and variable amounts, which cannot be determined a priori and are generally based on the quantities produced, for €120 thousand. The caption also includes leases of quarry land and rents outside the scope of the new IFRS 16 standard for €8,870 thousand.

11. Staff costs

(thousands of euro)	2022	2021
Salaries and wages	417,237	383,401
Social security contributions and defined contribution plans	127,129	115,116
Employee severance indemnities and defined benefit plans	12,173	11,588
Other long-term benefits	(430)	211
Other	3,876	3,019
	559,985	**513,335**

The increase of the line item was influenced by the exchange rate effect for €29,947 thousand, mainly arising from the strengthening of the US dollar and Russian ruble.

The caption other long-term benefits includes a gain due to the increase in the rates used to discount pension plans in Germany.

The average number of employees is the following:

(number)	2022	2021
White collar and executives	3,656	3,690
Blue collar and supervisors	5,959	6,086
	9,615	**9,776**

12. Other operating expenses

Other operating expenses, related to both the ordinary and the non-recurring course of business, are composed as follows:

(thousands of euro)	2022	2021
Write-down of receivables	1,987	854
Provisions for liabilities and charges	14,027	17,163
Association dues	7,339	6,588
Indirect taxes and duties	37,176	32,624
Losses on disposal of property, plant and equipment	1,278	1,836
Other	24,194	14,374
	86,001	**73,439**

The write-down of receivables is netted by releases in the specific allowance for €1,065 thousand (2021: €1,129 thousand) and it is primarily related to bad debt in Italy and Russia.

Provisions for liabilities and charges include €6,406 thousand related to quarry restoration (2021: €11,014 thousand, please refer to note 39).

The caption other includes €9,068 thousand referring to a property tax assessment issued by the municipality of Guidonia Montecelio, near Rome (note 49).

13. Depreciation, amortization and impairment charges

(thousands of euro)	2022	2021
Intangible assets	4,745	6,773
Right-of-use assets	25,061	24,425
Property, plant and equipment	229,446	212,795
Impairment losses of non-current assets	129,648	5,055
	388,900	**249,048**

The impairment losses include €122,478 thousand related to the goodwill of the Russia CGU, as a result of the impairment test performed in the first six months' financial statements, following the conflict in Ukraine (note 19). The caption also includes €3,824 thousand related to plants and land in Germany, €3,033 thousand to sundry assets of the Stockertown (PA) plant, and a write-up of the former grinding unit in Manfredonia (Foggia), following the finalization of the plant sale agreement (€870 thousand).

14. Equity in earnings of associates and joint ventures

The line item includes the share of profit (loss) of investments accounted for under the equity method and possible write-downs, set out in detail below:

(thousands of euro)	2022	2021
Associates		
Société des Ciments de Hadjar Soud EPE SpA	(374)	920
Société des Ciments de Sour El Ghozlane EPE SpA	1,915	(3,333)
Laterlite SpA	4,156	4,654
Salonit Anhovo Gradbeni Materiali dd	6,749	3,148
Other associates	605	2,478
	13,051	**7,867**
Joint ventures		
Corporación Moctezuma, SAB de CV	70,412	63,862
Nacional Cimentos Participações SA (formerly BCPAR SA)	31,278	31,837
Other joint ventures	2,810	2,490
	104,500	**98,189**
	117,551	**106,056**

15. Gains on disposal of investments

These are non-recurring revenues, mainly arising from the sale of the investment in the associate Nord Est Logistica Srl.

In 2021, the capital gain mainly arose from the sale of 100% of Cimalux Société Immobilière Sàrl, owner of a building plot in the city-state of Luxembourg.

16. Finance revenues and Finance costs

(thousands of euro)	2022	2021
Finance revenues		
Interest income on liquid assets	20,340	8,301
Interest income on plan assets of employee benefits	8,779	6,733
Changes in the fair value of derivative instruments	4,084	11,007
Discount unwinding on liabilities	16,110	-
Foreign exchange gains	68,418	33,824
Dividend income	147	138
Other	5,316	3,437
	123,194	**63,440**
Finance costs		
Interest expense on bank borrowings	(15,081)	(13,278)
Interest expense on senior notes and bonds	(11,730)	(11,510)
Interest expense on employee benefits	(14,852)	(12,641)
Interest expense on lease liabilities	(2,073)	(2,179)
Changes in the fair value of derivative instruments	(677)	-
Discount unwinding on liabilities	-	(2,195)
Foreign exchange losses	(92,550)	(52,793)
Other	(9,359)	(3,244)
	(146,322)	**(97,840)**
Net finance costs	**(23,128)**	**(34,400)**

The decrease in net finance costs compared to the previous period was essentially due to higher interest income accrued on liquid assets, following the increase in interest rates in Europe and the United States. In addition, there was a favorable change in the net balance of non-cash items, in particular the discounting effect of liabilities related to the quarry restoration provision (note 39), again as a result of the increase in interest rates.

The balance of exchange rate losses includes realized losses on the translation of cash held in rubles, immediately after the outbreak of the conflict in Ukraine (€12,468 thousand).

17. Income tax expense

(thousands of euro)	2022	2021
Current tax	131,446	111,928
Deferred tax	557	(2,839)
Tax relating to prior years	(1,486)	(16,137)
	130,517	**92,952**

The increase in current tax is mainly due to the higher taxable income generated in the geographic areas of activity where operating conditions were more favorable, in particular the United States and Germany.

Tax relating to prior years includes income or charges resulting from the settlement, or probable settlement, with tax authorities of the claims that arose during tax audits and from the review or supplement of income tax returns referring to prior periods. In 2021, the caption included the benefit deriving from greater accelerated depreciation in the United States, following the review of the taxable useful life of some plant and equipment (€15,437 thousand).

The reconciliation of income tax computed at the theoretical tax rate applicable in Italy to income tax expense recorded in the consolidated income statement, is the following:

(thousands of euro)	2022	2021
Profit before tax	589,296	635,252
Italian income tax rate (IRES)	24.00%	24.00%
Theoretical income tax expense	**141,431**	**152,460**
Effect of permanent differences	(4,355)	(24,926)
Tax relating to prior years	(1,486)	(16,137)
Difference in foreign tax rate	4,914	(851)
Effect of rate changes on deferred income tax	(5,553)	(1,708)
Adjustments to deferred income tax	33	(7,793)
Italian regional income tax on production activities (IRAP)	744	230
Other differences	(5,211)	(8,323)
Income tax expense	**130,517**	**92,952**

The higher tax rate in 2022, equal to 22% of profit before tax (2021: 15%), is mainly influenced by the unfavorable change in tax relating to prior years, illustrated above, and the posting of some significant cost items that are not tax deductible (impairment of goodwill related to Russia CGU).

18. Earnings per share

Basic

Basic earnings per share is calculated by dividing net profit attributable to owners of the company by the weighted average number of shares outstanding during the period and excluding treasury shares

		2022	2021
Net profit attributable to owners of the company	thousands of euro	458,786	541,903
Average number of shares outstanding		186,377,503	192,131,838
Basic earnings per share	euro	2.462	2.820

Diluted

Diluted earnings per share is calculated by adjusting the earnings and weighted average number of shares for the effects of dilutive options and other potential dilutive shares. At the balance sheet date there were no dilutive equity instruments outstanding and therefore basic and diluted earnings are the same.

19. Goodwill and Other intangible assets

		Other intangible assets			
(thousands of euro)	Goodwill	Industrial patents, licenses and similar rights	Assets in progress and advances	Other	Total
At 1 January 2021					
Cost/deemed cost	812,812	80,535	1,275	31,984	113,794
Accumulated depreciation and write-downs	(209,209)	(47,507)	-	(5,569)	(53,076)
Net book amount	**603,603**	**33,028**	**1,275**	**26,415**	**60,718**
Year ended 31 December 2021					
Opening net book amount	603,603	33,028	1,275	26,415	60,718
Exchange differences	5,186	2,158	45	-	2,203
Additions	-	1,943	1,146	-	3,089
Amortization and impairment charges	-	(5,072)	-	(1,701)	(6,773)
Reclassifications	-	780	(598)	-	182
Closing net book amount	**608,789**	**32,837**	**1,868**	**24,714**	**59,419**
At 31 December 2021					
Cost/deemed cost	817,960	87,023	1,868	31,984	120,875
Accumulated depreciation and write-downs	(209,171)	(54,186)	-	(7,270)	(61,456)
Net book amount	**608,789**	**32,837**	**1,868**	**24,714**	**59,419**
Year ended 31 December 2022					
Opening net book amount	608,789	32,837	1,868	24,714	59,419
Exchange differences	23,173	1,792	(68)	-	1,724
Additions	-	695	727	-	1,422
Amortization and impairment charges	(122,478)	(3,108)	-	(1,636)	(4,744)
Reclassifications	-	1,187	(1,505)	-	(318)
Closing net book amount	**509,484**	**33,403**	**1,022**	**23,078**	**57,503**
At 31 December 2022					
Cost/deemed cost	766,072	87,383	1,022	31,138	119,543
Amortization and impairment charges	(256,588)	(53,980)	-	(8,060)	(62,040)
Net book amount	**509,484**	**33,403**	**1,022**	**23,078**	**57,503**

At 31 December 2022, the column industrial patents, licenses and similar rights is made up of industrial licenses (€26,312 thousand), application software for plant and office automation (€3,085 thousand), mining rights (€3,959 thousand), industrial patents (€47 thousand).

The column other essentially includes the customer list resulting from the business combination Testi Cementi Srl, Borgo Cementi Srl and Arquata Cementi Srl, which took place on 1 July 2019, for €22,248 thousand.

The decrease in goodwill refers to the write-down of €122,478 thousand, related to the Russia CGU, recorded as a consequence of the worsening economic prospects in the country and the sharp increase in the related cost of capital (WACC). Translation differences mainly relate to Russia, before write-down, (favorable impact of €21,333 thousand), United States (favorable impact of €1,960 thousand) and Poland (unfavorable impact of €120 thousand).

Goodwill and impairment test
Goodwill at 31 December 2022 amounts to €509,484 and is broken-down as follows:

(thousands of euro)	**2022**	**2021**
Italy (Cement sector)	76,114	76,114
United States of America	40,839	38,879
Germany	129,995	129,995
Luxembourg	69,104	69,104
Poland	87,488	87,608
Czech Republic/Slovakia	105,944	105,944
Russia	-	101,145
	509,484	**608,789**

For the purpose of impairment testing, the cash generating units ("CGUs") to which goodwill has been allocated are consistent with the management strategic vision and have been identified by country of operations, considering in a combined way the performance of cement and ready-mix concrete, since the two businesses, vertically integrated, are strictly interdependent. An exception is made for Italy where, considering both the corporate structure (two separate legal entities) and the organizational structure, two CGUs have been identified (cement and ready-mix concrete). The other CGUs correspond to the markets of presence, that are Germany, Luxembourg, the Netherlands, the Czech Republic/Slovakia, Poland, Ukraine, Russia and United States of America.

The recoverable amount of the CGUs, to which goodwill and intangible assets with indefinite useful lives have been allocated, is determined on the basis of their value in use, defined as the discounted value of the expected future cash flows at a rate that incorporates the risks associated with the particular cash-generating units as at the valuation date.

The key assumptions used for the calculation primarily concern:

- *estimation of cash flows:*

The cash flow estimates for each single CGU is based on 5-year plans approved by the board of directors. The management approach in determining the plans is based on sustainable and reasonable assumptions, which ensure consistency among prospective and historical flows and external information. The cash flow used is net of theoretical income tax, changes in working capital and capital expenditures.

Management's estimates were based on experience but, in line with the assumptions of the various industry members, in identifying the evolution of the current scenario they

considered both the uncertainties associated with market variables and the prospects arising from the national investment policies included in the European Recovery Fund plan, as well as the efforts required to gradually achieve the goal of carbon neutrality (for more details see the section "Impact of climate change", note 4).
The consolidated assumptions for future cash flows include an estimate of the expenses to be incurred for the purchase of CO_2 emission rights, whose cost is based on the information currently available, and the efforts to mitigate or offset such costs in the short to medium term.

The long-term objectives depend, instead, on various external factors, difficult to control or foresee, which may require significant investments, whose extent, currently, cannot be estimated yet. Therefore, given the actual estimation difficulty, these investments were not included in the assumptions for the future cash flows of the various CGUs. The whole of the assessments carried out led to the decision to use the most probable scenario, leaving the appropriate considerations on possible alternative scenarios to the specific sensitivity analyses.

- *terminal value:*

The terminal value is calculated assuming that, at the end of the projection period, the CGU generates a constant cash flow (perpetual). The annual rate of perpetual growth (g) to deduce the terminal value is based on the long-term growth expected for the industry in the country of operation. The development of the cement and ready-mix concrete business, especially, is strictly linked to average per capita consumption, population growth and GDP of the respective country (or where the asset is used). Such parameters are reflected on the (g) factor, which has been determined for each market as follows:

(in %)	ITA	GER	NLD	CZE	POL	UKR	LUX	RUS	USA
g									
31 December 2022	**0.59%**	**1.32%**	**1.30%**	**2.59%**	**2.30%**	**10.49%**	**2.83%**	**4.93%**	**1.48%**
31 December 2021	1.60%	1.98%	1.80%	3.18%	3.32%	5.68%	3.20%	4.44%	2.46%

- *discount rate:*

The discount rate represents the return expected by the company's lenders and shareholders to invest their capitals in the business; it is calculated as the weighted average between the equity cost and the cost of debt increased by the country-specific risk (WACC). The discount rates, after tax, applied to the main CGUs are as follows:

(in %)	ITA	GER	NLD	CZE	POL	UKR	LUX	RUS	USA
WACC									
31 December 2022	**9.46%**	**5.90%**	**6.03%**	**7.14%**	**7.54%**	**32.26%**	**5.98%**	**21.57%**	**7.55%**
31 December 2021	6.69%	4.54%	4.62%	5.29%	5.52%	14.90%	4.58%	9.32%	6.24%

The year 2022 was characterized by a sharp increase in the WACC, due to the interest rate rises decided by the central banks to offset inflationary pressures from the evolution of the post-pandemic macroeconomic framework and the geopolitical situation of the Russia-Ukraine conflict.

Where present, the assessment has encompassed also the fair value of the owned raw material reserves, of some investment properties and of banked emission allowances. The comparison of the recoverable amount thus obtained with the carrying amount of the various CGUs showed no indicators that goodwill may be impaired, with the exception of the impairment loss referred to above for Russia CGU.

The sensitivity analysis was performed on the recoverable amount of the different CGUs, in order to verify the effects of reasonably possible changes, if any, in the key assumptions. Specifically, we reasoned upon changes in the cost of money (and consequently WACC discount rate) and net operating cash flow. In general, we can assert that only in the event of a significant cash flow decrease or an increase of the discount rate by some percentage points, the recoverable amount would come out lower than the carrying amount at the balance sheet date and that some CGUs are more sensitive to changes in the above assumptions.

A further sensitivity analysis was prepared by assessing the possible impacts related to the conflict in Ukraine, in particular by acting on the growth rate 'g'; this exercise did not reveal any indicators that the assets of the Ukraine would be impaired.

20. Right-of-use assets and Lease liabilities

(thousands of euro)	Land and buildings	Plant and machinery	Industrial and commercial equipment	Other	Total
At 1 January 2021					
Cost/deemed cost	35,759	18,343	62,009	17,133	133,244
Accumulated depreciation and write-downs	(9,797)	(4,287)	(23,323)	(8,112)	(45,519)
Net book amount	**25,962**	**14,056**	**38,686**	**9,021**	**87,725**
Year ended 31 December 2021					
Opening net book amount	25,962	14,056	38,686	9,021	87,725
Exchange differences	492	73	2,842	154	3,561
Additions and other	6,203	1,130	2,492	3,625	13,450
Extinctions	(1,415)	-	(2)	(267)	(1,684)
Depreciation and impairment charges	(5,382)	(2,875)	(11,145)	(5,023)	(24,425)
Closing net book amount	**25,860**	**12,384**	**32,873**	**7,510**	**78,627**
At 31 December 2021					
Cost/deemed cost	39,122	19,602	67,363	17,743	143,830
Accumulated depreciation and write-downs	(13,262)	(7,218)	(34,490)	(10,233)	(65,203)
Net book amount	**25,860**	**12,384**	**32,873**	**7,510**	**78,627**
Year ended 31 December 2022					
Opening net book amount	25,860	12,384	32,873	7,510	78,627
Exchange differences	318	35	2,023	97	2,473
Additions and other	5,194	620	14,063	5,118	24,995
Extinctions	(1,540)	(1,354)	-	(121)	(3,015)
Depreciation and impairment charges	(5,869)	(2,455)	(12,140)	(4,597)	(25,061)
Reclassifications	-	-	(393)	-	(393)
Closing net book amount	**23,963**	**9,230**	**36,426**	**8,007**	**77,626**
At 31 December 2022					
Cost/deemed cost	40,809	16,221	83,110	20,052	160,192
Accumulated depreciation and write-downs	(16,846)	(6,991)	(46,684)	(12,045)	(82,566)
Net book amount	**23,963**	**9,230**	**36,426**	**8,007**	**77,626**

Lease liabilities recorded in the balance sheet at 31 December 2022 amount to €78,392 thousand. During the period 2022, the financial effect due to modification of the terms, mainly for extension and termination options, was an increase in lease liabilities and right-of-use assets of € 2,882 thousand.

The following schedule breaks down the present value of lease obligations at the balance sheet date:

(thousands of euro)	**2022**	**2021**
Within 6 months	11,003	10,625
Between 6 and 12 months	9,257	11,825
Between 1 and 5 years	44,867	43,529
Over 5 years	13,265	12,286
	78,392	**78,265**

Set out below is a breakdown of cash outflows for leases:

(thousands of euro)	**2022**	**2021**
Short-term lease, low value and variable components	5,276	4,993
Interest amount	2,073	2,179
Principal amount	24,525	23,283
	31,874	**30,455**

21. Property, plant and equipment

(thousands of euro)	Land and buildings	Plant and machinery	Industrial and commercial equipment	Assets in progress and advances	Other	Total
At 1 January 2021						
Cost/deemed cost	2,745,254	4,846,098	412,079	162,972	135,887	8,302,290
Accumulated depreciation and write-downs	(1,130,264)	(3,825,143)	(307,168)	(29,716)	(100,594)	(5,392,885)
Net book amount	**1,614,990**	**1,020,955**	**104,911**	**133,256**	**35,293**	**2,909,405**
Year ended 31 December 2021						
Opening net book amount	1,614,990	1,020,955	104,911	133,256	35,293	2,909,405
Exchange differences	104,266	47,900	6,616	6,212	2,525	167,519
Additions	20,576	63,208	33,177	101,212	3,002	221,175
Change in scope of consolidation	-	-	(2)	2,682	-	2,680
Disposals and other	(2,310)	(255)	(415)	(142)	(54)	(3,176)
Depreciation and impairment charges	(42,749)	(143,259)	(22,747)	(245)	(8,557)	(217,557)
Reclassifications	4,395	56,066	6,056	(76,807)	6,906	(3,384)
Closing net book amount	**1,699,168**	**1,044,615**	**127,596**	**166,168**	**39,115**	**3,076,662**
At 31 December 2021						
Cost/deemed cost	2,896,648	5,055,262	453,045	172,450	147,581	8,724,986
Accumulated depreciation and write-downs	(1,197,480)	(4,010,647)	(325,449)	(6,282)	(108,466)	(5,648,324)
Net book amount	**1,699,168**	**1,044,615**	**127,596**	**166,168**	**39,115**	**3,076,662**
Year ended 31 December 2022						
Opening net book amount	1,699,168	1,044,615	127,596	166,168	39,115	3,076,662
Exchange differences	80,562	32,881	5,021	6,322	1,455	126,241
Additions	28,404	90,340	31,064	122,490	3,678	275,976
Disposals and other	(1,883)	(822)	(863)	(94)	(3)	(3,665)
Depreciation and impairment charges	(46,706)	(147,789)	(28,319)	(3,884)	(9,919)	(236,617)
Reclassifications	52,942	48,759	9,657	(118,087)	8,256	1,527
Closing net book amount	**1,812,487**	**1,067,984**	**144,156**	**172,915**	**42,582**	**3,240,124**
At 31 December 2022						
Cost/deemed cost	3,110,000	5,199,692	487,654	179,798	158,480	9,135,624
Accumulated depreciation and write-downs	(1,297,513)	(4,131,708)	(343,498)	(6,883)	(115,898)	(5,895,500)
Net book amount	**1,812,487**	**1,067,984**	**144,156**	**172,915**	**42,582**	**3,240,124**

Total additions of €275,976 thousand in 2022 are described in the business review, to which reference is made. In the cash flow statement and in the business review capital expenditures are reported according to the actual outflows (€265,305 thousand).

During the year the group capitalized borrowing costs amounting to €333 thousand on qualifying assets (2021: €266 thousand). Borrowing costs were capitalized at the rate of 2.25% (2021: 1.96%).

Positive exchange differences of €126,241 thousand reflect basically the strengthening in the dollar/euro and ruble/euro exchange rate. In 2021 the trend in the exchange rate of the dollar, the ruble and the hryvnia had given rise to overall positive exchange differences of €167,519 thousand, as well.

Real guarantees on assets of consolidated companies are represented by liens on industrial and commercial equipment for the amount of €39 thousand at 31 December 2022 (2021: €104 thousand).

During 2006, Buzzi Unicem USA entered into a series of agreements with Jefferson County, Missouri, related to the Selma plant. Legal title to the plant property was transferred to the County and at the same time the County then leased the same property back to the company, under a sale and lease-back contract. Correspondingly Buzzi Unicem USA has subscribed bonds issued by the County, with the same maturity for an amount of €88,126 thousand at 31 December 2022. Our subsidiary is responsible for all operation and maintenance of the leased assets and has the option to purchase the personal property at the conclusion of the lease term for $1. Should Buzzi Unicem USA not exercise the option, it shall be obliged to pay 125% of the personal property taxes that would normally apply. The plan provides for 60% abatement of personal property taxes for approximately 15 years. Since there was not and there will not be any financial flow between the parties, in compliance with the applicable accounting standards and based on the economic substance of the agreement, the company has not recorded the bond and the financial liability for the capital lease in its consolidated financial statements. The company recorded the original cost of the personal property within property, plant and equipment and is depreciating the property over the appropriate useful lives. The carrying amount at the balance sheet date is €24,735 thousand.

During 2015, Buzzi Unicem USA entered into a series of agreements similar to the above cited ones with Bel Aire County, Kansas, regarding a new distribution terminal in the city of Wichita. The carrying amount of the assets at the balance sheet date is €4,739 thousand.

22. Investment property

It is accounted for using the cost model and it amounts to €17,561 thousand, showing a decrease of €136 thousand versus last year.
The fair value at the balance sheet date, based on internal and external independent appraisals, amounts to €22,480 thousand (2021: €23,461 thousand) and is classifiable as level 2, because based on observable data. The measurement of the market value built on internal appraisals was conducted using comparative estimates based on recent transactions for similar property, where available, and comparing them with information coming from real estate agents operating in the same area and with other publicly available databases.

(thousands of euro)	2022	2021
At 1 January		
Cost/deemed cost	21,335	23,396
Accumulated depreciation and write-downs	(3,638)	(4,634)
Net book amount	**17,697**	**18,762**
Exchange differences	62	79
Additions	11	122
Disposals and other	(209)	(1,101)
Depreciation and impairment charges	-	(293)
Reclassifications	-	128
At 31 December	**17,561**	**17,697**
Cost/deemed cost	20,252	21,335
Accumulated depreciation and write-downs	(2,691)	(3,638)
Net book amount	**17,561**	**17,697**

23. Investments in associates and joint ventures

The amounts recognized in the balance sheet are as follows:

(thousands of euro)	2022	2021
Associates valued by the equity method	168,805	156,351
Joint ventures valued by the equity method	369,189	306,053
	537,994	**462,404**

The net increase of €75,590 thousand was affected: upwards by the share of the investee's earnings for €117,551 thousand and by exchange differences for €38,347 thousand; downwards by dividends received for €75,751 thousand.

When events or changes in circumstances indicate that there may be an impairment, the book value of the investments in associates is being tested accordingly. Management measured the value in use as the group's share in the present value of estimated future cash flows. In some cases, the assessment has encompassed the fair value of property owned by the associates. The comparison between the recoverable amount resulting from the calculation and the carrying amount did not provide any evidence of a permanent loss on these assets, except for the investment in Société des Ciments de Sour El Ghozlane EPE SpA, for which the recoverable amount obtained using the expected cash flows method was lower than the carrying amount; therefore, an impairment loss of €1,559 thousand was recognized.

Furthermore, a sensitivity analysis was performed on the recoverable amount of the investments, to verify the effects of reasonably possible changes, if any, in the key assumptions. Specifically, we reasoned upon changes in the cost of money (and consequently WACC discount rate) and net operating cash flow.
In general, we can assert that only in the event of a meaningful cash flow decrease or an increase of the discount rate by some percentage points, the recoverable amount would come out lower than the carrying amount at the balance sheet date, despite the presence of some investments more sensitive to changes in the above assumptions.

23.1 Interests in associates

Set out below are the associates which, in the opinion of the directors, are material to the group at the balance sheet date. These associates have a share capital consisting solely of ordinary shares, which are held directly or indirectly by the company. The country of incorporation is also their principal place of business.

Nature of investments in associates:

Name of the entity	Nature of the relationship	Place of business/country of incorporation	% of ownership interest	Book value	Measurement method
Société des Ciments de Hadjar Soud EPE SpA	Note 1	Algeria	35.0	40,037	Equity
Société des Ciments de Sour El Ghozlane EPE SpA	Note 1	Algeria	35.0	36,102	Equity
Salonit Anhovo Gradbeni Materiali dd	Note 2	Slovenia	25.0	36,039	Equity

Note 1
Buzzi Unicem holds a 35% interest in Société des Ciments de Sour El Ghozlane EPE SpA and Société des Ciments de Hadjar Soud EPE SpA, two full-cycle cement plants operating in Algeria. They are strategic partnerships for the group presence in emerging markets, where the remaining majority stake is owned by the Algerian State through the industrial holding GICA.

Note 2
The group holds a 25% stake in Salonit Anhovo Gradbeni Materiali dd, a company owning a modern cement plant in Slovenia, located a few kilometers away from the Italian border. Salonit Anhovo is the main actor in the Slovenian market and it also exports regularly a meaningful portion of its production to the Italian regions across the border.

The three above cited associate companies are private and there is no quoted market price available for their shares. There are no contingent liabilities relating to the group’s interest in the same associates.

Summarized financial information for associates

Set out below is the summarized financial information for the associates that are material to the group, all valued by the equity method:

	Société des Ciments de Hadjar Soud EPE SpA		Société des Ciments de Sour El Ghozlane EPE SpA		Salonit Anhovo Gradbeni Materiali dd	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Summarized balance sheet						
Current assets						
Cash and cash equivalents	16,114	12,591	25,730	23,465	10,960	13,247
Other current assets (excluding cash)	30,808	29,470	34,554	32,835	54,047	38,331
	46,922	**42,061**	**60,284**	**56,300**	**65,007**	**51,578**
Non-current assets	**84,756**	**87,787**	**57,841**	**49,637**	**110,627**	**111,852**
Current liabilities						
Financial liabilities (excluding trade and other payables and provisions)	-	-	-	-	2,163	3,723
Other current liabilities (including trade and other payables and provisions)	9,898	11,849	9,055	7,158	22,674	23,268
	9,898	**11,849**	**9,055**	**7,158**	**24,837**	**26,991**
Non-current liabilities						
Financial liabilities (excluding other payables and provisions)	-	-	-	-	5,027	7,151
Other non-current liabilities (including other payables and provisions)	7,388	7,924	5,921	5,480	1,930	2,627
	7,388	**7,924**	**5,921**	**5,480**	**6,957**	**9,778**
Summarized income statement						
Net sales	29,672	33,243	34,017	28,437	132,800	97,955
Depreciation, amortization and impairment charges	(13,075)	(8,393)	(7,046)	(19,331)	(10,040)	(9,165)
Finance revenues	1,664	971	922	677	1,200	424
Finance costs	(16)	(52)	(2)	(9)	(479)	(352)
Income tax expense	(381)	(1,048)	(1,842)	(1,242)	(2,708)	(1,249)
Profit for the year	**(1,067)**	**2,629**	**5,472**	**1,468**	**27,193**	**12,792**
Other comprehensive income	8,166	3,204	7,267	2,569	-	-
Total comprehensive income	**7,099**	**5,833**	**12,739**	**4,037**	**27,193**	**12,792**

The above information reflects the amounts presented in the financial statements of each associate (not Buzzi Unicem's share of those amounts), adjusted for possible differences in the accounting policies between the group and the same associates.

Reconciliation of summarized financial information

Set out below is a reconciliation between the financial information (presented above) and the carrying amount of the interests in associate companies that are material to the group:

	Société des Ciments de Hadjar Soud EPE SpA		Société des Ciments de Sour El Ghozlane EPE SpA		Salonit Anhovo Gradbeni Materiali dd	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Opening net assets at 1 January	110,075	106,965	93,298	92,173	126,661	123,883
Profit for the year	(1,067)	2,629	5,472	1,468	27,193	12,792
Dividends declared	(2,782)	(2,723)	(2,888)	(2,911)	(10,014)	(10,014)
Exchange differences	8,166	3,204	7,267	2,568	-	-
Closing net assets	**114,392**	**110,075**	**103,149**	**93,298**	**143,840**	**126,661**
Ownership share (35%; 35%; 25%)	40,037	38,526	36,102	32,654	35,960	31,665
Goodwill	-	-	-	-	79	129
Carrying value	**40,037**	**38,526**	**36,102**	**32,654**	**36,039**	**31,794**

23.2 Interests in joint ventures

Set out below are the two joint ventures 31 December 2022 which, in the opinion of the directors, are material to the group at the balance sheet date:

Name of the entity	**Place of business/ country of incorporation**	**% of ownership interest**	**Book value**	**Measurement method**
Corporación Moctezuma, SAB de CV	Mexico	33.0	182,715	Equity
Nacional Cimentos Participações SA (formerly BCPAR SA)	Brazil	50.0	175,508	Equity

Corporación Moctezuma, SAB de CV has a share capital consisting solely of ordinary shares, which is held indirectly by the company. Corporación Moctezuma is the holding of a group which manufactures and sells cement, ready-mix concrete and natural aggregates. It is a strategic investment for the group, whose operations are located in Mexico.

At the balance sheet date 31 December 2022, the fair value of our interest in Corporación Moctezuma, SAB de CV, which is listed on the Bolsa Mexicana de Valores, was €836,458 thousand (2021: €845,721 thousand).

Nacional Cimentos Participações SA (formerly BCPAR SA) has a share capital consisting solely of ordinary shares, which is held directly by the company. Nacional Cimentos Participações SA is the holding company of a group that manufactures and sells cement, by operating seven plants in Brazil, one in the north-eastern region of the country (state of Paraíba) and the others in the south-eastern area (state of Minas Gerais). In this case too, the investment is strategic for the group.

Summarized financial information for joint ventures

Set out below is the summarized financial information for the joint ventures that are material to the group, both valued by the equity method:

	Corporación Moctezuma, SAB de CV		Nacional Cimentos Participações SA (formerly BCPAR SA)	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**
Summarized balance sheet				
Current assets				
Cash and cash equivalents	240,359	183,262	115,527	95,996
Other current assets (excluding cash)	97,315	87,118	122,495	85,045
	337,674	**270,380**	**238,022**	**181,041**
Non-current assets	**340,078**	**293,716**	**523,457**	**474,588**
Current liabilities				
Financial liabilities (excluding trade and other payables and provisions)	2,482	2,806	68,190	14,849
Other current liabilities (including trade and other payables and provisions)	128,660	82,313	41,214	27,686
	131,142	**85,119**	**109,404**	**42,535**
Non-current liabilities				
Financial liabilities (excluding other payables and provisions)	3,507	1,186	279,092	313,695
Other non-current liabilities (including other payables and provisions)	6,072	15,661	17,911	17,148
	9,579	**16,847**	**297,004**	**330,843**
Summarized income statement				
Net sales	768,506	661,552	400,213	253,426
Depreciation, amortization and impairment charges	(23,388)	(27,737)	(37,010)	(15,690)
Finance revenues	21,191	14,082	30,068	34,950
Finance costs	(15,197)	(9,106)	(23,207)	(38,272)
Income tax expense	(81,272)	(70,822)	(23,535)	5,019
Profit for the year	**207,015**	**189,108**	**62,557**	**63,675**
Other comprehensive income	49,171	24,742	24,234	2,174
Total comprehensive income	**256,186**	**213,850**	**86,791**	**65,849**

The above information reflects the amounts presented in the financial statements of each joint venture (not Buzzi Unicem's share of those amounts), adjusted for possible differences in the accounting policies between the group and the same joint ventures.

Reconciliation of summarized financial information

Set out below is a reconciliation between the financial information (presented above) and the carrying amount of the interests in joint ventures that are material to the group:

	Corporación Moctezuma, SAB de CV		Nacional Cimentos Participações SA (formerly BCPAR SA)	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**
Opening net assets at 1 January	462,264	398,220	229,692	173,146
Profit for the year	207,015	189,108	62,557	63,675
Actuarial gains (losses) on post-employment benefits	129	1,761	-	-
Dividends declared	(162,490)	(145,340)	(28,325)	(9,295)
Exchange differences	49,042	22,981	24,234	2,041
Other	(18,770)	(4,466)	-	125
Closing net assets	**537,190**	**462,264**	**288,157**	**229,692**
% of ownership (33%; 50%)	182,715	156,107	144,079	114,846
Goodwill	-	-	31,429	28,128
Carrying value	**182,715**	**156,107**	**175,508**	**142,974**

24. Equity investments at fair value

The line item refers to investments in unconsolidated subsidiaries and in other companies, all of them unlisted.

(thousands of euro)	**Subsidiaries**	**Other**	**Total**
At 1 January 2022	908	11,314	12,222
Additions	-	60	60
Fair value changes	-	308	308
Write-downs	-	(2,067)	(2,067)
Disposals and other	-	72	72
At 31 December 2022	**908**	**9,687**	**10,595**

25. Derivative financial instruments

At 31 December 2022, the value of the derivative financial instrument relating to the put and call option on the remaining 50% of the capital of Nacional Cimentos Participações SA (formerly BCPAR SA), based on the calculation method agreed between the parties, corresponds to an asset of €11,031 thousand. It is defined as the difference between the exercise price of the option and the fair value of the ownership interest to be acquired. The change in the fair value of the derivative was taken through the income statement (note 16)

The notional principal amount and the fair value estimation of the outstanding derivative instruments are summarized as follows:

	2022		2021	
(thousands of euro)	**Notional**	**Fair value**	**Notional**	**Fair value**
Nacional Cimentos Participações SA (formerly BCPAR SA) takeover option	282,722	11,031	254,325	6,948

26. Other non-current assets

(thousands of euro)	**2022**	**2021**
Loans to third parties and leasing	2,074	2,376
Loans to associates and joint ventures	226,890	213,757
Loans to customers	9,830	9,306
Tax receivables	840	862
Non-current financial assets	-	19,907
Receivables from personnel	870	784
Guarantee deposits	12,959	13,493
Other	8,805	9,820
	262,268	**270,305**

Loans to third parties and leasing are mostly interest-bearing and adequately secured.

Loans to associates and joint ventures include the financing granted to Companhia Nacional de Cimento (CNC, a wholly-owned subsidiary of Nacional Cimentos Participações SA, formerly BCPAR SA), for the acquisition of the CRH group companies operating in Brazil that took place in 2021.

Loans to customers are granted to some major accounts in the United States; they bear interest at market rates, are adequately secured and are performing regularly.

In 2021, the caption non-current financial assets included investments entrusted to asset management firms, subscribed for an initial nominal value of €20,000 thousand and subsequently collected in the course of 2022.

Receivables from personnel include loans to employees equal to €348 thousand (2021: €335 thousand).

Guarantee deposits represent assets held in trust to secure the payment of benefits under certain pension plans in the United States for €11,948 thousand, besides insurance deposits.

The receivables included in this item expiring after more than five years amount to €20,718 thousand (2021: €20,243 thousand). The maximum exposure to credit risk is the carrying value of each class of receivable mentioned above.

27. Inventories

(thousands of euro)	2022	2021
Raw materials, supplies and consumables	424,476	320,429
Work in progress	110,283	69,962
Finished goods and merchandise	101,161	70,306
Advances	2,995	1,883
Emission rights	82,108	37,430
	721,023	**500,010**

Increases and decreases of the various categories depend on the trend in production and sales, on the price of the factors employed and remained in stock (mainly), as well as on changes in exchange rates used for the translation of foreign financial statements.

The amount shown is net of an allowance for obsolescence of €37,836 thousand (2021: €34,160 thousand).

28. Trade receivables

(thousands of euro)	2022	2021
Trade receivables	542,095	457,943
Less: Loss allowance	(14,626)	(15,479)
Trade receivables, net	**527,469**	**442,464**
Other trade receivables:		
From associates	14,158	13,239
From parent companies	48	32
	541,675	**455,735**

Trade receivables are non-interest bearing and generally have a maturity between 30 and 120 days.

The year-end balances from associates arise from normal and regular business transactions entered into with firms operating in the ready-mix concrete and cement segment.

The carrying amounts of net trade receivables are denominated in the following currencies:

(thousands of euro)	2022	2021
Euro	324,867	241,217
US Dollar	153,112	157,867
Russian Ruble	18,581	13,488
Czech Koruna	19,366	17,217
Polish Zloty	10,414	9,407
Other currencies	1,129	3,268
	527,469	**442,464**

Movements in the loss allowance for trade receivables during the year are as follows:

(thousands of euro)	2022	2021
At 1 January	15,479	22,692
Exchange differences	306	586
Change in scope of consolidation	-	(18)
Increase recognized in profit or loss	2,687	1,915
Receivables written off as uncollectible	(2,856)	(8,795)
Unused amounts reversed and other	(990)	(901)
At 31 December	**14,626**	**15,479**

The additions to the loss allowance for trade receivables are included among other operating expenses, net of related releases (note 12). Information about the exposure to credit risk can be found in note 3.1.

29. Other receivables

(thousands of euro)	2022	2021
Tax receivables	48,065	38,011
Receivables from social security institutions	166	208
Receivables from unconsolidated subsidiaries and associates	3,135	793
Loans to customers	73	72
Receivables from suppliers	15,276	6,623
Receivables from personnel	281	403
Current financial assets	2,442	1,427
Loans to third parties and leasing	394	282
Accrued interest income	2,150	1,280
Other accrued income and prepaid expenses	16,293	11,461
Other	11,073	14,033
	99,348	**74,593**

Tax receivables include income tax payments in advance (€21,106 thousand, of which €10,050 thousand for tax credits on electricity purchases in Italy) and the debit balance of periodic value added tax liquidation (€26,840 thousand); this caption also includes the amounts owed by the ultimate parent Fimedi SpA to the Italian companies that are member of the consolidated tax return for domestic income tax purposes.

Loans to customers represent the current portion of the interest-bearing lending granted in the United States (note 26).

Receivables from suppliers mainly include advances on the procurement of gas, electricity and other services. The increase is mainly related to down payments for power in Italy, where the exposure towards supplier has grown exponentially as a result of galloping inflation.

Prepaid expenses refer to goods or services to be received in the future.

The caption other decreases mainly thanks to the cash-in of the receivable related to the sale, in 2021, of investment property for an amount of €2,400 thousand.

30. Cash and cash equivalents

(thousands of euro)	2022	2021
Cash at banks and in hand	1,107,834	692,004
Short-term deposits	233,654	511,607
	1,341,488	**1,203,611**

Foreign operating companies hold about 35.8% of the balance of €1,341,488 thousand (77.9% in 2021). At the closing date, short-term deposits and securities earn interest at about 3.05% on average (1.02% in 2021), yield in euro is around 1.12%, in dollar 3.67% and in other currencies 7.18%. The average maturity of such deposits and securities is lower than 60 days.

The cash flows, the working capital and the available liquidity of the subsidiaries are handled locally but under a central finance function, to ensure an efficient and effective management of the resources generated and/or of the financial needs.
Cash and cash equivalents are denominated in the following currencies:

(thousands of euro)	2022	2021
Euro	608,659	185,792
US Dollar	612,666	790,985
Russian Ruble	69,838	132,055
Other currencies	50,325	94,779
	1,341,488	**1,203,611**

31. Assets held for sale

They mainly refer to land located in San Antonio, Texas (€2,931 thousand), some plant and machinery of the mothballed Travesio (Pordenone) facility (€1,235 thousand), and to the inactive grinding unit in Manfredonia (Foggia) (€870 thousand).

32. Share capital

At the balance sheet date the share capital of the company is composed as follows:

(number of shares)	2022	2021
Shares issued and fully paid		
Ordinary shares	192,626,154	192,626,154
	192,626,154	**192,626,154**
Share capital (thousands of euro)	123,637	123,637

The number of shares outstanding changed during 2022 as summarized below:

(number of shares)	2022
At 1 January 2022	
Shares issued	192,626,154
Less: Treasury shares	(494,316)
Outstanding at beginning of year	**192,131,838**
Year ended 31 December 2022	
Purchase of treasury shares	(7,000,000)
At 31 December 2022	
Shares issued	192,626,154
Less: Treasury shares	(7,494,316)
Outstanding at end of year	**185,131,838**

During the financial year, the company purchased no. 7,000,000 treasury shares, equal to 3.634% of the share capital, for a total consideration of €123,218 thousand, within the scope of the authorization resolved by the shareholders' meeting of 7 May 2021.

33. Share premium

It consists of the overall premium on shares issued over time. The line item amounts to €458,696 thousand as at 31 December 2022 and it is unchanged versus last year.

34. Other reserves

The line item encompasses several captions, which are listed and described here below:

(thousands of euro)	2022	2021
Exchange differences	(272,162)	(514,160)
Revaluation reserves	88,286	88,286
Merger surplus	249,177	249,177
Other	117,989	117,603
	183,290	**(59,094)**

The exchange differences reflect the exchange rate fluctuations that occurred starting from the first-time consolidation of financial statements denominated in foreign currencies. The net positive change of €241,998 thousand in the balance results from two opposing effects: an increase of €173,773 thousand due to the strengthening of the US dollar , €46,403 thousand of the Russian ruble, €15,612 thousand of the Brazilian real, €16,681 thousand of the Mexican peso and €5,396 thousand of the Algerian dinar; a decrease of €14,130 thousand due to the devaluation of the Ukrainian hryvnia, and €1,737 thousand of the other currencies in Eastern Europe.

35. Retained earnings

The line item contains both retained earnings and profit for the financial year attributable to owners of the company. It also includes the legal reserve from the statutory financial statements of Buzzi Unicem SpA, changes in shareholders' equity of consolidated companies pertaining to the parent company that took place after the first consolidation and the revaluation reserves accrued by the Mexican companies that used inflation accounting up to the year 2001.

During the year some transactions took place with non-controlling interests after the acquisition of control, the overall effect of which led to an increase in retained earnings of €1,224 thousand.

The changes in gains and losses generated by the actuarial valuations of liabilities for employee benefits, net of related deferred tax, in 2022 brought to an increase in retained earnings equal to €64,471 thousand.

36. Non-controlling interests

The balance refers to Cimalux SA for €3,376 thousand, Betonmortel Centrale Groningen (B.C.G.) BV for €1,387 thousand and other minor entities for the remainder.

Summarized financial information on subsidiaries with material non-controlling interests

Set out below is the summarized financial information for Cimalux SA before intercompany eliminations.

The company operates in the cement industry in Luxembourg. In the opinion of the directors, it is the only subsidiary with non-controlling interests that is material to the group.

Name of subsidiary	Place of business/country of incorporation	Non-controlling interests		Profit attributable to non-controlling interests		Equity attributable to non-controlling interests	
		2022	2021	2022	2021	2022	2021
Cimalux SA	Luxembourg	1.57%	1.57%	15	371	3,376	3,549

(thousands of euro)	2022	2021
Summarized balance sheet		
Non-current assets	88,487	86,168
Current assets	170,347	183,191
Non-current liabilities	16,098	21,465
Current liabilities	27,549	21,642
Net assets	**215,187**	**226,252**
Summarized income statement		
Net sales	123,680	108,971
Operating expenses	(116,700)	(94,869)
Depreciation, amortization and impairment charges	(7,714)	(7,291)
Finance revenues	3,127	19,078
Finance costs	(1,198)	(488)
Income tax expense	(180)	(1,717)
Profit for the year	**1,015**	**23,684**
Other comprehensive income	4,064	920
Total comprehensive income	**5,079**	**24,604**
Total comprehensive income attributable to non-controlling interests	**64**	**14**
Dividends paid to non-controlling interests	235	111
Summarized statement of cash flows		
Cash flows from operating activities		
Cash generated from operations	(7,528)	17,354
Interest paid	(10)	(5)
Income tax paid	(1,109)	(3,267)
Net cash generated from (used in) operating activities	**(8,647)**	**14,082**
Net cash generated from (used in) investing activities	**(9,080)**	**14,393**
Net cash generated from (used in) financing activities	**14,987**	**(27,505)**
Increase (decrease) in cash and cash equivalents	**(2,740)**	**970**
Cash and cash equivalents at beginning of year	**5,714**	**4,744**
Cash and cash equivalents at end of year	**2,974**	**5,714**

37. Debt and borrowings

(thousands of euro)	2022	2021
Long-term debt		
Senior notes and bonds	-	498,802
Unsecured term loans	608,150	489,149
	608,150	**987,951**
Current portion of long-term debt		
Senior notes and bonds	499,907	-
Unsecured term loans	94,121	136,635
	594,028	**136,635**
Short-term debt		
Bank debts	-	942
Accrued interest expense	12,544	11,534
	12,544	**12,476**

During 2022 the average interest rate on financial indebtedness was equal to 2.74% (2021: 2.05%).

The exposure of the group's borrowings to interest rate changes and the contractual re-pricing dates at the end of the reporting period are as follows:

(thousands of euro)	2022	2021
Within 6 months	512,656	42,565
Between 6 and 12 months	93,916	106,546
Between 1 and 5 years	607,153	986,953
Over 5 years	997	998
	1,214,722	**1,137,062**

Senior notes and bonds
At the balance sheet date the caption includes only the so-called eurobond "Buzzi Unicem €500,000,000 - 2.125% Notes due 2023" issued in April 2016, for a nominal amount of €500 million with a 7-year maturity. The notes, placed with institutional investors and listed on the Luxembourg Stock Exchange, have a minimum denomination of €100,000 and pay a fixed annual coupon of 2.125%. The issue price was equal to €99.397 of par value and the notes were repaid in advance in a single installment on 28 January 2023. This bond is carried at amortized cost, corresponding to an interest rate of 2.312% and to an amount of €499,907 thousand in the balance sheet.

Term loans and other borrowings
The change for the year is essentially stemming from an increase of €200,145 thousand for new borrowings and a decrease of €136,792 thousand due to principal repayments.

As at 31 December 2022 the group has undrawn committed facilities for €194,302 thousand (2021: €203,552 thousand), thereof €187,320 thousand available to the

company, at floating rate with maturity in 2023, and the remaining €6,982 thousand to Dyckerhoff GmbH and its subsidiaries, always at floating rate, with maturity in 2023.
In respect to interest rate and currency, the gross indebtedness at 31 December 2022 can be shortly split as follows: 24% floating and 76% fix; 18% dollar-denominated and 82% euro-denominated.

The following table summarizes the carrying amount of the borrowings compared with their fair value:

	2022		2021	
(thousands of euro)	Carrying amount	Fair value	Carrying amount	Fair value
Floating rate borrowings				
Unsecured term loans	293,099	294,926	88,190	90,170
Fix rate borrowings				
Senior notes and bonds	499,907	490,855	498,802	504,895
Unsecured term loans	409,172	402,579	538,536	569,495
	1,202,178	**1,188,360**	**1,125,528**	**1,164,560**

The fair values are based on the cash flows discounted at current borrowing rates for the group and are within level 2 of the specific hierarchy.

	2022		2021	
(thousands of euro)	Notional	Fair value	Notional	Fair value
Nacional Cimentos Participações SA (formerly BCPAR SA) takeover option	282,722	11,031	254,325	6,948

38. Employee benefits

The line item includes post-employment benefits and other long-term benefits.

Post-employment benefits

They consist of pension plans, life insurance and healthcare plans, employee severance indemnities and other. Group companies provide post-employment benefits for their employees either directly or indirectly, by paying contributions to independently administered funds. The way these benefits are provided varies according to the legal, fiscal and economic conditions of each country in which Buzzi Unicem operates. The obligations relate both to active employees and to retirees. Liabilities for contributions accrued but not yet paid are included within other payables.

Defined contribution plans

They primarily relate to public plans and/or supplemental private plans in Germany, the Netherlands, Luxembourg, Poland, the Czech Republic and the United States of America. Defined contribution plans for post-employment benefits exist also in Italy (employee severance indemnities or TFR for companies with at least 50 employees, after 31 December 2006). Expenses associated with defined contribution plans are charged to the income statement together with social security contributions under staff costs. No further commitments on the part of the employer exist over and above the payment of contributions to public plans or private insurance policies.

Defined benefit plans

Defined benefit plans may be unfunded, or they may be wholly or partly funded by the contributions paid by the company and, sometimes, by its employees to an entity or fund legally separate from the employer by which the benefits are paid.

Italy

The obligation for employee severance indemnities (TFR) is considered a defined benefit plan and is unfunded. It consists of the residual obligation that was required until 31 December 2006 under Italian legislation to be paid by companies with more than 50 employees, or accrued over the employee's working life for other companies. The obligation is remeasured every year, according to national employment laws. The provision is settled upon retirement or resignation and may be partially paid in advance if certain conditions are met. The level of benefits provided depends on the date of hire, length of service and salary. The commitments that amount to €12,026 thousand (2021: €14,877 thousand), have a weighted average duration of approximately 7 years.

Germany and Luxembourg

These pension arrangements provide for retirement benefits, early-retirement benefits, widows/widowers' benefits, orphans' allowances and generally also include long-term disability benefits. The level of benefits provided depends on the date of hire, salary and length of service. The commitments have a weighted average duration of approximately 12 years.

The pension obligations in Germany totaling €199,632 thousand (2021: €273,032 thousand) are partly funded through a contractual trust agreement. The value of trust assets is €61,694 thousand (2021: €74,705 thousand) and reduces the amount to be recognized as a liability.

In Germany the defined benefit pension plans were closed as of 31 December 2017. For employees, who joined the company after 31 December 2017, a newly defined contribution plan was established. All other pension plans in Germany and Luxembourg are financed only by provisions. At the same time, starting from 1 January 2018, the possibility of deferred compensation for the benefit of individual supplemental pension was changed to defined contribution plans. Obligations for post-employment medical costs in Germany are unfunded and contain a commitment on the part of the employer to reimburse 50% of private healthcare insurance premiums to former employees and co-insured spouses and/or to widows/widowers. This healthcare plan was closed in 1993 and has a remaining weighted average duration of approximately 5 years.

Netherlands
In the Netherlands, commitments for retirement total €739 thousand (2021: €1,116 thousand) and relate to both the so-called "excedent" pension plan, which is supplementary to the sector pension fund, and the pension plan for employees not registered into such fund. The obligations are funded by contributions to an insurance company. The value of plan assets by the insurance policy amounts to €564 thousand (2021: €799 thousand) and reduces the amount to be recognized as a liability. The commitments have a weighted average duration of approximately 18 years.

United States of America
Pension plans are mainly funded, while healthcare obligations are unfunded in nature. Pension arrangements provide for retirement and early-retirement benefits, surviving dependents' benefits (spouse or, alternatively, children) as well as long-term disability benefits. Benefits to white collar employees or their surviving dependents are linked to salary and length of service. For blue-collar workers, or their surviving dependents, pension benefits are determined on the basis of the salary, length of service as well as a fixed, periodically re-negotiated multiple. A major part of pension obligations, meaning €240,480 thousand (2021: 307,899 thousand), is covered by an external pension fund; its fair value of €217,251 thousand (2021: €277,450 thousand) reduces the amount to be recognized as a liability. Since 2021, following the recognition of actuarial gains, the fair value of a specific fund resulted above the value of the obligation, determining a surplus recognized as an asset and as of the balance sheet date amounts to €4,435 thousand. These pension plans have been closed since 1 January 2011 and the weighted average duration is approximately 12 years. There are also unfunded obligations for a small group of individuals, whose weighted average duration is between 8 and 12 years.

Healthcare plans cover the portion of medical costs that is not covered by state plans or the costs of a private supplementary health insurance policy. The allowances paid to employees and, if relevant, their spouses depend on the length of service and do not include surviving dependents' benefits. These commitments have a weighted average duration of approximately 9 years.

Russia
The outstanding pension plans guarantee retirement services and benefits to former employees such as health care and other forms of indemnities. The level of the various benefits provided depends on the salary and employment conditions at the company. The liabilities amount to €940 thousand (2021: €1,168 thousand) and are funded by specific accounting provisions. The pension plan was closed as of 31 December 2018.

Other long-term benefits

The group grants also other long-term benefits to its employees, which include those generally paid when the employee attains a specific seniority. In this case the valuation reflects the probability that payment is required and the length of time for which payment is likely to be made. These schemes are unfunded and the amount of the obligation is calculated on an actuarial basis, in accordance with the projected unit credit method. Actuarial gains and losses arising from this obligation are recognized in the income statement. In the United States the group sponsors a deferred compensation plan for certain employees. Amounts deferred are funded into a trust and the earnings in the trust accrued to the benefit of the participants. The asset and liability are reported at fair value (the net asset value of each investment fund).

The obligations for employee benefits are analyzed as follows:

(thousands of euro)	2022	2021
By category		
Post-employment benefits:		
Pension plans	180,805	259,305
Healthcare plans	67,329	81,249
Employee severance indemnities	12,026	14,877
Other long-term benefits	8,075	9,414
	268,235	**364,845**
By geographical area		
Italy	13,370	16,508
Germany, Luxembourg, Netherlands	152,795	219,028
United States of America	100,047	125,056
Other countries	2,023	4,253
	268,235	**364,845**

Defined benefit plan assets, amounting to €4,435 thousand, shown separately under assets, relate to a specific situation in the United States, i.e. a positive difference between the fair value of plan assets and the obligation to a certain category of employees.

The amounts recognized in the balance sheet for post-employment benefits are determined as follows:

	Pension Plans		Healthcare plans		Employee severance indemnities	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Present value of funded obligations	437,723	577,370	-	-	-	-
Fair value of plan assets	(279,807)	(352,954)	-	-	-	-
	157,916	**224,416**	**-**	**-**	**-**	**-**
Present value of unfunded obligations	18,454	27,984	67,329	81,249	12,026	14,877
Defined benefit plan assets	4,435	6,905	-	-	-	-
Liability in the balance sheet	**180,805**	**259,305**	**67,329**	**81,249**	**12,026**	**14,877**

The movement in the defined benefit obligation for post-employment benefits is illustrated below:

	Pension Plans		Healthcare plans		Employee severance indemnities	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
At 1 January	605,354	622,181	81,249	77,228	14,877	16,738
Current service cost	8,999	9,522	2,068	1,959	-	-
Past service cost	89	(701)	-	-	-	-
Losses (gains) from plan changes	(1)	(1)	-	-	-	-
Other costs	28	(32)	-	-	-	12
	9,115	**8,788**	**2,068**	**1,959**	**-**	**12**
Interest expense	13,276	10,790	2,251	1,790	140	56
(Gains) losses from changes in demographic assumptions	(3,914)	(3,969)	48	402	-	(4)
(Gains) losses from changes in financial assumptions	(162,377)	(31,970)	(15,742)	(1,160)	(2,243)	49
Experience (gains) losses	5,337	2,444	(1,358)	770	1,211	99
	(160,954)	**(33,495)**	**(17,052)**	**12**	**(1,032)**	**144**
Employee contributions	17	14	612	539	-	-
Benefit payments	(31,475)	(28,208)	(6,914)	(6,415)	(1,880)	(2,315)
Settlements	-	(58)	-	-	-	-
Exchange differences	20,353	25,346	5,115	6,136	-	-
Change in scope of consolidation	-	(6)	-	-	-	-
Other changes	491	2	-	-	(79)	242
At 31 December	**456,177**	**605,354**	**67,329**	**81,249**	**12,026**	**14,877**

The present value of the defined benefit obligations is composed of the following at the end of each reporting period:

	Pension Plans		Healthcare plans	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**
Active members	151,680	230,796	12,885	13,933
Deferred members	25,873	38,424	19,001	25,427
Pensioners	278,624	336,134	35,443	41,889
At 31 December	**456,177**	**605,354**	**67,329**	**81,249**

Changes in the fair value of plan assets are as follows:

	Pension Plans	
(thousands of euro)	**2022**	**2021**
At 1 January	352,954	280,423
Interest income	9,231	6,733
Employer contributions	6,226	5,102
Employee contributions	17	14
Benefit payments	(17,525)	(14,949)
Additions	-	40,000
Settlements	(634)	(266)
Actuarial gains (losses)	(88,965)	14,842
Exchange differences	18,120	21,055
Other differences	383	-
At 31 December	**279,807**	**352,954**

Plan assets are comprised as follows:

	Germany		United States of America	
(thousands of euro)	**2022**	**2021**	**2022**	**2021**
Cash and cash equivalents	**1,566**	**12,249**	**6,560**	**7,763**
Equity instruments	**20,639**	**27,651**	**-**	**-**
Euro equities	15,320	18,936	-	-
Europe ex Euro equities	5,319	8,715	-	-
Debt instruments	**26,454**	**27,130**	**42,293**	**62,856**
Euro corporate investment grade	13,308	7,781	-	-
Euro corporate unrated	381	93	-	-
Euro non-investment grade companies	1,627	1,567	-	-
Euro sovereigns investment grade	6,017	12,613	-	-
Euro sovereigns non-investment grade	371	-	-	-
Dollar corporate investment grade	1,511	1,405	-	-
Dollar sovereign investment grade	152	223	42,293	62,856
Other corporate investment grade	1,645	1,783	-	-
Other investment grade sovereigns	1,442	1,665	-	-
Derivative financial instruments	**137**	**(67)**	**-**	**-**
Equity derivatives	187	(67)	-	-
Currency derivatives	164	-	-	-
Debt derivatives	(214)	-	-	-
Investment funds	**12,898**	**7,741**	**168,397**	**206,832**
Dollar corporate bonds	-	-	34,779	40,380
Dollar sovereign bonds	-	-	47,610	48,004
Euro indexed equities	7,078	1,609	-	-
Dollar indexed equities	3,497	4,380	48,015	67,586
Other indexed equities	-	-	38,102	50,943
Different euros	2,323	1,752	-	-
Dollar sundries	-	-	(109)	(81)
	61,694	**74,704**	**217,250**	**277,451**

The fair values stated above exclusively relate to quoted prices in active markets (level 1).

For the assets of the Netherlands, a breakdown is not available since these are investments made by the insurance company, that is the insurance contract underwritten in exchange for the pension benefits. In 2022, the fair value of these investments amounted to €564 thousand (2021: €799 thousand and at the balance sheet date 76% of the Dutch pension plan is funded.

Plan assets in Germany are administered by a trust fund. The asset allocation strategy is aimed at optimizing returns on fund assets while limiting losses. An investment committee composed of fiduciary and company representatives supervises the administration and investment strategy of the funds related to the invested assets. At the balance sheet date, 31% of the pension plans is funded. Independent of its payment obligations to beneficiaries, Buzzi Unicem has the right to receive the dividends resulting from the annual results of the funds. The contribution to the trusts does not directly depend on the market values of the underlying obligations. Buzzi Unicem has the option to fund benefit obligations associated with the trusts out of the company's current cash flow. The conditions linked to these commitments have been continually adapted over the past years; benefits paid to beneficiaries will therefore decline further. The assets of these funds are comprised in the table showing the fair value of plan assets.

In the United States, plan assets are administered by a trust fund. The asset allocation strategy is aimed at optimizing returns on fund assets and is subject to specific risk management policies. Three members of local management form the "benefit committee", which is responsible for maintaining an investment policy, managing the investment of the plan assets and ensuring compliance of the investments with legislation, documentation and with the investment policy. Regular meetings of the "benefit committee" occur with a consultancy firm to whom the day-to-day investment responsibilities for plan assets have been assigned. All pension payments to beneficiaries are made from those plan assets. For funded pension obligations, full coverage through plan assets is to be achieved in the long-term; for the short to medium-term, coverage must not fall short of 80% in order to avoid legally prescribed benefit curtailments. At the balance sheet date, some pension plans are fully funded, while others are 81% funded. Healthcare plan benefits are exclusively funded by provisions, therefore annual payments to beneficiaries are made out of the company's operating cash flow.

Expected contributions to post-employment benefits plans (including reimbursement rights on the part of the German entity) for 2022 amount to €12,146 thousand.

The maturity analysis for the same type of benefits is as follows:

(thousands of euro)	**Pension Plans**	**Healthcare plans**	**Employee severance indemnities**
Year 2023	30,884	6,284	702
Year 2024	31,253	6,424	1,167
Year 2025	29,657	6,022	1,008
Year 2026	29,603	5,996	1,151
Year 2027	29,911	6,000	850
Year 2028-2032	149,856	28,237	5,338
	301,164	**58,963**	**10,216**

In addition to forecasts of mortality and employee turnover based on current statistical insight, post-employment benefits and other long-term benefits are computed according to the following main actuarial assumptions, identified on the basis of independent sources that are constant over time:

	2022						2021					
(in %)	ITA	GER	LUX	NLD	USA	RUS	ITA	GER	LUX	NLD	USA	RUS
Pension plans discount rate	3.8	3.7	3.7	4.3	5.5	9.9	1.0	1.1	1.1	1.3	3.0	8.4
Salary growth rate	3.2	2.8	2.8	2.5	4.2	6.8	2.7	2.8	2.8	2.5	4.2	4.1
Pension growth rate	-	2.3	-	-	-	4.8	-	1.8	-	-	-	4.1
Healthcare discount rate	-	-	-	-	5.4	-	-	-	-	-	2.7	-
Medical cost growth rate	-	2.3	-	-	6.5	-	-	1.8	-	-	5.8	-

The assumptions listed above reflect the current economic period, characterized by rising interest rates in the major economies in which the group operates, and/or realistic expectations in each territory. The discount rate adopted is the rate applicable at the end of the reporting period for high quality fixed-interest securities or for corporate bonds with a term corresponding to the respective obligations for employee benefits.

The sensitivity of the defined benefit obligation to changes in the main assumptions is presented here below:

(thousands of euro)		Pension Plans	Healthcare plans	Employee severance indemnities
Salary growth rate				
	Increase 1%	4,926	-	-
	Decrease 1%	(4,646)	-	-
Discount rate				
	Increase 1%	(47,342)	(4,991)	(213)
	Decrease 1%	58,290	5,798	218
Pension growth rate				
	Increase 1%	11,637	-	-
	Decrease 1%	(20,501)	-	-
Medical cost growth rate				
	Increase 1%	-	3,418	-
	Decrease 1%	-	(3,032)	-
Mortality				
	Increase 1%	11,320	175	-
	Decrease 1%	(11,310)	(160)	-

39. Provisions for liabilities and charges

(thousands of euro)	Environmental risks and restoration	Antitrust	Legal claims Tax risks	Other risks	Total
At 1 January 2022	71,712	6,832	6,451	66,047	151,042
Additional provisions	7,099	-	1,580	51,293	59,972
Discount unwinding	(16,172)	-	-	-	(16,172)
Unused amounts released	(1,633)	-	(373)	(1,774)	(3,780)
Used during the year	(4,509)	-	(1,859)	(47,941)	(54,309)
Exchange differences	638	(122)	236	1,191	1,943
Other changes	2,553	-	(301)	-	2,252
At 31 December 2022	**59,688**	**6,710**	**5,734**	**68,816**	**140,948**

Total provisions can be analyzed as follows:

(thousands of euro)	Environmental risks and restoration	Antitrust	Legal claims Tax risks	Other risks	Total
Non-current	58,531	-	2,729	17,696	78,956
Current	1,157	6,710	3,005	51,120	61,992
	59,688	**6,710**	**5,734**	**68,816**	**140,948**

The environmental risks and quarry restoration provision includes the obligations for site reclamation, which are applicable to the locations where the extraction of raw materials takes place and for the fulfillment of requirements concerning quarries, safety, health and environment. Movements during the period include a provision of €6,406 thousand and a decrease of €16,172 thousand relating to the discount effect, based on updated interest rates (notes 8 and 16).

The provision for tax risks amounts to €5,109 thousand and reflects the probable liabilities following assessments and disputes over indirect and property taxes.

The column other risks includes the provision for CO_2 emission rights for €44,613 thousand, which encompasses the liabilities deriving from emissions greater than the free allocations, to be fulfilled by purchasing the rights on the market. Changes during the period can be summarized as follows: an allowance of €44,618 thousand corresponding to the estimated deficit for 2022 and uses of €40,863 thousand matching the emission rights consumed in 2021 and surrendered to the competent authority.

Other risks include the amounts set aside by the individual consolidated entities in connection with miscellaneous contractual and commercial litigations and disputes, among which are restructuring costs for €4,100 thousand and workers compensation claims not covered by insurance for €17,578 thousand, such as indemnities paid to employees and compensation in case of accidents. The additions include €4,867 thousand for workers compensation claims not covered by insurance, against uses for the same reason of €4,897 thousand.

40. Deferred income tax assets and liabilities

Net deferred tax liability consists of deferred tax liabilities, net of deferred tax assets, which have been offset, where possible, by the individual consolidated companies.

The net balance may be analyzed as follows:

(thousands of euro)	2022	2021
Deferred income tax assets:		
To be recovered after more than 12 months	(162,731)	(174,600)
To be recovered within 12 months	(23,377)	(30,692)
	(186,108)	(205,292)
Deferred income tax liabilities:		
To be settled after more than 12 months	501,275	464,862
To be settled within 12 months	21,773	29,594
	523,048	494,456
Net deferred income tax liabilities	**336,940**	**289,164**

Temporary differences and carryforwards that give rise to deferred tax assets and liabilities are analyzed as follows:

(thousands of euro)	2022	2021
Deferred income tax assets related to:		
Provisions for liabilities and charges	(12,947)	(13,682)
Trade receivables	(1,900)	(3,277)
Employee benefits	(22,764)	(48,919)
Long-term debt	(6,142)	(4,724)
Property, plant and equipment	(4,882)	(7,042)
Inventories	(8,430)	(5,666)
Tax loss carryforwards (theoretical benefit)	(80,963)	(74,502)
Other	(82,701)	(70,761)
Total deferred income tax assets	**(220,729)**	**(228,573)**
Valuation allowances	34,621	23,281
Net deferred income tax assets	**(186,108)**	**(205,292)**
Deferred income tax liabilities related to:		
Accelerated depreciation	168,982	144,920
Employee benefits	49	47
Property, plant and equipment	313,680	313,726
Inventories	7,887	3,792
Gains on disposal of fixed assets	1,012	287
Financial assets	2,611	2,327
Other	28,827	29,357
Total deferred income tax liabilities	**523,048**	**494,456**
Net deferred income tax liabilities	**336,940**	**289,164**

The deferred tax liability related to property, plant and equipment refers mainly to the positive differential that in 1999, year of the acquisition, Dyckerhoff allocated to the raw material reserves of Lone Star Industries, following the business combination with this company.

The company recognizes deferred tax liabilities on undistributed profits of its associates.

Deferred tax assets on tax loss carryforwards were maintained within the limits of an updated judgment on their future utilization in the next five years.

The movement in deferred tax assets and liabilities during the year, taking into consideration the offsetting of balances within the same tax jurisdiction, is summarized in the following table:

(thousands of euro)	**2022**	**2021**
At 1 January	289,164	252,055
Income statement charge (credit)	557	(2,839)
Statement of comprehensive income charge (credit)	25,526	14,876
Exchange differences	21,693	25,072
At 31 December	**336,940**	**289,164**

41. Other non current liabilities

(thousands of euro)	**2022**	**2021**
Purchase of equity investments	2,785	2,712
Non-controlling interests in partnerships	1,660	1,503
Payables to personnel	317	241
Financial tax payables	95	210
Other	2,836	2,286
	7,693	**6,952**

The caption purchase of equity investments mainly refers to the business combination Seibel & Söhne.

Other non-current liabilities are all due within five years from the balance sheet date, except for the caption non-controlling interests in partnerships, whose maturity is indefinite. The carrying amount of the line item is deemed to approximate its fair value.

42. Trade payables

(thousands of euro)	**2022**	**2021**
Trade payables	322,775	292,023
Other trade payables:		
To associates	1,518	2,020
	324,293	**294,043**

43. Income tax payables

This item reflects current income tax liabilities, net of advances, withholdings and tax credits.

44. Other payables

(thousands of euro)	2022	2021
Advances	6,673	6,039
Purchase of equity investments	141	119
Payables to social security institutions	16,203	17,637
Payables to personnel	35,209	36,951
Payables to customers	9,920	11,249
Deferred interest income	20	38
Other accrued expenses and deferred income	9,261	7,843
Tax payables	16,926	13,641
Financial tax payables	14,452	4,968
Other	12,027	12,682
	120,832	**111,167**

Payables to customers are represented by contractual liabilities, namely short-term advances received following the sale of products and by the volume rebates settled in a separate transaction with the customer.

Deferred income relates to operating revenues pertaining to the following period.

The caption tax payables includes the credit balance of periodic value added tax for €5,494 thousand (2021: €3,961 thousand).

Financial tax payables mainly relate to the pending litigation with the municipality of Guidonia (Rome) regarding Italian property taxes (ICI and IMU) (note 49).

45. Cash generated from operations

(thousands of euro)	2022	2021
Profit before tax	**589,296**	**635,252**
Adjustments for:		
Depreciation, amortization and impairment charges	388,900	249,048
Equity in earnings of associates and joint ventures	(117,551)	(106,056)
Gains on disposal of fixed assets	(7,203)	(27,311)
Net change in provisions and employee benefits	(17,328)	(47,112)
Net finance costs	23,128	34,400
Other non-cash movements	1,759	(180)
Changes in operating assets and liabilities:		
Inventories	(220,449)	(16,714)
Trade and other receivables	(94,423)	(15,933)
Trade and other payables	29,306	46,982
Cash generated from operations	**575,435**	**752,376**

46. Financing activities

Changes to the items included in the financing activities of the cash flow statement are detailed as follows:

(thousands of euro)	Note	Beg balance	Cash: Proceeds	Cash: Repay-ment		Non-cash: Accruals	Non-cash: Exchange differen-ces	Non-cash: Fair value	Non-cash: Other	Ending balance
Long-term debt										
Senior notes and bonds	37	498,802	-	-		-	-	-	(498,802)	-
Unsecured term loans	37	489,149	200,145	(111)		-	7,369	200	(88,602)	608,150
		987,951	**200,145**	**(111)**		**-**	**7,369**	**200**	**(587,404)**	**608,150**
Current portion of long-term debt										
Senior notes and bonds	37	-	-	-		-	-	1,105	498,802	499,907
Unsecured term loans	37	136,635	-	(136,681)		-	5,454	111	88,602	94,121
		136,635	**-**	**(136,681)**		**-**	**5,454**	**1,216**	**587,404**	**594,028**
Total from Statement of Cash Flows		**-**	**200,145**	**(136,792)**		**-**	**-**	**-**	**-**	**-**
Short-term debt										
Bank debts	37	942	-	(942)		-	-	-	-	-
Accrued interest expense	37	11,534	-	(11,534)		12,544		-		12,544
		12,476	**-**	**(12,476)**		**12,544**	**-**	**-**	**-**	**12,544**
Total from Statement of Cash Flows		**-**	**-**	**68**		**-**	**-**	**-**	**-**	**-**
Lease liabilities										
Lease liabilities	20	55,815	21,461	-	474		963	474	(21,055)	58,132
Current portion of lease liabilities	20	22,450	1,368	(24,525)	1,645		97	(1,830)	21,055	20,260
		78,265	**22,829**	**(24,525)**		**-**	**1,060**	**(1,356)**	**-**	**78,392**
Total from Statement of Cash Flows		**-**	**-**	**(24,525)**		**-**	**-**	**-**	**-**	**-**
Non-current financial liabilities										
Others	41	6,361	-	(8,145)		-	13,553	-	(5,299)	6,470
Total from Statement of Cash Flows		**-**	**-**	**5,408**		**-**	**-**	**-**	**-**	**-**
Changes in ownership interests without loss of control		**-**	**-**	**(3)**		**-**	**-**	**-**	**-**	**-**
Dividends paid to owners of the company	**47**	**-**	**-**	**(73,351)**		**-**	**-**	**-**	**-**	**-**
Dividends paid to non-controlling interests		**-**	**-**	**(136)**		**-**	**-**	**-**	**-**	**-**

47. Dividends

Dividends declared by the shareholders' meeting in 2022 and 2021 were respectively €74,053 thousand (40 eurocent per share,) and €48,033 thousand (25 eurocent per share).

As for the year ended 31 December 2022 the board of directors is proposing to the Annual General Meeting of 12 May 2023 a dividend of 45 eurocents per share. Therefore, expected dividend distribution amounts to a total of €83,309 thousand. These financial statements do not reflect such payable to the shareholders.

48. Commitments

(thousands of euro)	2022	2021
Guarantees granted	34,601	30,965
Other commitments and guarantees	74,011	57,382
	108,612	**88,347**

Guarantees granted include commitments toward banks in favor of investee companies, including an amount of €29,111 thousand for loans granted to the associate Nacional Cimentos Participações SA (formerly BCPAR SA).

Capital expenditure contracted for at the balance sheet date to acquire property, plant and equipment amounts to €73,793 thousand (2021: €44,703 thousand). It can be basically traced back to different modernization projects in the United States (€27,508 thousand), Germany (€14,768 thousand), Italy (€17,110 thousand), Luxembourg (€3,626 thousand), Russia (€6,961 thousand), Ukraine (€453 thousand), the Czech Republic (€3,223 thousand) and Poland (€144 thousand).

The total of future minimum payments due on short-term operating lease contracts, to low-value assets and to other contracts outside the scope of IFRS 16 (mainly represented by leasing of quarry land and railcars). It can be broken down as follows:

(thousands of euro)	2022	2021
Within 1 year	3,612	2,887
Between 1 and 5 years	8,549	8,479
Over 5 years	32,427	32,701
	44,588	**44,067**

49. Legal claims and contingencies

Buzzi Unicem is exposed to legal risks, stemming from the variety and complexity of the norms and regulations that apply to the industrial operations of the group, particularly in the areas of environment, health, safety, product liability, taxation and competition. Consequently, there are claims arising in the normal course of business that are pending against the group. While it is not feasible to predict in a precise way the outcome of any case, it is the opinion of management that the ultimate dispositions will not have a material adverse effect on the group’s financial condition. Instead, when it is likely that an outflow of resources is required to settle obligations and the amount can be reliably estimated, the group recognizes specific provisions for this purpose.

Fiscal

In 2016 the company was subject to audit by the Revenue Service for the year 2012 and controls on subsequent years (from 2013 to 2016). The Revenue Service followed-up in December 2017, December 2018 and July 2019 by notifying assessment notices relating to the 2012, 2013, 2014, 2015 and 2016 financial years, containing remarks on the corporate income tax (IRES) and the regional tax on production activities (IRAP). The greater taxable amount contested in the notices of assessment mainly refers to the failure to charge a royalty to Buzzi Unicem's foreign subsidiaries in the USA and Germany for the use of the corporate logo. For IRES and IRAP purposes, the higher taxable amount established for the five years totals approximately €77.6 million. For IRES purposes, for all five years the declared tax loss is higher than the disputed amounts, therefore no higher IRES, interest or penalties are due. On the other hand, for IRAP purposes, the assessment entails a request, only for the years 2012, 2013 and 2014, for higher taxes and related penalties as well as interest for approximately €2.0 million. For the years 2015 and 2016 the declared negative taxable amount is higher than the disputed amounts, therefore for these financial years no higher IRAP, interests and penalties are due. The company has filed an appeal against all the assessment notices (years 2012, 2013, 2014, 2015 and 2016) and requested the initiation of the 'mutual agreement procedure' (MAP) provided for in the treaties in force with the Countries involved, considering that the defense elements are well-grounded and sound and the risk of losing is remote.
Following the conclusion of the ‘mutual agreement procedure’ (MAP) with the United States for all the years subject to the dispute, the Revenue Service on 26 November 2021 communicated that the competent Italian and US authorities agreed to redetermine the adjustments by the Italian tax administration to a significantly more favorable extent than the remarks made during the assessment, with a partial recognition of this adjustment by the US authority. The company decided to accept this agreement, but its execution with the United States will be carried out at the conclusion of the mutual agreement procedure still in place on the same issues with Germany. The company, therefore, set aside the higher tax deriving from the acceptance of the agreement with the United States (approximately €185 thousand) to provision for risks and charges, while maintaining the registration, made in previous years, of the receivable for the sums paid on a provisional basis pending judgment, until the final conclusion of the dispute.

Between 2015 and 2022 the municipality of Guidonia Montecelio (Rome) notified Buzzi Unicem some notices of assessment related to higher ICI/IMU and TASI, besides penalties and interests, regarding the years from 2008 to 2021 for a total amount of approximately €29 million. The municipality bases its request on the assumption that the land belonging to Buzzi Unicem which is used to quarry raw materials can be comparable, for the purpose of local property taxes, to land for development. Considering this request as incorrect, the company challenged all the tax deeds received before the competent Tax Courts.At present, with reference to the different years contested, the Regional Tax Court of Rome and the Regional Tax Court of Lazio have filed several unfavorable judgments to the company and also some favorable ones. However, considering that it has valid reasons, Buzzi Unicem challenged, or intends to challenge, all the sentences with a negative outcome. With reference to some of the years for which Buzzi Unicem was losing at the outcome of the first or the second instance judgment, the municipality ordered the provisional payment of an amount of approximately €4.9 million, which the company paid in full, as well as of an amount of approximately €3.1 million which was partly not due as a result of the judgment at second instance. In any case, Buzzi Unicem will request the reimbursement of the amounts paid on a provisional basis which, following the respective appeal proceedings, were not or will not be due. The company fully recorded the higher taxes in the balance sheet, with the related interest and penalties, for all the years in which the appeals were rejected at first instance. The company, finally, did record in the balance sheet the amounts requested always by the Municipality of Guidonia Montecelio (Rome) thru eight more executive notices of assessment for IMU (from 2017 to 2021) and TASI (from 2017 to 2019) most recently notified (for a total of approximately €7.6 million).

Antitrust

As regards the antitrust fine of €59.8 million imposed on 7 August 2017 on Buzzi Unicem and other cement companies for having created an alleged anti-competitive agreement, which lasted from June 2011 until January 2016, it should be pointed out that, on 22 December 2020, the European Court of Human Rights (ECHR) declared as admissible the appeal for the request for compensation presented on 22 May 2020. We are waiting for the assessment on its merits by the Court. The full amount of the fine has been paid. In relation to the actions sanctioned by the Italian Antitrust Authority, Buzzi Unicem has received several letters requesting compensation, to which it has always replied rejecting all charges. To date, the company has also received acts of summons to compensate for damages as a result of the alleged overcharge paid following the agreement sanctioned by the Italian Antitrust Authority, for a total amount of approximately €27 million, in addition to two summons (relating to a plurality of plaintiffs) for a total of approximately €87 million, of which about €10 million directly attributable to Buzzi Unicem. The company, as mentioned, believes that it has acted in full compliance with antitrust regulations and has therefore appealed before the court to prove its non-involvement in any violation.

Against the decision of the Antitrust Authority of Poland concluded by imposing sanctions on 6 producers, including the subsidiary Dyckerhoff Polska, for an amount of approximately €15 million, an appeal was filed before the Regional Court of Warsaw which ruled in December 2013 reducing the fine to approximately €12.3 million. Dyckerhoff Polska appealed against the recalculation of the penalty. The Court of Appeal, following a procedure of consultation with the Polish Constitutional Court, summarized the proceeding in January 2018 and in the hearing of 27 March 2018 decided to further reduce the fine to approximately €7.5 million, which have been fully paid. The company, once the motivations for the judgment had been acquired, decided to challenge the decision before the Supreme Court. On 29 July 2020, the Supreme Court cancelled the decision of the Court of Appeal and referred the case back to the same

Court for a reconsideration of the sanction. As a result of this decision, the penalty paid was reimbursed to the company, but based on the motivations of the Supreme Court, it is likely that a new penalty for a similar amount will be imposed. The company has therefore recorded a provision equal to the reimbursed penalty in the financial statements. On 21 May 2021, the Court of Appeal decided to refer the proceedings to the Warsaw Regional Court for further investigation. In the context of this antitrust proceeding concerning the cement sector, the Polish company Thomas Beton on 13 March 2019 notified a claim for compensation to our subsidiary Dyckerhoff Polska and to six more Polish cement producers, for a total inclusive amount referring to all seven cement producers of €14.4 million, plus interest and costs of the proceeding. The Regional Court in Warsaw dismissed the claim as time-barred and Thomas Beton did not appeal the judgment. The company is defending itself in the proceeding and does not expect a negative impact on the financial statements.

Environmental

As regards the measures adopted for the remediation of the Augusta (Siracusa) roadstead, the land areas and the respective underneath aquifers, Buzzi Unicem is involved in a number of proceedings before the Regional Administrative Court (TAR) of Sicily – Catania division – and the Administrative Justice Council of Sicily (CGARS) against the Ministry for Environment, Land and Sea Protection and various public and private entities. The TAR of Sicily, Catania, with judgment dated 11 September 2012, not appealed by the Ministry, acknowledged that the company was not involved at all in the pollution of the Augusta roadstead and, on the basis of this ruling, at the end of 2017 the Ministry warned the other companies operating on the Augusta roadstead, with the exception of Buzzi Unicem, to clean up the roadstead.

The CGARS, with sentence of 15 November 2018, established the need to correctly re-determine the responsibilities of the companies operating on the Augusta roadstead, making reference to the various positions, including that of Buzzi Unicem. Also following this judgement, no further involvement of the company followed in relation to the remediation of the roadstead, with respect to which the absence of a causal link with the production cycle of the Augusta cement plant seems to be consolidated.

With respect to the final project for the safety enhancement and clean-up, challenged by the company before the competent courts, together with certain subsequent acts aimed at implementing it, and with respect to the Program Agreement on the environmental requalification measures for the re-industrialization and infrastructural development of the Priolo SIN areas of 2008/2009, the interest in pursuing the aforementioned judgments has ceased both in the light of what was established in the aforementioned rulings and considering the ministerial clarification intervened in the deeds, for which the final remediation project subject to the appeal is to be considered outdated.

In conclusion, any potential critical issues seem to be limited to Buzzi Unicem's involvement in the remediation of the land areas and the aquifer, about which the company has carried out on its own, qualifying itself as the guiltless owner of the contamination, the procedural formalities aimed at the characterization, risk analysis and remediation and/or permanent safety enhancement of land areas and the portions of the aquifer concerned. These obligations, on which the Ministry of the Environment has expressed a positive opinion, with prescriptions, also through decision-making meetings, which the company has not contested, are in progress without any new relevant critical issue emerging during the monitoring activities.

Waiting for the developments related to the above actions, in consideration of the fact that Buzzi Unicem has so far voluntarily taken care of the remediation process, and that no specific requests from the Public Administration have emerged in recent years, it has been decided to maintain a provision for risks of €1.5 million.
In the United States of America, numerous lawsuits and claims exist that have been filed against Lone Star Industries, Inc. (LSI) regarding silica-containing or asbestos-containing materials sold or distributed by the company or its subsidiaries in the past and used primarily in construction and other industries. The plaintiffs allege that the use of such materials caused work-related injuries. LSI maintained product liability and comprehensive general liability insurance coverage, to the extent available, for most of the time that it sold or distributed silica-containing and asbestos-containing materials. Further, between 2009 and 2010, LSI and its major insurance carriers entered into settlement agreements that define the parties' responsibilities and cost shares for these liabilities until amended or terminated in accordance with their terms. LSI and the insurance carriers are in the process of negotiating amendments to the settlement agreements. The insurance carriers continue to follow the settlement agreements and no carrier has provided notice of termination. Estimating the costs associated with silica-related and asbestos-related claims involves many uncertainties that affect the amount and timing of any losses. In addition, LSI has exhausted coverage under certain insurance policies. The company however maintains a provision for amounts not expected to be covered by insurance.

Other legal proceedings
Our Luxembourg subsidiary Cimalux SA received a claim for compensation of €0.36 million for the alleged breach of contract relating to the delivery of sewage sludge. The litigation was settled and closed with the payment of half of the requested amount.
In a second case relating to the same company, the bankruptcy trustee of a shareholding sold by Cimalux SA in December 2008 requested the reimbursement of €0.5 million as part of the sale price paid to our subsidiary. The request, also made against the notary who had drawn up the sales contract in 2008, is based on the alleged nullity of the sales contract as it was concluded during the insolvency dispute period. The Court of First Instance rejected the request against Cimalux, but accepted the request against the notary who appealed against this decision. The bankruptcy trustee also filed an appeal. Cimalux SA will continue to defend itself in the proceeding and does not expect a negative impact on the financial statements.

50. Related party transactions

The company assembles the professional skills, the human resources and the equipment that make it possible to provide assistance to other subsidiaries and associates.

Buzzi Unicem SpA regularly carries out trading transactions with a number of associates and/or joint ventures, which mainly consist of both the sale and purchase of finished goods, semi-finished products, raw materials to entities operating in the business of cement and ready-mix concrete. Furthermore the company provides upon request to the same entities technical and engineering services. Goods are sold on the basis of the price lists in force with non-related parties and services are rendered on a cost-plus basis. There are also some transactions of financial nature with investee and parent companies; equally, they have normal terms and interest rate conditions.

The relationship with the parent company Fimedi SpA and its subsidiaries or other entities that are significantly influenced by individuals with significant voting power in Fimedi SpA, consists in the rendering of services in the area of administration, taxation, legal affairs, payroll and information systems, for limited amounts.

The company and its Italian subsidiaries Unical SpA, Calcestruzzi Zillo SpA, Testi Cementi Srl and Buzzi Unicem Srl (formerly Serenergy Srl) are members of a controlled group of corporations for domestic income tax purposes, with Fimedi SpA acting as the parent.

Set out below are the main transactions carried out with related parties and the corresponding year-end balances:

(thousands of euro)	2022	in % of reported balance	2021	in % of reported balance
Sales of goods and services:	64,310	1.6	55,907	1.6
associates and unconsolidated subsidiaries	38,231		32,357	
joint ventures	25,990		23,365	
parent companies	26		26	
other related parties	63		159	
Purchases of goods and services:	96,103	3.6	61,577	2.8
associates and unconsolidated subsidiaries	94,305		74,867	
joint ventures	1,140		(13,955)	
parent companies	-		7	
other related parties	658		658	
Finance revenues:	4,123	3.3	2,467	3.9
associates and unconsolidated subsidiaries	-		3	
joint ventures	4,123		2,464	
Trade receivables:	14,251	2.6	13,402	2.9
associates and unconsolidated subsidiaries	7,997		5,821	
joint ventures	6,162		7,433	
parent companies	32		32	
other related parties	60		116	
Loans receivable:	230,020	95.9	214,548	87.4
associates and unconsolidated subsidiaries	2,289		87	
joint ventures	227,731		214,461	
Other receivables:	12,387	10.2	16,836	17.0
associates and unconsolidated subsidiaries	1,217		322	
joint ventures	785		774	
parent companies	10,385		15,740	
Trade payables:	6,172	1.9	6,800	2.3
associates and unconsolidated subsidiaries	6,063		6,725	
joint ventures	100		58	
parent companies	-		7	
other related parties	9		10	
Loans payable:	4,999	34.2	4,988	97.3
parent companies	4,999		4,988	
Other payables:	-	-	4,931	4.2
parent companies	-		4,931	
Guarantees granted:	30,611		28,527	
joint ventures	30,611		28,527	

Key management includes the directors of the company (executive or not), the statutory auditors and 6 other senior executives of first level.
The compensation paid or payable to key management for employee services, not included in the previous table, is shown below:

(thousands of euro)	2022	2021
Salaries and other short-term employee benefits	4,706	4,535
Post-employments benefits	939	908
	5,645	**5,443**

For a complete and detailed description of the consideration paid to directors, please refer to the Report on remuneration policy and compensation paid, available at the company's headquarters and website.

51. Transparency requirements

The law 124/2017 art. 1, paragraphs 125-129, as modified by the law 58/2019, art. 35, introduced some new disclosure requirements regarding the transparency of public funds received not of a general nature and without consideration, remuneration or compensation nature. In particular, for companies, the legislation requires the publication in the notes to the financial statements of all the economic benefits, of an amount equal to or greater than €10,000, received from public resources.

Subsequently, the law 12/2019, art. 3 quater, paragraph 2, with the aim of simplifying the disclosure requirements foreseen for the companies benefiting from the subsidies, provided that the recording of state and de minimis aids in the National State Aid Register, referred to in article 52 of the law 234/2012, replaces the duty to indicate them in the notes to the financial statements, asking the beneficiaries to simply declare the existence of such aids in the aforementioned Register.

It should be noted that Buzzi Unicem meets the requirements of the Ministerial Decree of 21 December 2017 containing "Provisions regarding the reduction of tariffs to cover the general system charges for energy-intensive companies", as well as those provided for by the Authority Resolution 921/2017/R/eel as subsequently amended.

For the purposes of transparency and control of State aid, CSEA as providing entity will register the concessions granted in application of the Ministerial Decree into the National State Aid Register, to which reference should therefore be made for the information required by the regulation:
https://www.rna.gov.it/RegistroNazionaleTrasparenza/faces/pages/TrasparenzaAiuto.jspx.

In addition to what is indicated in the National State Aid Register, "Transparency" section, the following additional grants have been received:

Paying entity (thousands of euro)	**Amount of the economic benefit granted**	**Description of the kind of benefit granted**
Eni Fuel SpA	29	Reimbursement of excise duties on diesel for industrial use
INAIL Istituto Nazionale per l'Assicurazione contro gli Infortuni sul lavoro - Pubbliche amministrazioni IPA	106	INAIL - reduction of the insurance premium for prevention/training

52. Other information

Material non-recurring events and transactions

As stated in the review of operations, the year ended 31 December 2022 was affected by material non-recurring events and transactions – as defined in Consob Communication no. DEM/6064293 of 28 July 2006 – with a net negative impact on EBITDA equal to €8,716 thousand.

Atypical and/or unusual transactions

Please note that Buzzi Unicem did not carry out atypical and/or unusual transactions during the year ended 31 December 2022, as defined in Consob Communication no. DEM/6064293 of 28 July 2006.

Net financial position

The Group's net financial position as at 31 December 2022 is as follows:

(thousands of euro)	2022	2021
Cash and short-term financial assets:		
Cash and cash equivalents	1,341,488	1,203,611
Other current financial receivables	8,194	3,885
Short-term financial liabilities:		
Current portion of long-term debt	(594,028)	(136,635)
Current portion of lease liabilities	(20,260)	(22,450)
Short-term debt	(12,544)	(12,476)
Other current financial liabilities	(15,314)	(6,025)
Net short-term cash	**707,536**	**1,029,910**
Long-term financial liabilities:		
Long-term debt	(608,150)	(987,951)
Lease liabilities	(58,132)	(55,815)
Other non-current financial liabilities	(2,880)	(2,922)
Net debt	**38,374**	**(16,778)**
Long-term financial assets:		
Derivative financial instruments	11,031	6,948
Other non-current financial receivables	238,794	245,346
Net financial position	**288,199**	**235,516**

Components of net debt

Set out below is the reconciliation of those net debt components not directly inferable from the line items in the balance sheet scheme.

(thousands of euro)	Note	2022	2021
Other current financial receivables		**8,194**	**3,885**
Receivables from unconsolidated subsidiaries and associates	29	3,135	793
Loans to customers	29	73	72
Receivables from sale of equity investments	29	-	31
Loans to third parties and leasing	29	394	282
Accrued interest income	29	2,150	1,280
Current financial assets	29	2,442	1,427
Other current financial payables		**(15,314)**	**(6,025)**
Purchase of equity investments	44	(141)	(119)
Financial tax payables	44	(14,452)	(4,968)
Other financial payables	44	(701)	(900)
Deferred interest income	44	(20)	(38)
Other non-current financial receivables		**238,794**	**245,346**
Loans to third parties and leasing	26	2,074	2,376
Loans to associates and joint ventures	26	226,890	213,757
Loans to customers	26	9,830	9,306
Non-current financial assets	26	-	19,907
Other non-current financial payables		**(2,880)**	**(2,922)**
Purchase of equity investments	41	(2,785)	(2,712)
Financial tax payables	41	(95)	(210)

54. Events after the balance sheet date

On 1 January 2023, the corporate revision project, within the scope of consolidation, approved by the Board of Directors and communicated on 3 August 2022 and 8 November 2022, became effective. The transaction concerned the contribution in kind of the business unit relating to cement operations in Italy in favor of Buzzi Unicem Srl (formerly Serenergy Srl), at going-concern values and without any effect on the consolidated financial statements of the group.

On 28 January 2023 the bond "Buzzi Unicem €500,000,000 - 2.125% Notes due 2023" was repaid in advance with respect to its maturity date of 28 April 2023.

As far as the trading outlook is concerned, reference is made to the appropriate chapter in the review of operations.

Casale Monferrato, 29 March 2023

On behalf of the Board of Directors

Chairman
Veronica Buzzi

List of companies included in the consolidated financial statements and of equity investments

Name	Registered office		Share capital	Ownership interest held by	% of ownership
Companies consolidated on a line-by-line basis					
Buzzi Unicem SpA	Casale Monferrato (AL)	EUR	123,636,659		
Unical SpA	Casale Monferrato (AL)	EUR	130,235,000	Buzzi Unicem SpA	100.00
Testi Cementi Srl	Casale Monferrato (AL)	EUR	1,000,000	Buzzi Unicem SpA	100.00
Arquata Cementi Srl	Casale Monferrato (AL)	EUR	100,000	Buzzi Unicem SpA	100.00
Falconeria Srl	Casale Monferrato (AL)	EUR	50,000	Buzzi Unicem SpA	100.00
Buzzi Unicem Srl	Casale Monferrato (AL)	EUR	25,500	Buzzi Unicem SpA	100.00
Dyckerhoff GmbH	Wiesbaden DE	EUR	105,639,816	Buzzi Unicem SpA	100.00
Alamo Cement Company	San Antonio US	USD	200,000	Buzzi Unicem SpA	100.00
RC Lonestar Inc.	Wilmington US	USD	10	Buzzi Unicem SpA Dyckerhoff GmbH	51,50 48,50
Buzzi Unicem Algérie Sàrl i. L.	Ouled Fayet - Alger DZ	DZD	3,000,000	Buzzi Unicem SpA	70.00
Dyckerhoff Beton GmbH & Co. KG	Wiesbaden DE	EUR	18,000,000	Dyckerhoff GmbH	100.00
GfBB prüftechnik GmbH & Co. KG	Flörsheim DE	EUR	50,000	Dyckerhoff GmbH	100.00
Portland Zementwerke Seibel und Söhne GmbH & Co. KG	Erwitte DE	EUR	250,000	Dyckerhoff GmbH	100.00
Dyckerhoff Basal Nederland BV	Nieuwegein NL	EUR	18,002	Dyckerhoff GmbH	100.00
Cimalux SA	Esch-sur-Alzette LU	EUR	29,900,000	Dyckerhoff GmbH	98.43
Dyckerhoff Polska Sp zoo	Nowiny PL	PLN	70,000,000	Dyckerhoff GmbH	100.00
Cement Hranice as	Hranice CZ	CZK	510,219,300	Dyckerhoff GmbH	100.00
ZAPA beton as	Praha CZ	CZK	300,200,000	Dyckerhoff GmbH	100.00
OOO SLK Cement	Suchoi Log RU	RUB	30,625,900	Dyckerhoff GmbH	100.00
TOB Dyckerhoff Ukraina	Kyiv UA	UAH	230,943,447	Dyckerhoff GmbH	100.00
PRAT Dyckerhoff Cement Ukraine	Kyiv UA	UAH	7,917,372	Dyckerhoff GmbH TOB Dyckerhoff Ukraina	99,98 0,02
Dyckerhoff Gravières et Sablières Seltz SAS	Seltz FR	EUR	180,000	Dyckerhoff Beton GmbH & Co. KG	100.00
Dyckerhoff Kieswerk Trebur GmbH & Co. KG	Trebur-Geinsheim DE	EUR	125,000	Dyckerhoff Beton GmbH & Co. KG	100.00
Dyckerhoff Kieswerk Leubingen GmbH	Erfurt DE	EUR	101,000	Dyckerhoff Beton GmbH & Co. KG	100.00
sibobeton Osnabrück GmbH & Co. KG	Lengerich DE	EUR	5,368,565	Dyckerhoff Beton GmbH & Co. KG	98.50
Dyckerhoff Transportbeton Thüringen GmbH & Co. KG	Erfurt DE	EUR	100,000	Dyckerhoff Beton GmbH & Co. KG	95.00

List of companies included in the consolidated financial statements and of equity investments
(continued)

Name	Registered office		Share capital	Ownership interest held by	% of ownership
Companies consolidated on a line-by-line basis (continued)					
Dyckerhoff Beton Rheinland-Pfalz GmbH & Co. KG	Neuwied DE	EUR	795,356	Dyckerhoff Beton GmbH & Co. KG	70.97
TBG Lieferbeton GmbH & Co. KG Odenwald	Reichelsheim DE	EUR	306,900	Dyckerhoff Beton GmbH & Co. KG	66.67
Dyckerhoff Basal Toeslagstoffen BV	Nieuwegein NL	EUR	27,000	Dyckerhoff Basal Nederland BV	100.00
Dyckerhoff Basal Betonmortel BV	Nieuwegein NL	EUR	18,004	Dyckerhoff Basal Nederland BV	100.00
Béton du Ried SAS	Krautergersheim FR	EUR	500,000	Cimalux SA	100.00
ZAPA beton SK sro	Bratislava SK	EUR	11,859,396	ZAPA beton as Cement Hranice as	99,97 0,03
OOO CemTrans	Suchoi Log RU	RUB	185,000,000	OOO SLK Cement	100.00
OOO Dyckerhoff Suchoi Log obshestvo po sbitu tamponashnich zementow	Suchoi Log RU	RUB	259,100,000	OOO SLK Cement	100.00
TOB Dyckerhoff Transport Ukraina	Kyiv UA	UAH	51,721,476	TOB Dyckerhoff Ukraina	100.00
Alamo Concrete Products Company	San Antonio US	USD	1	Alamo Cement Company	100.00
Alamo Transit Company	San Antonio US	USD	1	Alamo Cement Company	100.00
Buzzi Unicem USA Inc.	Wilmington US	USD	10	RC Lonestar Inc.	100.00
Midwest Material Industries Inc.	Wilmington US	USD	1	RC Lonestar Inc.	100.00
Lone Star Industries Inc.	Wilmington US	USD	28	RC Lonestar Inc.	100.00
River Cement Company	Wilmington US	USD	100	RC Lonestar Inc.	100.00
River Cement Sales Company	Wilmington US	USD	100	RC Lonestar Inc.	100.00
Signal Mountain Cement Company	Wilmington US	USD	100	RC Lonestar Inc.	100.00
Heartland Cement Company	Wilmington US	USD	100	RC Lonestar Inc.	100.00
Heartland Cement Sales Company	Wilmington US	USD	10	RC Lonestar Inc.	100.00
Hercules Cement Company LLC	Wilmington US	USD	n/a	RC Lonestar Inc.	100.00
Dyckerhoff Transportbeton Schmalkalden GmbH & Co. KG	Erfurt DE	EUR	512,000	Dyckerhoff Transportbeton Thüringen GmbH & Co. KG	67.55

List of companies included in the consolidated financial statements and of equity investments
(continued)

Name	Registered office		Share capital	Ownership interest held by	% of ownership
Companies consolidated on a line-by-line basis (continued)					
MegaMix Basal BV	Nieuwegein NL	EUR	27,228	Dyckerhoff Basal Betonmortel BV	100.00
Friesland Beton Heerenveen BV	Heerenveen NL	EUR	34,487	Dyckerhoff Basal Betonmortel BV	80.26
Betonmortel Centrale Groningen (B.C.G.) BV	Groningen NL	EUR	42,474	Dyckerhoff Basal Betonmortel BV	66.03
ZAPA beton HUNGÁRIA kft	Zsujta HU	HUF	88,000,000	ZAPA beton SK sro	100.00
Buzzi Unicem Ready Mix, LLC	Nashville US	USD	n/a	Midwest Material Industries Inc.	100.00
RED-E-MIX, LLC	Springfield US	USD	n/a	Midwest Material Industries Inc.	100.00
RED-E-MIX Transportation, LLC	Springfield US	USD	n/a	Midwest Material Industries Inc.	100.00
Utah Portland Quarries Inc.	Salt Lake City US	USD	378,900	Lone Star Industries Inc.	100.00
Rosebud Real Properties Inc.	Wilmington US	USD	100	Lone Star Industries Inc.	100.00
Investments in joint ventures valued by the equity method					
Cementi Moccia SpA	Napoli	EUR	7,398,300	Buzzi Unicem SpA	50.00
Fresit BV	Amsterdam NL	EUR	6,795,000	Buzzi Unicem SpA	50.00
Presa International BV	Amsterdam NL	EUR	7,900,000	Buzzi Unicem SpA	50.00
Nacional Cimentos Participações SA	Recife BR	BRL	873,072,223	Buzzi Unicem SpA	50.00
E.L.M.A. Srl	Sinalunga (SI)	EUR	15,000	Unical SpA	50.00
Nacional Projetos de Cimento SA	Recife BR	BRL	13,406,955	Nacional Cimentos Participações SA	100.00
Mineração Bacupari SA	Recife BR	BRL	7,143,950	Nacional Cimentos Participações SA	100.00
Companhia Nacional de Cimento - CNC	Recife BR	BRL	691,520,831	Nacional Cimentos Participações SA	100.00
Agroindustrial Delta de Minas SA	Recife BR	BRL	26,319,159	Nacional Cimentos Participações SA	100.00
Nacional Cimentos Paraíba SA	Recife BR	BRL	265,173,765	Nacional Cimentos Participações SA	100.00
Lichtner-Dyckerhoff Beton GmbH & Co. KG	Berlin DE	EUR	200,000	Dyckerhoff Beton GmbH & Co. KG	50.00
ZAPA UNISTAV sro	Brno CZ	CZK	20,000,000	ZAPA beton as	50.00
EKO ZAPA beton sro	Praha CZ	CZK	1,008,000	ZAPA beton as	50.00
Corporación Moctezuma, SAB de CV	Mexico MX	MXN	171,376,652	Fresit BV Presa International BV	51,51 15,16
CCS Cimento de Sergipe SA	Aracaju, BR	BRL	2,326,000	Nacional Projetos de Cimento SA	100.00
Mineração Delta de Sergipe SA	Aracaju, BR	BRL	823,184	Nacional Projetos de Cimento SA	100.00
Mineração Delta do Rio SA	Recife BR	BRL	1,669,385	Nacional Projetos de Cimento SA	100.00
Mineração Delta do Paraná SA	Recife BR	BRL	5,294,139	Nacional Projetos de Cimento SA	100.00
Agroindustrial Árvore Alta SA	Recife BR	BRL	632,000	Nacional Projetos de Cimento SA	100.00
CCA Holding SA	Belo Horizonte BR	BRL	1,346,593,967	Companhia Nacional de Cimento - CNC	100.00
CCP Holding SA	Recife BR	BRL	307,543,000	Nacional Cimentos Paraíba SA	85.00
Ravenswaarden BV	Lochem NL	EUR	18,000	Dyckerhoff Basal Toeslagstoffen BV	50.00
Eljo Holding BV	Groningen NL	EUR	45,378	Dyckerhoff Basal Betonmortel BV	50.00
Megamix-Randstad BV	Gouda NL	EUR	90,756	Dyckerhoff Basal Betonmortel BV	50.00

List of companies included in the consolidated financial statements and of equity investments
(continued)

Name	Registered office		Share capital	Ownership interest held by	% of ownership
Investments in joint ventures valued by the equity method (continued)					
Cementos Moctezuma, SA de CV	Mexico MX	MXN	2,421,712,754	Corporación Moctezuma, SAB de CV	100.00
Companhia de Cimento Campeão Alvorada – CCA	Belo Horizonte BR	BRL	867,511,283	CCA Holding SA	100.00
Cantagalo Empreendimentos SA	Cantagalo BR	BRL	248,268	Companhia Nacional de Cimento - CNC CCA Holding SA	51,29 48,71
Delta de Arcos SA	Matozinhos BR	BRL	466,668	Companhia Nacional de Cimento - CNC CCA Holding SA	51,06 48,74
Delta de Matozinhos SA	Matozinhos BR	BRL	1,314,836	Companhia Nacional de Cimento - CNC CCA Holding SA	51,06 48,74
Companhia de Cimento da Paraíba - CCP	Recife BR	BRL	319,642,205	CCP Holding SA	100.00
Mineração Nacional SA	Recife BR	BRL	31,756,571	CCP Holding SA	100.00
Maquinaria y Canteras del Centro, SA de CV	Mexico MX	MXN	19,597,565	Cementos Moctezuma, SA de CV	51.00

List of companies included in the consolidated financial statements and of equity investments

(continued)

Name	Registered office		Share capital	Ownership interest held by	% of ownership
Investments in associates valued by the equity method					
Hinfra Srl	Casale Monferrato (AL)	EUR	10,000	Buzzi Unicem SpA	60.00
Premix SpA	Melilli (SR)	EUR	3,483,000	Buzzi Unicem SpA	40.00
Société des Ciments de Sour El Ghozlane EPE SpA	Sour El Ghozlane DZ	DZD	1,900,000,000	Buzzi Unicem SpA	35.00
Société des Ciments de Hadjar Soud EPE SpA	Azzaba DZ	DZD	1,550,000,000	Buzzi Unicem SpA	35.00
Laterlite SpA	Solignano (PR)	EUR	22,500,000	Buzzi Unicem SpA	33.33
Salonit Anhovo Gradbeni Materiali dd	Anhovo SL	EUR	36,818,921	Buzzi Unicem SpA	25.00
w&p Cementi SpA	San Vito al Tagliamento (PN)	EUR	2,000,000	Buzzi Unicem SpA	25.00
Calcestruzzi Faure Srl	Salbertrand (TO)	EUR	53,560	Unical SpA	24.00
Edilcave Srl	Villar Focchiardo (TO)	EUR	72,800	Unical SpA	20.00
Warsteiner Kalksteinmehl GmbH & Co. KG i. L.	Warstein DE	EUR	51,129	Dyckerhoff GmbH	50.00
Warsteiner Kalksteinmehl Verwaltungsgesellschaft mbH i. L.	Warstein DE	EUR	25,600	Dyckerhoff GmbH	50.00
Cl4C GmbH & Co. KG	Heidenheim an der Brenz DE	EUR	40,000	Dyckerhoff GmbH	25.00
Projektgesellschaft Warstein-Kallenhardt Kalkstein mbH	Warstein DE	EUR	25,200	Dyckerhoff GmbH	25.00
Köster/Dyckerhoff Vermögensverwaltungs GmbH	Warstein DE	EUR	25,000	Dyckerhoff GmbH	24.90
Köster/Dyckerhoff Grundstücksverwaltungs GmbH & Co. KG	Warstein DE	EUR	10,000	Dyckerhoff GmbH	24.90
Nordenhamer Transportbeton GmbH & Co. KG	Nordenham DE	EUR	322,114	Dyckerhoff Beton GmbH & Co. KG	51.59
BLD Betonlogistik Deutschland GmbH	Rommerskirchen DE	EUR	25,200	Dyckerhoff Beton GmbH & Co. KG	50.00
Lichtner-Dyckerhoff Beton Verwaltungs GmbH	Berlin DE	EUR	25,000	Dyckerhoff Beton GmbH & Co. KG	50.00
TRAMIRA Transportbetonwerk Minden-Ravensberg GmbH & Co. KG	Minden-Dankersen DE	EUR	1,000,000	Dyckerhoff Beton GmbH & Co. KG	50.00
Transass SA	Schifflange LU	EUR	50,000	Cimalux SA	41.00
SA des Bétons Frais	Schifflange LU	EUR	2,500,000	Cimalux SA	41.00
Bétons Feidt SA	Luxembourg LU	EUR	2,500,000	Cimalux SA	30.00
Houston Cement Company LP	Houston US	USD	n/a	Alamo Cement Company	20.00
BLRP Betonlogistik Rheinland-Pfalz GmbH	Rommerskirchen DE	EUR	25,000	Dyckerhoff Beton Rheinland-Pfalz GmbH & Co. KG	50.00
BLN Beton Logistiek Nederland BV	Heteren NL	EUR	26,000	Dyckerhoff Basal Betonmortel BV	50.00
Van Zanten Holding BV	Leek NL	EUR	18,151	Dyckerhoff Basal Betonmortel BV	25.00
Louisville Cement Assets Transition Company	Louisville US	USD	n/a	Lone Star Industries Inc.	25.00
Cooperatie Megamix BA	Almere NL	EUR	80,000	MegaMix Basal BV	37.50

List of companies included in the consolidated financial statements and of equity investments
(continued)

Name	Registered office		Share capital	Ownership interest held by	% of ownership
Other investments in subsidiaries at fair value					
GfBB prüftechnik Verwaltungs GmbH	Flörsheim DE	EUR	25,600	Dyckerhoff GmbH	100.00
Dyckerhoff Beton Verwaltungs GmbH	Wiesbaden DE	EUR	46,100	Dyckerhoff GmbH	100.00
Lieferbeton Odenwald Verwaltungs GmbH	Flörsheim DE	EUR	25,000	Dyckerhoff GmbH	100.00
Bildungs-Zentrum-Deuna GmbH	Deuna DE	EUR	25,565	Dyckerhoff GmbH Bildungs-Zentrum-Deuna GmbH	50,00 50,00
Dyckerhoff Kieswerk Trebur Verwaltungs GmbH	Trebur-Geinsheim DE	EUR	25,000	Dyckerhoff Beton GmbH & Co. KG	100.00
SIBO-Gruppe Verwaltungsgesellschaft mbH	Lengerich DE	EUR	26,000	Dyckerhoff Beton GmbH & Co. KG	100.00
Dyckerhoff Beton Rheinland-Pfalz Verwaltungs GmbH	Neuwied DE	EUR	26,000	Dyckerhoff Beton GmbH & Co. KG	70.97
Nordenhamer Transportbeton GmbH	Nordenham DE	EUR	25,565	Dyckerhoff Beton GmbH & Co. KG	56.60
Seibel Beteiligungsgesellschaft mbH	Erwitte DE	EUR	25,000	Portland Zementwerke Seibel und Söhne GmbH & Co. KG	100.00
MKB Mörteldienst Köln-Bonn Verwaltungsgesellschaft mbH	Neuss DE	EUR	25,000	MKB Mörteldienst Köln-Bonn GmbH & Co. KG	100.00
Dyckerhoff Transportbeton Thüringen Verwaltungs GmbH	Erfurt DE	EUR	25,565	Dyckerhoff Transportbeton Thüringen GmbH & Co. KG	100.00
Dyckerhoff Transportbeton Schmalkalden Verwaltungs GmbH	Erfurt DE	EUR	25,600	Dyckerhoff Transportbeton Thüringen GmbH & Co. KG	67.58
Compañia Cubana de Cemento Portland, SA	Havana CU	CUP	100	Lone Star Industries Inc.	100.00
Transports Mariel, SA	Havana CU	CUP	100	Lone Star Industries Inc.	100.00
Proyectos Industries de Jaruco, SA	Havana CU	CUP	186,700	Compañia Cubana de Cemento Portland, SA	100.00

For the German partnerships in the legal form of a GmbH & Co. KG consolidated on a line-by-line basis, the exemption according to Article 264b German Commercial Code is applicable.

Information pursuant to article 149-*duodecies* of the CONSOB Regulation for listed companies

The following table, prepared in accordance with article 149-duodecies of the CONSOB Regulation no. 11971/99, reports the amount of the fees charged in 2022 for auditing and services other than auditing provided by the independent auditors and by entities that are part of its network.

(thousands of euro)	**Service provider**	**Service recipient**	**Fees charged in 2022**
Audit	EY SpA	Parent – Buzzi Unicem SpA	175
	EY SpA	Subsidiaries	60
	Network EY	Subsidiaries	1,388
Attestation	EY SpA	Parent – Buzzi Unicem SpA (1)	10
	Network EY	Parent – Buzzi Unicem SpA (2)	28
	Network EY	Subsidiaries (3)	9
Total			**1,670**

1) Certification of the declaration of expenses for research and development activities
2) Agreed upon procedures on the annual financial information of the Algerian associates Société des Ciments de Sour El Ghozlane and Société des Ciments de Hadjar Soud;
3) Certifications required under Dutch law;

Certification of the consolidated financial statements pursuant to article 81-*ter* of Consob regulation no. 11971 of 14 May 1999 as amended

- The undersigned Pietro Buzzi, as Chief Executive Finance, and Elisa Bressan, as Manager responsible for preparing Buzzi Unicem's financial reports, hereby certify, pursuant to the provisions of article 154-bis, paragraphs 3 and 4, of Legislative Decree no. 58 of 24 February 1998, that the administrative and accounting procedures for the preparation of the consolidated financial statements during the year 2022:

  - are adequate with respect to the company structure, and
  - have been effectively applied.

- The undersigned also certify that:

  a) the consolidated financial statements

  - have been prepared in accordance with International Financial Reporting Standards (IFRS), as endorsed by the European Union through Regulation (EC) 1606/2002 of the European Parliament and Counsel dated 19 July 2002;

  - correspond to the results documented in the books and the accounting records;

  - provide a true and correct representation of the financial conditions, results of operations and cash flows of the issuer and of the entities included in the scope of consolidation.

  b) the review of operations includes a reliable analysis of operating performance and results, as well as of the situation of the issuer and of the entities included in the scope of consolidation, together with a description of the main risks and uncertainties to which they are exposed.

Casale Monferrato, 29 March 2023

Chief Executive Finance

Pietro Buzzi

Manager responsible
for preparing financial reports

Elisa Bressan

Buzzi Unicem S.p.A.

Consolidated financial statements as at December 31, 2022

Independent auditor's report pursuant to article 14 of Legislative Decree n. 39, dated 27 January 2010, and article 10 of EU Regulation n. 537/2014

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Independent auditor's report pursuant to article 14 of Legislative Decree n. 39, dated 27 January 2010 and article 10 of EU Regulation n. 537/2014
(Translation from the original Italian text)

To the Shareholders of
Buzzi Unicem S.p.A.

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Buzzi Unicem Group (the Group), which comprise the consolidated balance sheet as at December 31, 2022, and the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Group as at December 31, 2022, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of Buzzi Unicem S.p.A. in accordance with the regulations and standards on ethics and independence applicable to audits of financial statements under Italian Laws. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We identified the following key audit matters:

Key Audit Matter	Audit Response
Valuation of Goodwill As at December 31, 2022 goodwill amounted to € 509 million and it has been allocated to the Group's Cash Generating Units (CGU). The processes and methods used by the Company to evaluate and determine the recoverable amount of each CGU, in terms of value in use, are based on assumptions that are in some cases complex and that, due to their nature, imply the use of judgement by Management, in particular with reference to the forecast of future cash flows and to the estimate of the long-term growth and discount rates applied to the future cash flow forecasts. Considering the level of judgement and complexity of the assumptions applied in estimating the recoverable amount of goodwill, we considered that this area represents a key audit matter. Disclosures related to the valuation of goodwill are provided in note 19 – "Goodwill and Other intangible assets" and note 2.9 – "Intangible assets"	Our audit procedures in response to this key audit matter included, among others: • the assessment of the processes implemented by the Company with reference to the criteria and methodology of the impairment test; • the validation of the CGUs perimeter and test of the allocation of the carrying value of the Group's assets to each CGU; • the assessment of the future cash flow forecasts, including comparisons with sector data and forecasts; • the assessment of the consistency of the future cash flow forecasts of each CGU with the Group business plan; • the assessment of the accuracy of future cash flow forecasts when compared to actual results; • the assessment of the long-term growth rates and discount rates. In performing our analysis, we involved our experts in valuation techniques, who have performed independent calculations and sensitivity analyses of the key assumptions in order to determine any changes that could materially affect the valuation of the recoverable amount. Lastly, we assessed the adequacy of the disclosures provided in the notes to the consolidated financial statements with regard to the valuation of goodwill.

Responsibilities of Directors and Those Charged with Governance for the Consolidated Financial Statements

The Directors are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005, and, within the terms provided by the law, for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

The Directors are responsible for assessing the Group's ability to continue as a going concern and, when preparing the consolidated financial statements, for the appropriateness of the going concern assumption, and for appropriate disclosure thereof. The Directors prepare the consolidated financial statements on a going concern basis unless they either intend to liquidate the Parent Company Buzzi Unicem S.p.A. or to cease operations, or have no realistic alternative but to do so.

The statutory audit committee ("Collegio Sindacale") is responsible, within the terms provided by the law, for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we have exercised professional judgment and maintained professional skepticism throughout the audit. In addition:

- we have identified and assessed the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designed and performed audit procedures responsive to those risks, and obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- we have obtained an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- we have evaluated the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors;
- we have concluded on the appropriateness of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to consider this matter in forming our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;
- we have evaluated the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- we have obtained sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the

group audit. We remain solely responsible for our audit opinion.

We have communicated with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We have provided those charged with governance with a statement that we have complied with the ethical and independence requirements applicable in Italy, and we have communicated them all matters that may reasonably be thought to bear on our independence, and where applicable, the actions taken to eliminate relevant risks or the safeguard measures applied.

From the matters communicated with those charged with governance, we have determined those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We have described these matters in our auditor's report.

Additional information pursuant to article 10 of EU Regulation n. 537/14

The shareholders of Buzzi Unicem S.p.A., in the general meeting held on May 9, 2014, engaged us to perform the audits of the consolidated financial statements for each of the years ending December 31, 2014 to December 31, 2022.

We declare that we have not provided prohibited non-audit services, referred to article 5, par. 1, of EU Regulation n. 537/2014, and that we have remained independent of the Group in conducting the audit.

We confirm that the opinion on the consolidated financial statements included in this report is consistent with the content of the additional report to the audit committee (Collegio Sindacale) in their capacity as audit committee, prepared pursuant to article 11 of the EU Regulation n. 537/2014.

Report on compliance with other legal and regulatory requirements

Opinion on the compliance with Delegated Regulation (EU) 2019/815

The Directors of Buzzi Unicem S.p.A. are responsible for applying the provisions of the European Commission Delegated Regulations (EU) 2019/815 for the regulatory technical standards on the specification of a single electronic reporting format (ESEF – European Single Electronic Format) (the "Delegated Regulation") to the consolidated financial statements, to be included in the annual financial report.

We have performed the procedures under the auditing standard SA Italia n. 700B, in order to express an opinion on the compliance of the consolidated financial statements as at December 31, 2022 with the provisions of the Delegated Regulation.

In our opinion, the consolidated financial statements as at December 31, 2022 have been prepared in the XHTML format and have been marked-up, in all material aspects, in compliance with the provisions of the Delegated Regulation.

Due to certain technical limitations, some information included in the notes to the consolidated financial statements when extracted from the XHTML format to an XBRL instance may not be reproduced in an identical manner with respect to the corresponding information presented in the consolidated financial statements in XHTML format.

Opinion pursuant to article 14, paragraph 2, subparagraph e), of Legislative Decree n. 39 dated 27 January 2010 and of article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998

The Directors of Buzzi Unicem S.p.A. are responsible for the preparation of the Report on Operations and of the Report on Corporate Governance and Ownership Structure of Buzzi Unicem Group as at December 31, 2022, including their consistency with the related consolidated financial statements and their compliance with the applicable laws and regulations.

We have performed the procedures required under audit standard SA Italia n. 720B, in order to express an opinion on the consistency of the Report on Operations and of specific information included in the Report on Corporate Governance and Ownership Structure as provided for by article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998, with the consolidated financial statements of Buzzi Unicem Group as at December 31, 2022 and on their compliance with the applicable laws and regulations, and in order to assess whether they contain material misstatements.

In our opinion, the Report on Operations and the above mentioned specific information included in the Report on Corporate Governance and Ownership Structure are consistent with the consolidated financial statements of Buzzi Unicem Group as at December 31, 2022 and comply with the applicable laws and regulations.

With reference to the statement required by art. 14, paragraph 2, subparagraph e), of Legislative Decree n. 39, dated 27 January 2010, based on our knowledge and understanding of the entity and its environment obtained through our audit, we have no matters to report.

Statement pursuant to article 4 of Consob Regulation implementing Legislative Decree n. 254, dated 30 December 2016

The Directors of Buzzi Unicem S.p.A. are responsible for the preparation of the non-financial information pursuant to Legislative Decree n. 254, dated 30 December 2016. We have verified that non-financial information have been approved by Directors.

Pursuant to article 3, paragraph 10, of Legislative Decree n. 254, dated 30 December 2016, such non-financial information are subject to a separate compliance report signed by another auditor.

Turin, April 4th, 2023

EY S.p.A.
Luigi Conti, Auditor

As disclosed by the Directors on page 3, the accompanying consolidated financial statements of Buzzi Unicem S.p.A. constitute a non-official version which is not compliant with the provisions of the Commission Delegated Regulation (EU) 2019/815. This independent auditor's report has been translated into the English language solely for the convenience of international readers. Accordingly, only the original text in Italian language is authoritative.

Buzzi Unicem

Buzzi Unicem SpA

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Tel. +39 0142 416 111
buzziunicem.com

Share Capital €123,636,658.80

Company Register of Alessandria-Asti no. 00930290044

Legal form: Buzzi Unicem SpA is a stock corporation organized under Italian law, controlled by Fimedi SpA

Business: Manufacturing, distribution and sale of cement, ready-mix concrete and aggregates mainly in Italy, the United States of America, Germany, Luxembourg, the Netherlands, Poland, the Czech Republic and Slovakia, Ukraine, Russia, Mexico and Brazil

Cover photo: New Karlsruhe Subway – Germany (Christoph Mertens)