ANNUAL **REPORT** 2021

Buzzi Unicem

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

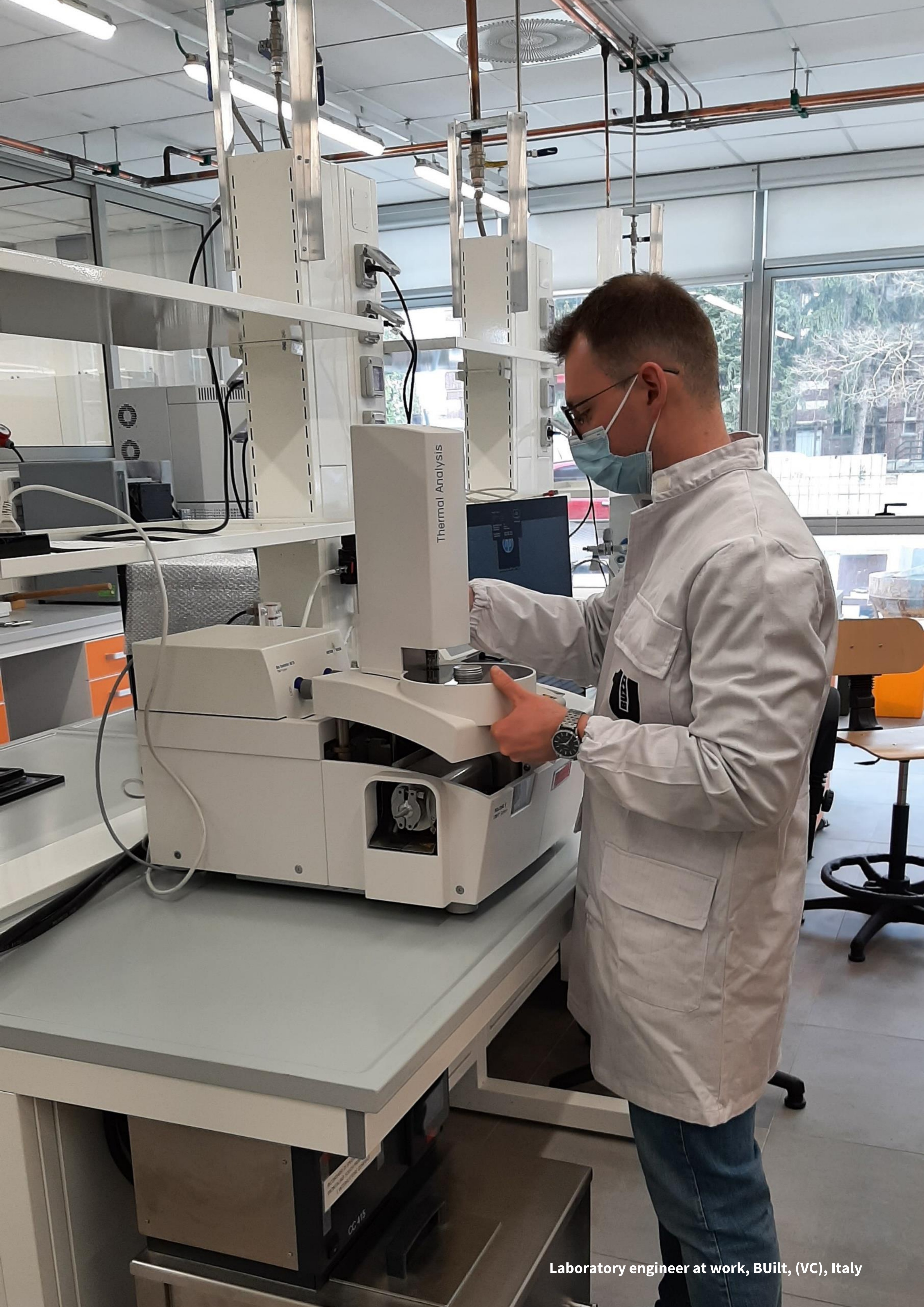
The company’s dedicated management has a long-term view of the business and commitment towards a sustainable development, supported by high quality assets.

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)



Laboratory engineer at work, BUilt, (VC), Italy

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
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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;
[2] appointed Managing Directors by the Board of Directors on May 8, 2020, with powers of ordinary and extraordinary administration;
[3] members of the Control and Risk Committee.

Visiting a quarry in Robilante (CN), Italy

Review of operations

Shares, Shareholders and Performance indicators

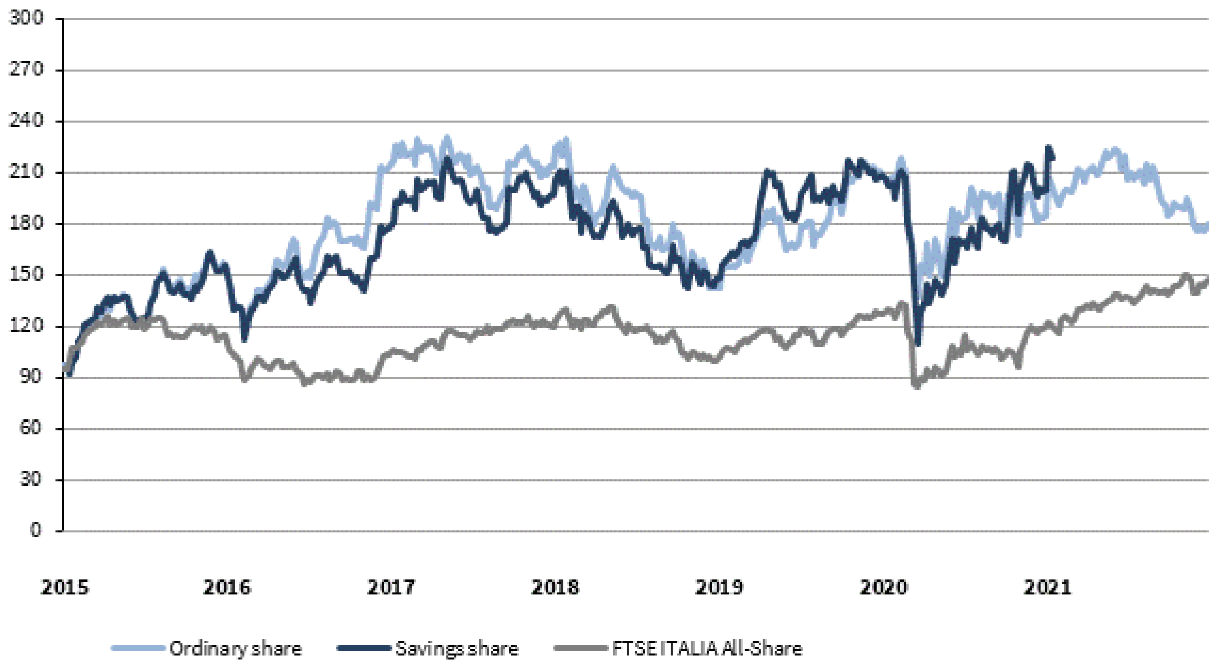
The ordinary shares of Buzzi Unicem have been listed on the Milan Stock Exchange since September 1999. Market capitalization as at 31 December 2021 was €3.652 million. Each ordinary share is entitled to one vote. Following approval of the proposal to convert savings shares into ordinary shares by the Shareholders' Meetings held on 19 November 2020, on 18 January 2021 the mandatory conversion of savings shares into ordinary shares became effective and, therefore, starting from that date the trading on Euronext Milan has concerned only the ordinary shares. Furthermore, starting from 18 January 2021, Buzzi Unicem share capital is divided into no. 192,626,154 ordinary shares with no par value.

Trading in Buzzi Unicem shares

	Ordinary shares	Savings shares	Ordinary shares	Savings shares
Reference period	**number**	**number**	**€m**	**€m**
Year 2015	310,480,095	27,239,050	4,326.8	244.3
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**

Price trend of Buzzi Unicem shares

(base January 2015= 100)



Distribution of shareholdings*

(ordinary shares)

	No. Shareholders	in %	No. Shares	in %
1 - 1.000	12,646	84.96	2,941,155	1.53
1.001 - 10.000	1,621	10.89	4,732,853	2.46
10.001 - 100.000	452	3.03	15,916,324	8.26
100.001 -	166	1.12	169,035,822	87.75

* Referred to the ex-dividend date (24 May 2021)

A total of 75,063,938 ordinary shares - corresponding to approximately 39% of voting capital - are held by foreign investors.

Market capitalization

As at 31 December 2021 (milions of euro)

2015	3,134
2016	4,210
2017	4,258
2018	2,872
2019	4,265
2020	3,755
2021	**3,652**

Capital structure

As at 31 December 2021 (in %)

Presa SpA (Buzzi Family)	81,337,000	42.23
Fimedi SpA (Buzzi Family)	19,252,563	9.99
Free Float	91,542,275	47.52
Treasury shares	494,316	0.26
Total no. of shares	**192,626,154**	**100.00**

Key per-share data

(euro)	2015	2016	2017	2018	2019	2020	2021
Basic eps (ordinary)	0.60	0.70	1.90	1.86	1.88	2.72	**2.82**
Shareholders' equity per share	12.40	13.47	13.81	15.77	17.90	17.49	**22.71**
Price/earnings ratio	21,9x	32,3x	11,9x	8,1x	12,0x	7,2x	**6,7x**
Price at year-end							
ordinary shares	16.5	22.62	22.59	15.00	22.42	19.50	**18.96**
savings shares	10.1	11.55	12.84	9.62	13.72	13.04	**-**
Dividend per share[1]							
ordinary shares	0.07	0.10	0.12	0.13	0.15	0.25	**0.40**
savings shares	0.07	0.10	0.20	0.15	0.17	-	**-**
Yield							
ordinary shares	0.40%	0.40%	0.50%	0.83%	0.67%	1.28%	**2.11%**
savings shares	0.60%	0.90%	1.60%	1.55%	1.27%	-	**-**

[1] 2021: proposed to shareholders at the Annual General Meeting

Financial Performance Indicators

(in %)	2021	2020	2019
EBITDA margin[1]	**23.1**	24.2	22.7
Return on sales (ROS)	**15.8**	16.3	14.6
Return on Equity (ROE)[2]	**12.4**	15.6	10.5
Return on Capital Employed (ROCE)[3]	**8.7**	9.2	8.0
Debt/Equity	**58.2**	77.3	73.5

[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)	2021	2020
Ebitda	**794.6**	**780.8**
Restructuring costs	-	2.4
Additions to provisions for risks	1.3	1.1
Other expenses	-	0.7
EBITDA recurring	**795.9**	**785.0**

[1] The figure as at 31 December 2019 no longer reflects the effects of the first-time application of IFRS 16 (€27.7 million)

- **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

After a marked recovery in the first half of the year, thanks to the improvement in the Covid-19 epidemiological situation and the following easing of restrictions, the world economy slowed down its pace of expansion during the third quarter, as a result of the increase in infections due to the spread of the Delta variant and to tensions in global supply chains, especially as regards raw materials and semiconductors. These dynamics affected both the major advanced economies, excluding the euro area, and emerging countries. Starting from November, the spread of the Omicron variant, mainly in Europe and the United States, has caused an exponential growth in infections again but, thanks to the contribution of vaccination campaigns, the number of hospitalized patients has remained under control. For the fourth quarter, the most recent indicators show widespread signs of recovery in advanced economies, both in manufacturing and services, while in emerging countries the recovery appears weaker, especially in manufacturing. In this context, global GDP is expected to grow by 5.9% in 2021 while trade should increase by 9.3%.
In the United States of America, the economy grew at a rapid pace during the first half of the year, thanks to the progress of the vaccination campaign and the support of the fiscal measures launched by the government. However, the economic situation cooled down during the summer months due to the new surge in infections and bottlenecks in the production chains, which weighed on the manufacturing sector, especially the automotive one. At the same time, inflation began to rise again, reaching its highest level since the Eighties in December, driven by energy and rent increases.
In the Eurozone, after two quarters of robust expansion, economic activity significantly slowed down in the latter part of 2021, due to the increase in infections caused by the spread of the Omicron variant, and the consequent reintroduction of gradually more stringent restrictions, in addition to the persistent bottlenecks on the supply side which held back manufacturing production. Against this backdrop, GDP is expected to grow by 5.3% in 2021, still below pre-pandemic levels. Inflation, in December, reached its highest value since the launch of the European Monetary Union (+5.0%), driven mainly by the energy component.
In Italy, GDP expansion was still robust also in the summer quarter (+2.6%), supported mainly by domestic consumption. In the last quarter, however, with the resurgence of the pandemic, in addition to the supply difficulties of businesses, economic activity slowed down, both in manufacturing and in services. Industrial production was also affected by the shortage of raw materials and intermediate inputs, attenuating its growth rate.
As for the main emerging economies, in China, economic growth in the third quarter decelerated, penalized by the downturn in the real estate sector and by the emergence of further Covid-19 outbreaks, that caused new disruptions in global supply chains. In Brazil and Russia, strong international demand for raw materials and hydrocarbons supported GDP expansion.
At the end of the year, oil prices, having overcome the downward pressure following the discovery of the Omicron variant, showed strong signs of recovery, reaching 80 dollars a barrel. The price of natural gas remained very high in Europe, driven by tensions with Russia and by the strong demand for electricity production.
In November, the Federal Reserve taking into account its inflation and employment targets, launched the tapering program, while the ECB, considering the high uncertainty, reiterated the need to maintain an accommodative but flexible stance and to carefully follow the evolution of the macroeconomic situation. On the other hand, the sharp rise in price dynamics led the central banks of Brazil, Mexico and Russia to raise interest rates.

Construction investments, whose level is closely related to the evolution of the demand for cement and ready-mix concrete, showed a positive trend in the United States of America, basically thanks to the soundness of the residential sector. In Italy, the increase in investments was driven by residential renovation and the positive contribution of new public works. In Central and Eastern Europe, investment initiatives mainly concerned the residential sector. In Russia and Ukraine, on the other hand, construction activity showed a positive trend, supported by the increase in public works.
In the year under review, the group sold 31.2 million tons of cement, up 6.7% compared to 2020 and 12.1 million cubic meters of ready-mix concrete, improving 3.4% compared to the output of the previous year. Consolidated net sales increased from €3,222.4 to €3,445.6 million. During the year no changes occurred in the

scope of consolidation, while the exchange rate effect, mainly consisting of the depreciation of the ruble, the Ukrainian hryvnia and the dollar, which were particularly evident in the second half of the year, was unfavorable for € 62.7 million. Like for like net sales would have improved by 8.9% compared to 2020.
Ebitda amounted to €794.6 million, up 1.8% compared to €780.8 million of last year. The 2021 figure includes non-recurring costs of €1.3 million, mainly referring to provisions for risks (in 2020 net non-recurring costs equal to €4.2 million).
After amortization and depreciation of €249.0 million, Ebit stood at €545.6 million, versus €523.9 million in 2020. Net financial costs increased from €0.3 to €34.4 million: the rise was essentially determined by the variances in the net balance of non-cash items, in particular exchange gains or losses. Profit before tax was €635.3 million compared to €700.3 million in 2020. After current and deferred income tax of €93.0 million (€139.8 million in 2020), the income statement closed with a net profit of €542.3 million, €541.9 million thereof being the portion attributable to the owners of the company.
Net debt at year-end 2021, including long-term assets, is positive and amounts to €235.5 million, down €477.1 million compared to €241.6 million as at 31 December 2020, following capital expenditures of €217.7 million and after having distributed dividends of €191.2 million, €143.3 million thereof referring to the extraordinary dividend, already accounted for as debt in the 2020 financial year. The debt/equity ratio was 58% (77% at year-end 2020).

Operating and financial performance

In 2021, cement sales at consolidated level came in at 31.2 million tons, up 6.7% compared to 2020, thanks to the progress recorded in Italy, the United States of America and Eastern Europe, favored by the soundness of domestic demand and construction investments, as well as by overall favorable weather conditions. These trends definitely offset the weakness recorded in Germany, which was affected by the unfavorable weather, especially during the summer period. Ready-mix concrete sales amounted to 12.1 million cubic meters, up 3.4% compared to 2020. Sales volumes recorded a positive development in Italy and Eastern Europe, while in the United States of America and in Central Europe they showed a decline.

Consolidated net sales increased from €3,222.4 to €3,445.6 million. During the year no changes in scope were recorded, while the exchange rate effect was unfavorable for €62.7 million. Like for like net sales would have improved by 8.9%.

In Italy, during 2021, our hydraulic binders and clinker sales, clearly progressing in the first six months of the year, maintained a positive trend in the second half too, thanks to the solidity of domestic demand and the mild weather. Average selling prices, for the whole of 2021, showed a positive trend. The ready-mix concrete sector closed the year markedly improving, with prices also increasing. Overall net sales in Italy stood at €604.7 million, up 20.7%.

As for the Central European countries, in Germany, our hydraulic binders shipments, after a slight decline in the first part of 2021, confirmed the weak trend also during the second half, penalized by the unfavorable weather and by the uncertainties related to the increase in infections in the last quarter. Average selling prices, on the other hand, showed a favorable change. In this context, the ready-mix concrete sector also closed with a decline in production compared to 2020 and prices slightly strengthening. In Luxembourg and the Netherlands, our cement deliveries, after a robust first half, showed a slight slowdown during the second half of the year, anyway closing 2021 with a good progress, coupled with improved selling prices. The ready-mix concrete sector, despite a recovering fourth quarter, recorded a slightly negative trend, associated with a favorable change of selling prices. The turnover of Central Europe remained almost stable, increasing from €878.5 to €880.3 million, up 0.2%. Germany recorded a decline in net sales equal to 1.2% (from €717.0 to €708.1 million), while Benelux grew by 4.9% (from €191.7 to €201.1 million).

Looking at the Eastern European markets, in Russia, cement sales, after a first half clearly progressing, continued somehow steadily in the second half of the year, thanks to the soundness of demand and the still mild weather, closing the year 2021 clearly improving compared to the previous year. Unit selling prices, in local currency, showed a positive change. The growing demand for hydrocarbons on a global scale had a favorable impact on the production of oil well special cements, which significantly exceeded the level reached at the end of 2020. Net sales amounted to €207.4 million, increasing (+5.9%) compared to €195.8 million of last year. The depreciation of the ruble (-5.4%) had a negative impact on the turnover: at constant exchange rates, revenues would have increased by 11.6%.

In Ukraine, the recovery in the construction sector, favored by government stimuli, and the imposition of tariffs on imports from Turkey, pushed our cement sales upwards for the whole of 2021. Selling prices, in local currency, which were negative in the first six months of the year, grew during the second half, driven by inflation. Ready-mix concrete production showed even more evident growth, with selling prices rising too. Net sales came in at €127.0 million, up 9.4% compared to 2020. The depreciation of the local currency (-4.6%) negatively impacted the translation of the results into euro: at constant exchange rates the turnover would have increased by 14.4%.

In Poland, our cement sales volumes, after a weak first half, picked up in the second half of 2021, closing the year on the rise. The average level of selling prices, in local currency, equally improved. Ready-mix concrete output recorded even more evident progress, but with selling prices, in local currency, decreasing. In this market context, net sales in euro amounted to €126.4 million, up 7.3% compared to 2020. The weakening of the zloty (-2.8%) had an unfavorable impact on the translation of the results: at constant exchange rates net sales would have been up 10.3%.

In the Czech Republic, cement sales, after a first semester progressing, confirmed the positive trend also in the second half of the year, closing 2021 markedly increasing versus 2020. Average selling prices, in local currency, improved. The ready-mix concrete business, including Slovakia, recorded slightly higher production levels; the price effect was also favorable. Overall net sales, thanks also to the appreciation of the Czech koruna (+3.1%), came in at €177.5 million, up 11.3% compared to 2020. At constant exchange rates the turnover would have been up 8.3%

Net sales of Eastern Europe as a whole came in at €637.2 million, up 8.5% compared to €587.0 million of 2020. Like for like, they would have been up 11.0%.

In the United States of America, our hydraulic binders volumes, thanks to the soundness of demand and to generally favorable weather conditions, especially during the fourth quarter, confirmed the progress already recorded in the first half, closing 2021 satisfactorily. Ready-mix concrete output, mainly present in Texas, despite a partial recovery during the third quarter, showed some weakness closing below the level reached in the previous year. Selling prices, in local currency, improved nicely in the cement sector, while in the concrete one the increase was less evident. Overall net sales stood at €1,329.6 million, up 5.5% versus €1,260.6 million of 2020. The depreciation of the dollar (-3.5%), which occurred above all in the first part of the year, negatively impacted on the translation of the results into euro: at constant exchange rates net sales would have been up 9.2%.

The consolidated Ebitda stood at €794.6 million, up 1.8% compared to €780.8 million of the previous year. Currency fluctuation resulted in a negative effect of €19.2 million. The figure of the year under review includes net non-recurring costs of €1.3 million, attributable to provisions for liabilities and charges. In 2020 non-recurring expenses incurred were equal to €4.2 million. Excluding non-recurring items Ebitda rose from €785.0 to €795.9 million (+1.4%), with Ebitda to sales margin standing at 23.1% (24.4% in 2020). The strengthening of operating results in the United States of America and Russia, despite the unfavorable exchange rate effect, in addition to Italy and the Czech Republic, more than offset the slowdown recorded in Central Europe, Poland and Ukraine.

Amortization and depreciation amounted to €249.0 million, versus €256.9 million of the previous year. Ebit came in at €545.6 million, up compared to €523.9 million in 2020. Net finance costs increased from €0.3 to €34.4 million, mainly due to the variance of the net balance of non-cash items, in particular gains/losses on foreign exchange. Gains on sale of investments contributed positively for €18.0 million, thanks to the disposal of building land in Luxembourg, while equity in earnings of associates decreased from €173.1 to €106.1 million. It should be pointed out that in 2020 an amount of €103.6 million, referring to the assets disposal carried out by the associate Kosmos Cement, contributed to the balance. As a consequence of the above, profit before tax amounted to €635.3 million, down compared to €700.3 million of the previous year. The tax burden for the year was €93.0 million, versus €139.8 million in 2020. The lower tax rate of 2021, equal to 15% of the profit before tax (20% in 2020), was affected by the component relating to prior years, which incorporates a benefit for greater accelerated depreciation in the United States, and by a lower taxable income produced in the jurisdictions of operations where the tax rates are higher. Therefore, the income statement for 2021 closed with a net profit of €542.3 million (€560.5 million in 2020). Net profit attributable to the owners of the company amounts to €541.9 million in the year under review (-3.3%).

Consolidated net financial position as at 31 December 2021 was positive and stood at €235.5 million, compared to €241.6 million of net debt at year-end 2020. The improvement was achieved thanks to the favorable trend in cash generated from operations and from some slowdown of capital expenditures projects caused by disruptions in the supply chains of materials and difficulties in carrying out orders, following the persistence of the Covid-19 pandemic. In 2021 the group distributed dividends of €191.2 million and paid total capital expenditures of €217.7 million, €33.2 million thereof dedicated to improving environmental performance and decarbonizing production process. Projects to increase the production of cements with a lower clinker content, the use of alternative fuels and the in-house production of electricity belong to this category. An amount of €16.7 million was allocated to capacity expansion projects, among which the erection of the new cement grinding department in Korkino in Russia (€4.3 million), the construction of a new clinker storage in San Antonio, Texas (€2.1 million), and a new natural aggregates quarry in Austin, Texas (€4.3 million).

As at 31 December 2021, total equity, inclusive of non-controlling interests, stood at €4,375.2 million versus €3,603.0 million at 2020 year-end. Consequently, the debt/equity ratio decreased to 58% from 77% in the previous year.

Italy

During the last quarter of 2021 the Italian economy showed moderate development (+0.6%), following the most evident increases recorded in the second and third quarters (respectively +2.6% and +2.7%), supported mainly by the recovery in consumption and the strengthening of industrial production. The slowdown observed at the end of the year was influenced by the new wave of infections, resulting from the spread of the Omicron variant in the country, and by the further acceleration of inflation (+3.9% in December), caused by the surge in energy prices and persistent disruptions to supply chains.
Exports, thanks to the soundness of international demand, showed clear progress (+18.2% for the whole of the year), which was more marked towards EU countries than the non-EU area. The expansion of industrial production, widespread in all the main sectors but more marked for intermediate and capital goods, was equal to 11.8% in 2021, compared with a decline of 11.4% in 2020. The employment rate, on the other hand, which has been growing since February, slightly decreased in the fourth quarter, closing 2021 in any case at pre-pandemic levels (59.0%). In this context, GDP in 2021 rose by 6.5%, while inflation, referred to the entire period, reached +1.9%, driven upwards by the increase in energy prices. The recovery in economic activity was also reflected in public accounts, with public debt/GDP ratio at around 150%, improving on the 2020 figure (155%).

In 2021, construction investments grew at a rapid pace, thanks to important measures implemented by the Government, such as the so-called Superbonus 110%, and to the prospective opportunities offered by the PNRR, the National Recovery and Resilience Plan. The increase in investments (+16.4% compared to 2020) was driven by the residential renovation sector, whose growth exceeds 20%, and by the positive contribution of new public works (+15%). However, the recovery was significantly impacted by shortages and the sharp rise in the price of raw materials.
Our hydraulic binders and clinker volumes, after clearly progressing in the first six months of the year, maintained a positive trend also in the second half, thanks to the soundness of domestic demand and the mild climate; referring to the whole of the year, they increased by 15.9%. Average selling prices, in the same period, showed a positive trend. The ready-mix concrete sector closed the year markedly progressing (+17.4%), with better prices, too.

Such trend in volumes and prices led to net sales of €604.7 million, up 20.7% (€501.1 million in 2020). The unit production costs showed a clear worsening due to the significant increase in fuel and power costs, despite a marginal improvement of the fixed component. Ebitda achieved €40.8 million, up 20.7% compared to €33.8 million of last year. The recurring Ebitda, equal to the reported one, increased by 15.2% compared to €35.5 million in 2020 (which included non-recurring charges of €1.6 million). During the financial year the company did not realize other operating revenues from the intercompany sale of CO_2 emission rights.

(millions of euro)	2021	2020	21/20
Net sales	604.7	501.1	+20.7%
EBITDA	40.8	33.8	+20.7%
EBITDA recurring	40.8	35.5	+15.2%
% of net sales	6.8	7.1	
Capital expenditures	26.5	52.0	-49.1%
Headcount end of period n.	1,555	1,561	-0.4%

The investment activity aimed at improving our production technology, environmental performance and occupational safety continued throughout the year. In particular, it is worth mentioning €2.8 million dedicated to initiatives for the decarbonization of the production process, including investments to increase the production of cements with a lower clinker content and the greater use of alternative fuels. In addition, €10.5 million were capitalized for energy and technological efficiency measures. The expenditure for the expansion of raw materials reserves and for the overburden removal and securing of the quarry fronts amounted to €3.2 million. In the ready-mix concrete sector, €1.9 million were invested for the modernization of some batching plants.

Germany

After a contraction of 4.6% recorded last year, the German economy grew by 2.8% in 2021, i.e. at a less brilliant pace than its main European partners. In the second and third quarters, the easing of restrictions linked to the pandemic and the increase in private consumption supported the economy, which was however slowed down by the weakness of exports and investments. During the fourth quarter, a further contraction in investments coupled with a weaker domestic consumption, caused by the new increase in infections and by the higher inflation, once again hindered the economy. Although orders reached high levels, driven by the strong recovery in global demand, industrial production, particularly in the automotive sector, is expected to slightly decline in 2021, penalized by the shortage of raw materials and semiconductors. The inflation rate, which rose sharply in the fourth quarter, stood at 3.2%, mainly due to the increase in energy factors and raw materials. In a context characterized by a slowdown in capital spending by businesses, a direct consequence of the weakness of industrial production, construction investments showed a stable trend, supported by good activity in the residential sector.
Our deliveries of hydraulic binders, after a slight decline in the first part of 2021, closed the year down (-3.8%), confirming a weak trend also during the second half, being penalized by unfavorable weather conditions and by the uncertainties associated with the increase in Covid-19 infections. Average selling prices, on the other hand, showed a satisfactory positive change. In this context, also the ready-mix concrete sector closed with a decrease in production compared to 2020 (-4.9%) and prices slightly strengthening.

Overall net sales thus decreased from €717.0 to €708.1 million (-1.2%) while Ebitda in any case improved from €123.8 to €127.5 million (+2.9%). Unit production costs recorded a net unfavorable change due to the increase in fuel and electricity items, as well as to the surge in the prices of CO_2 emission rights. In 2021 the business incurred operating costs of €23.6 million for the purchase of CO_2 emission rights (€16.5 million in 2020).

(millions of euro)	2021	2020	21/20
Net sales	**708.1**	717.0	-1.2%
EBITDA	**127.5**	123.8	+2.9%
% of net sales	**18.0**	17.3	
Capital expenditures	**41.4**	42.3	-2.2%
Headcount end of period n.	**1,780**	1,789	-0.5%

Total capital expenditures realized in 2021 amounted to €41.4 million, €8.2 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 production of cements with a lower clinker content and the greater use of alternative fuels. In addition, €6.2 million were capitalized for energy and technological efficiency measures. In the ready-mix concrete sector, €3.7 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 limited contraction in 2020 (-1.8%), during 2021 GDP progressed significantly (+7%), mainly thanks to the expansion of private consumption, which returned to pre-pandemic levels already in the third quarter, and to the soundness of the service sector. During the first half of the year, investments also showed a positive trend, and then slowed down in the second half of the year. Despite the high vaccination rate, during the fourth quarter a new worsening of the epidemiological picture led to the return to new restrictions and, consequently, to a slowdown in the expansionary dynamics of consumption which, however, should not have had a particularly unfavorable impact on growth. Inflation rate increased significantly in the year, reaching 3.5%, driven upwards by the surge in energy prices, as well as by the rise in the prices of various goods and services.

The economy recovered rapidly even in the Netherlands, thanks to an improvement in the health situation and to the recovery of private consumption, already in the first half of the year. Trade contributed to the rebound, with exports showing an expansionary dynamic. The investment activity, on the other hand, weakened during the second and third quarters due to shortages and the lengthening of delivery times for materials and semi-finished products. Despite a marginal slowdown recorded at the end of the year, due to the new wave of infections, in 2021 GDP grew by 4.3% while inflation reached 2.8%, driven upwards by higher energy prices.

Our cement shipments, after a robust first half, showed a slight slowdown during the second half of the year, closing 2021 with a fair progression anyway (+5.8%), and with increasing selling prices. The ready-mix concrete sector, despite a recovering fourth quarter, recorded a slightly negative trend (-0.2%), associated with improving selling prices.
Net sales came in at €201.1 million, up 4.9% compared to the previous year (€191.7 million). Ebitda stood at €16.5 million, decreasing compared to €21.7 million in 2020. Unit production costs showed a clear rise, mainly due to the increase in energy factors and CO_2 emission rights, while fixed costs were lower. During the year the business incurred operating costs of €2.4 million for the purchase of CO_2 emission rights (€2.1 million in 2020).

(millions of euro)	**2021**	**2020**	**21/20**
Net sales	**201.1**	191.7	+4.9%
EBITDA	**16.5**	21.7	-24.2%
% of net sales	**8.2**	11.3	
Capital expenditures	**9.0**	7.1	+26.8%
Headcount end of period n.	**301**	311	-3.2%

Total capital expenditures made in 2021 amounted to €9.0 million, of which €2.3 million were directed to the improvement of the environmental performance and to the decarbonization of the production process, in addition to energy and technological efficiency measures. Moreover, €1.2 million were capitalized for the purchase of new quarry equipment and €1.0 million for the modernization of some batching plants.

Poland

The Polish economy, after a positive first half, was confirmed as such also during the second half of 2021, despite a still very uncertain epidemiological picture and interruptions in supply chains. In the third quarter, GDP grew (+2.1% on a quarterly basis), mainly driven by the gradual easing of the restrictions linked to the pandemic which supported the recovery in domestic consumption. At the end of the year, despite the slowdowns of logistics on a global scale, investments and inventories maintained an expansionary trend, supporting the recovery of manufacturing activity. In this context, therefore, GDP grew by 5.7% in 2021, while inflation increased significantly in the second half of the year, due to the trend in commodity prices and supply bottlenecks, reaching 5.2%.

In 2021, the construction sector maintained some stability, thanks to the solidity of residential demand and investments in infrastructures, while the commercial component remained weak. These dynamics were reflected in our cement sales volumes which, after the difficulties that emerged in the first semester, showed good results in the second half of 2021, closing the year better off (+5.3%). The average level of selling prices, in local currency, was also improving. The ready-mix concrete production recorded even more evident progress (+24.4%), but with selling prices, in local currency, decreasing.

Net sales increased from €117.8 to €126.4 million (+7.3%) while Ebitda fell from €35.3 to €31.3 million (-11.3%). However, it should be remembered that the depreciation of the local currency (-2.8%) impacted the translation of the results into euro: at constant exchange rates net sales would have been up 10.3% and Ebitda down 8.9%. The unit production costs in local currency showed an unfavorable change, penalized by the higher costs of fuels, power and CO_2 emission rights. During 2021 the business incurred operating costs of €8.7 million for the purchase of CO_2 emission rights (€6.5 million in 2020).

(millions of euro)	**2021**	**2020**	**21/20**
Net sales	**126.4**	117.8	+7.3%
EBITDA	**31.3**	35.3	-11.3%
% of net sales	**24.7**	29.9	
Capital expenditures	**7.7**	6.0	+28.5%
Headcount end of period n.	**350**	349	+0.3%

Total capital expenditures made in 2021 amounted to €7.7 million, of which €3.1 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 improvement of workplace safety. In the ready-mix concrete business €1.3 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

The relaxation of the restrictive measures during the second and third quarters allowed a revival of economic activity, favoring the expansion of domestic consumption. The resurgence of infections during the final part of the year and the consequent introduction of new restrictions, aimed primarily at the hospitality sector, should not have affected the positive development of the economic situation. Despite strong global demand, industrial production and exports, particularly in the automotive sector, slowed down due to the continuing shortage of semiconductors. Based on these dynamics, GDP for 2021 is estimated to grow by 3.3% while inflation, which increased significantly at the end of the year, reached 3.3%, driven by the increase in prices of production goods and factors.

Construction investments showed some stability: the positive trend in the residential demand was offset by the weakness of the commercial sector, while no significant changes are expected for infrastructures. Cement sales, after a favorable first half, confirmed a good trend also in the second part of the year, closing 2021 markedly advancing compared to 2020 (+10.8%). Average selling prices, in local currency, increased. The ready-mix concrete sector, including Slovakia, recorded slightly higher production levels (+1.5%); the price variance was also favorable.

Consolidated net sales amounted to €177.5 million (€159.5 million in 2020, +11.3%) and Ebitda increased from €46.8 to €51.3 million (+9.7%). The appreciation of the Czech koruna (3.1%) had a positive impact on the translation of the results into euro: at constant exchange rates, the variance of net sales would have been +8.3%, while the one of Ebitda +6.3%.
The improvement in fuel and electricity costs was offset by the increase in the fixed component and, more evidently, in CO_2 emission rights: unit production costs therefore showed an unfavorable variance. During the year the business incurred operating charges of €6.6 million for the purchase of CO_2 emission rights (€1.7 million in 2020).

(millions of euro)	**2021**	**2020**	**21/20**
Net sales	**177.5**	159.5	+11.3%
EBITDA	**51.3**	46.8	+9.7%
% of net sales	**28.9**	29.4	
Capital expenditures	**7.5**	9.3	-19.0%
Headcount end of period n.	**720**	737	-2.3%

Total capital expenditures realized in 2021 amounted to €7.5 million, of which €1.3 million for energy and technological efficiency measures and €1.2 million for the purchase and preparation of quarry land. Moreover, €4.2 million in the ready-mix sector were invested, €2.8 million thereof for the modernization of some batching plants and for new truck mixers and pumps, as well as €1.4 million for the expansion of the distribution network.

Ukraine

After the recovery of economic activity during the second quarter, thanks to the positive trend of domestic demand, industrial production and exports, in the third quarter GDP grew at a slower pace, in a context of general slowdown. In the last quarter, in a scenario of clear uncertainty, largely due to the growing tensions on the border with Russia and to the delays in the vaccination campaign, consumer confidence worsened while the agricultural and mining sector maintained an expansionary trend. For the whole of 2021, GDP should grow by 3.5% and inflation, fueled both by the dynamics of global trade and by the recovery of domestic demand, is expected to reach a high level (+9.5%).

The recovery in the construction sector, favored by government stimuli, and the imposition of duties on imports from Turkey, pushed our cement sales upwards for the whole of 2021 (+10.4%). Selling prices, in local currency, which were weaker in the first six months of the year, increased during the second half, driven by inflation. Ready-mix concrete output showed even more evident growth (+32.7%), with selling prices also increasing.

Net sales stood at €127.0 million, up compared to €116.1 million achieved in 2020 (+9.4%), while Ebitda, however, decreased from €21.9 to €13.3 million (-39.1%). The depreciation of the local currency (-4.6%) negatively influenced the translation of the results into euro: at constant exchange rates the turnover would have been up 14.4% and Ebitda down 36.3%. Despite the significant savings in fixed costs, unit production costs in local currency worsened, mainly due to the considerable increase in fuel and electrical power costs.

(millions of euro)	**2021**	**2020**	**21/20**
Net sales	**127.0**	116.1	+9.4%
EBITDA	**13.3**	21.9	-39.1%
% of net sales	**10.5**	18.9	
Capital expenditures	**6.9**	9.2	-24.4%
Headcount end of period n.	**1,266**	1,281	-1.2%

Total capital expenditures made in 2021 amounted to €6.9 million, of which €2.8 million referring to energy and technological efficiency measures as well as improvement of occupational safety, €1.6 million for overburden removal in the quarry and €0.3 million for the purchase of plant vehicles.

Russia

The economic recovery, after a robust first half supported by the favorable trend in industrial production and mining, as well as by the strengthening of domestic consumption, was also confirmed in the second half of 2021, despite some signs of slowdown starting from the third quarter due to uncertainties about the epidemiological picture and the low vaccination rate. The recovery of activity on a global scale, in addition to the increase in the prices of hydrocarbons and raw materials, had a positive impact on exports and investments. At the sector level, the expansion was driven by services, while government programs to support credit and modernize the infrastructure network sustained the construction industry. The increase in demand and in energy prices pushed inflation upwards, leading to a tightening of monetary policy by the Central Bank. For the entire year 2021, GDP is expected to grow by 4.5%, while inflation should be 5.9%.

Cement sales, after a clear increase in the first half of the year, continued somehow steadily in the second one, thanks to the soundness of demand and the still favorable weather conditions, closing 2021 clearly improving compared to the previous year (+7.1%). Unit selling prices, in local currency, showed a positive change. The growing demand for hydrocarbons on a global scale had a favorable impact on the production of special oil-well cements, which significantly exceeded the level reached at the end of 2020.

Net sales amounted to €207.4 million, up compared to €195.8 million of the previous year (+5.9%) and Ebitda increased from €52.9 to €58.6 million (+10.7%). The weakening of the ruble (-5.4%) unfavorably influenced the translation of the results into euro: at constant exchange rates, net sales and Ebitda would have been up 11.6% and 16.6% respectively. Ebitda to sales margin, increasing compared to the previous year, remained on levels higher than the group average (28.2%). Unit production costs in local currency were almost stable, thanks to the favorable trend of electric power and fuel costs.

(millions of euro)	**2021**	**2020**	**21/20**
Net sales	**207.4**	195.8	+5.9%
EBITDA	**58.6**	52.9	+10.7%
EBITDA recurring	**58.6**	55.5	+5.5%
% of net sales	**28.2**	28.3	
Capital expenditures	**23.3**	17.8	+31.0%
Headcount end of period n.	**1,446**	1,355	+6.7%

Total capital expenditures made in 2021 amounted to €23.3 million, €4.3 million thereof for expansion projects, with the installation of the new cement mill at Korkino, €3.5 million for the improvement of environmental performance, thanks to the installation of the electrofilter and the emission monitoring system in Suchoi-Log, as well as €3.4 million for energy and technological efficiency works in both production plants. Moreover, €8.1 million concerned the purchase of railway wagons and €0.7 million new plant vehicles.

United States of America

The growth in economic activity recorded in the first half, favored by the positive dynamics of consumption and by the contribution of the America Rescue Plan, was followed by a slowdown in the third quarter, due to the worsening of the epidemiological situation, with the spread of the Delta variant, and supply chain disruptions. In the fourth quarter, however, the US economy registered a strong acceleration (+7.0%), thanks to the replenishment of inventories and the positive dynamics of exports, being much higher than imports. Furthermore, private consumption and investments offset the decline in public spending. Due to the increases in energy factors and components related to cars and rents, inflation increased significantly in the second half of 2021, reaching the maximum level since the 1980s. The most recent estimates indicate that GDP growth will be 5.7% in 2021, while inflation should be 4.3%.

Construction investments are expected to increase over the previous year (+1.5%), thanks to the soundness of the residential sector (+13.1%), net of the negative contribution of public works (-6.1%) and non-residential (-7.7%). Our hydraulic binders sales, thanks to the solidity of demand and to generally favorable weather conditions, especially during the last three months of the year, confirmed the progress already recorded in the first half, closing 2021 up by 7.5%. Ready-mix concrete output, mainly present in Texas, despite a partial recovery during the third quarter, showed some weakness closing below the level reached the previous year (-2.8%). Selling prices, in local currency, performed well in the cement business, while in the concrete one the increase was less evident.

Overall net sales amounted to €1,329.6 million, up 5.5% compared to €1,260.6 million of 2020, while Ebitda increased from €444.2 to €455.1 million (+2.4%). The depreciation of the dollar (-3.5%), which was particularly evident in the first part of the year, had a negative impact on the translation of the results into euro: at constant exchange rates net sales and Ebitda would have increased by 9.2% and 6.1% respectively. It should be remembered that the figure for the year under review includes a non-recurring addition of €1.3 million to provisions for risks: net of non-recurring items, Ebitda was up 2.7%. Ebitda margin still represents the top level of the group (34.3%), albeit declining, due to the increase in unit production costs, which were negatively impacted by the very unfavorable dynamics of energy factors, particularly fuels.

(millions of euro)	2021	2020	21/20
Net sales	1,329.6	1,260.6	+5.5%
EBITDA	455.1	444.2	+2.4%
EBITDA recurring	456.4	444.2	+2.7%
% of net sales	34.3	35.2	
Capital expenditures	95.3	113.8	-16.3%
Headcount end of period n.	2,246	2,300	-2.3%

Total capital expenditures realized in 2021 amounted to €95.3 million, €13.3 million thereof regarding the improvement of environmental performance and the decarbonization of the production process, including initiatives to increase the production of cements with a lower clinker content, the greater use of alternative fuels and the installation of a photovoltaic power station at San Antonio (Texas), for which €3.5 million were spent. Furthermore, during the year, investments in technological and energy efficiency reached €21.7 million, while the expansion and modernization of the distribution network, among which it is worth mentioning the works at the terminals of Wichita (Kansas), Cincinnati (Ohio) and Dallas (Texas), amounted to €8.8 million. On the other hand, as regards investments for the expansion of production capacity and raw material reserves, €2.1 million were capitalized for the construction of the clinker storage at San Antonio (Texas), €4.2 million for the new natural aggregates quarry in Austin (Texas) and €2.7 million for the overburden removal of quarry fronts. Purchases of new quarry and plant equipment, instead, were €7.2 million. Finally, in the ready-mix concrete sector capital expenditures concerned the expansion of some batching plants, technological optimization works and the purchase of mixer-trucks for a total of €10.7 million.

Mexico

(valued by the equity method)

The Mexican economy, after a strengthening first half, decelerated its expansionary pace during the third quarter, influenced by the uncertainties linked to the pandemic and the delayed vaccination campaign, as well as by interruptions in supply chains, which slowed down industrial production. However, thanks to the solidity of the US economy and the continuous flow of remittances sent by migrants, exports and domestic consumption showed a considerable recovery. In the fourth quarter, the economy recorded a further weakening, still penalized by the service sector, despite the fact that the industrial sector slightly recovered, helped by the upswing of car production.
Based on these dynamics, in 2021 economic activity grew both in the agricultural and manufacturing sectors, while in the service sector the recovery was partial. For instance, tourism, the primary source of income in many states, is still heavily penalized compared to pre-pandemic levels. Inflation has increased significantly since the third quarter, due to procurement difficulties and upward pressure from energy factors. After reducing interest rates in 2020 and providing ample liquidity in order to support the economic recovery, starting from August 2021 the Central Bank has gradually increased interest rates, with the aim of curbing inflationary pressures. In this context, GDP growth in 2021 is expected at +5.3%, while inflation should come in at 5.4%.

The sales of the associate Corporación Moctezuma, after a particularly sound first half of the year, recorded a marginal weakness in the second one, due to a slowdown in the construction sector, closing 2021 considerably progressing compared to the previous year (+8.4%). Price variance, in local currency, continued to be positive. Ready-mix concrete sales showed a favorable trend (+8.1%), with stable prices in local currency.
Net sales stood at €661.6 million, up 15.3% on the previous year, while Ebitda came in at €282.7 million, almost €18 million better compared to €265.0million of 2020. The Mexican peso showed an appreciation of 2.2%. At constant exchange rates net sales and Ebitda would have been up 12.8% and 4.3% respectively. The sharp increase in fuel and electricity items led to a worsening of unit production costs. The equity earnings referring to Mexico, included in the line item that encompasses the investments valued by the equity method, amount to €63.9 million (€58.1 million in 2020).

(millions of euro)	2021	2020	21/20
Net sales	661.6	573.8	+15.3%
EBITDA	282.7	265.0	+6.7%
% of net sales	42.7	46.2	
Capital expenditures	17.2	19.7	-13.0%
Headcount end of period n.	1,376	1,170	+17.6%

Figures at 100%

Brazil

(valued by the equity method)

During the first half of the year, the high rate of Covid-19 infections and the following introduction of new restrictions slowed down the Brazilian economy. However, thanks to the improvement in the health situation and the acceleration of the vaccination campaign, starting from the third quarter economic activity has shown the first signs of recovery. The fiscal stimulus package approved by Congress in March, aimed at supporting healthcare spending, households and employment rate, pushed the recovery of domestic consumption and private investment. The progress of the global demand for raw materials, agricultural and mining in particular, favored exports. During the last quarter, the economy slowed down again, due to the weakness of industrial production, the lower purchasing power, caused by a growing inflationary pressures, as well as political uncertainties. In this context, GDP is still expected to grow by 4.7% in 2021. The inflation rate, driven by the strong international demand for raw materials and industrial goods, as well as by higher costs for electricity, further increased in the last quarter, reaching 10% in December. These inflationary pressures led to a significant rise in interest rates by the Central Bank. The construction industry showed an expansionary trend, thanks to greater investments in the residential buildings, in the transportation system and in renewable energy projects.

The brilliant trend of cement shipments carried out by our joint venture in the first part of 2021 continued in the second half, and the year closed markedly progressing (+53.6%) compared to 2020. A decisive factor was the additional contribution referred to the companies of the CRH group operating in Brazil, acquired in April. Selling prices, in local currency, also showed a considerable improvement.
Net sales stood at €253.4 million, equal to +82.2% compared to €139.1 million of the previous year, while Ebitda reached €80.9 million, markedly up compared to €48.0 million of 2020. The depreciation of the Brazilian real penalized the translation of the results into euro (-8.2%): like for like, net sales and Ebitda would have been up 32.4% and 33.6% respectively. The unfavorable dynamic of unit production costs was due to the worsening of both fixed items and the variable cost component, particularly the energy factors. The equity earnings referring to Brazil, included in the line item that encompasses the investments valued by the equity method, amount to €31.8 million (0.4 million in 2020).

(millions of euro)	2021	2020	21/20
Net sales	253.4	139.1	+82.2%
EBITDA	80.9	48.0	+68.7%
% of net sales	31.9	34.5	
Capital expenditures	177.0	2.6	n.s.
Headcount end of period n.	1,227	712	+72.3%

Figures at 100%

Algeria

(valued by the equity method)

In Algeria, after a first semester characterized by the persistence of the Covid-19 pandemic, eventually in the autumn there was a slowdown in the number of new cases per day and an acceleration of the vaccination campaign. At the same time, the high prices on the global hydrocarbon markets, a primary source of income for the country, allowed a gradual recovery of oil and natural gas production, supporting exports. However, the economic recovery in non-hydrocarbon sectors remained incomplete, due to the weakness of public investment and the construction sector, also held back by inflationary pressures. In 2021 it is estimated that GDP will grow by 4.1%. In this context, cement consumption was approximately 19 million tons, down compared to 2020.

During 2021, no further expansions were announced, therefore, the production capacity remained stable at around 39 million tons, almost doubled compared to 2012. Thanks to the significant increase in clinker exports, which reached 6 million tons in 2021 (against 2 million tons in 2020), Algeria, from an importing country, thus became an exporter of clinker and, to a lesser extent, of cement. GICA and Holcim, the two main producers, destined much of the excess capacity to export. The export of clinker is mainly directed to the countries of sub-Saharan Africa (Mali and Niger). The sharp increase in clinker exports partly contributed to reducing internal commercial competition which, therefore, did not generate a significant drop in profitability.

Cement sales on the domestic market of the Hadjar Soud facility amounted to 0.8 million tons, sharply declining compared to the previous year (-16%). Clinker exports, on the other hand, clearly increased, from 41 thousand tons to about 300 thousand tons in 2021. During the year, some investments were carried out to improve the reliability of the production process, while the revamping project, aimed at improving the efficiency and optimization of the production process, is being defined.

The Sour El Ghozlane plant recorded a contraction in volumes sold on the domestic market, which stood at 0.8 million tons (0.9 million in 2020). Clinker exports, on the other hand, were sharply pushed upwards (from just over 1 thousand tons in 2020 to 100 thousand tons in 2021).

With reference to 100% of both associates and their individual financial statements, the 2021 financial year closed with net sales of €61.7 million, down compared to €68.5 million in the previous year (-10%). The depreciation of the Algerian dinar versus the euro (-10.2%) significantly impacted the unfavorable change. Ebitda was down, equal to €22.6 million (i.e. -27.6%). Ebitda to sales margin, although declining, remained however at interesting levels (35% versus 42% in 2020). Forecasts for 2022 indicate production, sales and results stable compared to the previous year. However, the recent increase in oil and natural gas prices could contribute to a resumption of public and private works, which slowed down considerably in the two previous years with a following positive effect on the company's financials.
The equity earnings referring to the Algerian market, included in the line item that encompasses the investments valued by the equity method, amount to €-2.3 million (2.0 million in 2020).

Slovenia

(valued by the equity method)

Despite the spread of the Covid-19 pandemic and the slow progress of the vaccination campaign had a negative impact on the economy, growth in the first half was solid, particularly thanks to the expansionary dynamics of domestic consumption and investments. Imports increased more than exports, the last ones penalized by bottlenecks in supply chains on an international scale. However, in the fourth quarter, economic activity grew at a slower pace than in previous months, influenced by a new increase in infections that led the government to introduce new restrictions. On an annual basis, GDP growth is expected to reach 6.9% in 2021.

Domestic cement consumption in Slovenia is estimated at approximately 1.1 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 2021 the hydraulic binders production increased compared to the previous year, standing at approximately 1.3 million tons. With reference to 100% of the associate, the 2021 financial year closed with net sales at €98.0 million (+10.9% compared to 2020), and Ebitda at €24.2 million, slightly down.
The equity earnings referring to Slovenia, included in the line item that encompasses the investments valued by the equity method, amount to €3.1 million (3.9 million in 2020).

Human Resources

The different and articulated territorial needs 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. The different skills, also as the result of various cultures, are interpreted in Buzzi Unicem 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 three main events, two of which have already occurred in 2020:

- the continuation of the initiatives to hinder the Covid-19 pandemic, through a constant dialogue with the Trade Union Representatives, for the adaptation of safety standards including those to return to work to the office, until the fully efficient resumption and the operation of all activities, also thanks to a significant participation in the vaccination campaigns by the staff;
- the continuation of training and coaching activities for highly trained apprentices of the second level University Specialization Master TAGCEM (Advanced Techniques for the Management of Cement Production Plants),
- the redeployment of part of the staff of the plants in Greve in Chianti (Florence) and Arquata Scrivia (Alessandria) after the painful decision to terminate the production and marketing of hydraulic binders in the above mentioned production facilities. The union negotiation, which has been lasting for almost five months, allowed to initiate, in addition to the Extraordinary Redundancy Fund, a process of redeployment, with retraining and assistance for tasks outside the scope of the group addressed to the employees who decided not to accept the positions being available in Italy.

As part of the project on the enhancement of our own human capital, we initiated a skills development path through the analysis of positions considered as essential for the proper management of production plants. The initiative involved many aspects of the company organization, from staff training to people's skills, from organizational structures to process management, from staff scheduling and planning to the identification of solutions suitable for specific needs. The project began with the analysis of the front lines of the plant who, in terms of responsibility, skills and resource management, play a central role in our organization.
Also at an experimental level, a virtual environment dedicated to digital learning was launched for the headquarters of Casale Monferrato, which provides training pills and courses aimed at enriching the behavioral, technical and digital skills of users.
As for traditional training, in 2021 a total of 32,026 hours were offered, 10,519 thereof external and 21,507 internal. The total hours of remote work performed during the 2021 financial year were 96,143.
As for the numeric indicators, the 2021 workforce (1,145 people) increased compared to the previous year (1,100), due to a significant number of new hires (81) and a higher turnover ratio (from 6.40% in 2020 to 8.30% in 2021).
On 15 March 2022, in Rome, a pact was reached for the renewal of the National Collective Bargaining Agreement for the sector, which expired last December, for the three-years period 2022-2024.

Personnel management in Germany, in 2021, was still affected by the pandemic crisis, although the vaccination rate of colleagues working in the country was very high (87%).
In the ready-mix concrete sector, negotiations had already begun in 2020 with the trade unions aimed at stipulating a collective company agreement. The procedure was concluded in November 2021 and the new collective company agreement has become effective from 1 January 2022. It allowed standardizing working, rest, flexibility conditions and benefits in all the geographical areas of operations in the country. Within the contract, the stipulation of a company pension fund was negotiated through an insurance policy that can be transferred to a different employer.
At the level of areas managed by Germany, a development plan was introduced dedicated to newly appointed managers or high level personnel about to be appointed managers. The management development plan lasts

18 months and is conducted in parallel with normal professional activity. It is split in two phases, a first phase of 12 months of training and development and a phase of project work of 6 months. The first session was addressed to 10 colleagues, 5 of them coming from Poland, the Czech Republic, Russia and Ukraine.

In the United States, following the business climate survey conducted by Mercer Sirota in 2020, an improvement plan was introduced, divided into five modules and initially addressed to all managerial levels of the cement business. The modules are: effective communication, the loyal manager, conflict management, how to listen, act with diplomacy and tact. In addition to the management of operational activities, the training course for logistics function was also initiated.
As far as personnel selection is concerned, the recruitment of qualified staff was still one of the main challenges in 2021, especially in Texas. The American turnover ratio increased from 21% in 2020 to 26.5% in 2021, coming in at 50.5% for blue-collar workers in the ready-mix concrete sector, especially truck mixer drivers.
In 2021, the Skillsoft e-learning platform continued to be used. The period under review was also characterized by the signing of 5-year collective bargaining agreements in the Chattanooga (TN) and Festus (MO) plants.

Headcount by country at year end

	2021	2020
Italy	1,555	1,561
United States of America	2,246	2,300
Germany	1,780	1,789
Luxembourg	184	183
Netherlands	117	128
Poland	350	349
Czech Republic and Slovakia	720	737
Ukraine	1,266	1,281
Russia	1,446	1,355
Total	**9,664**	**9,683**

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

	2021	2020
Turnover[1]	15.4%	13.3%
Days of absence[2]	89,611	86,486
Training days[3]	40,284	22,925

[1] Ratio of outgoing employees to workforce at Dec 31, 2021;
[2] Total days of illness and accident until 2020; from 2021 only the days of illness were considered.
[3] Total days of internal and external training.

Research and development

Buzzi Unicem devotes particular attention 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.

During 2021, particular attention was paid to the development and technical-economic assessment of cements containing natural (limestone and pozzolanas) or artificial additions (calcined clays), with the aim of reducing the clinker content in cements and keep performance unchanged.
The development of composite cements with calcined clays is recognized as a valid technical solution to reduce the dependence of the cement sector on other industries, in finding alternative materials to clinker. 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). It should be pointed out that in the future there may be critical issues for the procurement of these materials.
The industrial trials carried out by Buzzi Unicem with calcined clay cements led to the production of cement industrial prototypes with a clinker content lower than 50% (CEM IV-B/Q and CEM VA/(QS) cements), characterized by performance comparable to that typical of a type 42.5 and type 52.5 cement. The experiments highlighted the ability of our organization to find substitute materials for clinker and to activate them thermally to use them in place of clinker. The prototypes of these cements were used for the industrial production of innovative concretes, tested in the industry of 6 European countries (Italy, Germany, Czech Republic, Ukraine, Luxembourg, Netherlands), characterized by concrete regulations and construction site work methods being definitely not uniform. Some castings of these cements were used to create breakwater blocks positioned in the artificial barrier built in the Afsluitdijk project (https://theafsluitdijk.com/).
The calcined clay cement project was carried out in parallel with the studies conducted on the optimization of natural pozzolana-based cements. Buzzi Unicem has an undisputed leadership 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 pozzolana quarries of volcanic origin which are used for the production of cements where the pozzolana replaces clinker even in significant quantities (up to 45% addition). Cements containing natural pozzolanas allow a significant saving of clinker, do not require any thermal activation process and are therefore advantageous compared to calcined clays, where natural pozzolanas are available.
The studies carried out highlighted the possibility of producing pozzolanic cements characterized by good mechanical performance and high durability, albeit with a considerable reduction in clinker.

Buzzi Unicem has been developing and marketing innovative sulpho-aluminate clinker-based cements for several years, which are subject to continuous updating and research into new applications both in the premixed products and concrete sectors.
Sulpho-aluminate cement is a commercial product that is already available on the European and US market under the name of Buzzi Unicem Next. During the course of 2021 the optimization activity of the clinker production process continued and proceedings for obtaining technical authorizations are still underway in Germany, with the aim of extending its use in areas not being foreseen yet.

The development of innovative Belitic binders, i.e. cements characterized by a lower content of limestone in the raw materials, as already highlighted in the previous reports, reached a phase of industrial experimentation. The use of these innovative cements has not yet found significant application on the market. Despite being characterized by undoubtedly interesting properties from the point of view of reduced heat of hydration, long-term mechanical performance, durability, and potential CO_2 savings in the production process, it is necessary to dedicate additional resources to identify applications in which these types of cements can offer a real advantage for the construction sector.

In 2021 CO_2 capture tests were conducted using the equipment 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 results of the project are encouraging and the development tests of the plant will continue during the year 2022 with short and long-term CO_2 capture campaigns. The project contributes greatly to enriching the know-how and creating skills in the field of CO_2 capture technologies other than placing itself as a pioneer project in our sector. 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 CO_2 capture in our industrial sector and around the relationships of our plants.
The ANICA project http://www.act-ccs.eu/anica also continued in 2021, coordinated by the University of Darmstadt within the ACT (Accelerating CCS Technologies) platform which aims to experiment a capture technology based on indirect Ca-Looping (IHCaL). Buzzi Unicem participates in the project with its German subsidiary Dyckerhoff, with the purpose of evaluating the possible adoption of the investigated technology in a group cement plant.

During 2021 Buzzi Unicem also participated in the projects Saturno https://saturnobioeconomia.it/, circular economy with particular attention to the recovery and reuse of CO_2 and E-CO_2 https://e-co2.it/project/, financed under the POR-FESR plan in both the Piedmont and the Emilia Romagna regions.

The subsidiary Cimalux participates in the Interreg CO2REDRES project https://co2redres.uni.lu/, Treatment of secondary alternative materials for the reduction of CO_2 emissions in the construction sector.

During 2021, work continued on the research consortium called "CI4C - Cement Innovation for Climate", which aims to study 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.

Also in 2021, the Flashphos project https://flashphos-project.eu/, funded by the European Commission, started, 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.

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.

Buzzi Unicem is one of the founding partners of the Innovandi research network https://gccassociation.org/innovandi/gccrn/, which is an initiative fully funded by industrial resources involving more than 40 university partners and cement production companies. The initiative was created to stimulate and enhance a form of pre-competitive research between universities and companies operating in the construction materials sector all over the world. The Innovandi consortium finances pre-competitive research projects in the field of new construction materials, cements, concretes, CO_2 capture technologies. The first projects funded by the Innovandi consortium began in 2021.

Buzzi Unicem is also active in research relating to concrete digitization technologies: in this regard, it is worth mentioning the industrial experimentation activities carried out within the Hinfra startup, whose objective is the development of an automated technology for the structural restoration of concrete tunnels.

The year 2021 ended with the opening of the new Buzzi Unicem Innovation Lab (Built) which began its activities in the new site of Vercelli within the campus of the Università del Piemonte Orientale in a dedicated and independent structure adapted to its needs. This project is part of a partnership agreement with the Università del Piemonte Orientale which will also allow to achieve significant synergies as regards research and development.

The **ready-mix concrete sector** also pays great attention to research aimed at the development and industrialization of innovative and sustainable concrete mix design and applications. In 2021 the commitment was focused on a few technological and industrial lines of development:

Concrete with a lower carbon footprint. The concretes supplied by Unical today make already extensive use of cements with lower clinker content and are therefore characterized by a pronounced CO_2 reduction profile, limited only by the constraints of the regulations in force and by the demands of a market that has yet to be made aware of sustainability issues. Our research therefore focused on the feasibility and industrialization of concrete with a much greater CO_2 reduction, well below 50% compared to ordinary concretes. In this period, we were able to successfully move from experimental results to full industrialization also thanks to the stimulus represented by the first Italian construction sites that introduced explicit sustainability requirements in their regulations. The combined use of low k/c ratio binders and advanced formulation and admixture criteria allowed us to supply on site concretes with emission classes much lower than those conceivable a few years ago.

Concrete with recycled components. The replacement of traditional components of concrete with recycled materials allows to progressively reduce the extraction of natural resources and to feed the virtuous cycle of reuse. In this field, Unical saw in 2021 the transition from the preliminary research and first industrialization phase to the large-scale production and supply phase. Concretes complying with the minimum environmental criteria (CAM), which are now mandatory for public works, have now become “ordinary” products available in every plant. The research activities were therefore aimed at overcoming current regulatory limits, in view of probable future changes to them: use of large quantities of recycled material (even over 50%) and use of fine recycled aggregates, currently not usable for structural concretes. An interesting field of investigation is then the development of effective experimental methods for in-process monitoring of the properties of the recycled aggregate, aimed at compensating for its physiological greater variability and allowing its use in increasingly high-performance concretes.

Structural design with sustainable concretes. In the belief that the widespread use of sustainable concretes (low carbon emission and with recycled material) will be facilitated by a parallel evolution of design criteria and construction site practices, Unical began a process of technological study and collaboration with some Italian universities (Politecnico di Milano, Roma Tre, University of Florence) to analyze and guide this evolution. In particular, two three-year research doctorates were launched under Ministerial Decree 1061/2021.

Concrete for building restoration applications. The deteriorating conditions of many Italian infrastructures led Unical research to focus also on the study of high performance grouts with high durability, moderate shrinkage and above all considerable resistance to very short curing. These are in fact the main needs of the restoration of the buildings, which are more and more increasing in the near future. The feasibility limits, the most effective production and application techniques, the systems ensuring full reproducibility, regardless of the place of use, were investigated. The results are very encouraging and particularly interesting, given the large volumes that will be necessary for major restoration work, which can only be satisfied by ready-mix concrete castings.

New mix-design software. The new proprietary software "Openlab", which will manage the design of the mixes and each technological and operational parameter influencing the properties, costs and sustainability of each recipe, entered the final phase of development and is already completed as regards the analysis, assessment and monitoring of the components.

Ecology, Environment and Safety

Also in 2021 the Ecology, Environment and Safety function, which has among its objectives that of guaranteeing the constant maintenance of compliance with regulations and the continuous improvement of environmental and safety performance, was heavily involved in the management of the Covid-19 pandemic in order to minimize the spread of the virus by guaranteeing, at the same time, the continuity of production and administration.

In addition to what was implemented to reduce the risk for people, important safety actions were carried out, launching a real awareness campaign for workers, as well as investments to minimize residual risks.
This awareness allowed to obtain a significant increase in reports of near misses and critical issues by employees, solving which, by implementing appropriate corrective actions, it will be possible to improve 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 company objectives are aimed at reducing emissions into the atmosphere, with the optimization of continuous monitoring systems, the increased thermal substitution rate from non-conventional fuels, the performance of appropriate energy audits in the plants, the accurate control of the incoming raw materials and fuels. In particular, the control of incoming materials is essential in order to ensure full regulatory compliance.

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, drawn up according to the Global Reporting Initiative (GRI) guidelines. The objective that the GRI sets itself is to help promote a sustainable world economy, in which organizations manage responsibly and communicate transparently their performance and their economic, environmental, social and governance impacts, in the scope of the framework in which they operate.

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 workforce. 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.

Despite the difficulties arising from the Coronavirus infection, the informational meetings in our plants, open to external parties, with the aim of explaining, in a transparent manner, production activities, environmental impacts, quality management and company safety, continue. These events have nothing to do with the now obsolete concept of "open plants" but are opportunities of real information on all the sustainability issues.

In addition to environmental and safety management in the industrial operations, product sustainability over the years has increasingly become a focus of activities. To assess the environmental impacts, in Italy a webtool has been set up for our customers that allows the calculation, with maximum transparency and starting from given data, of the environmental performance of our products, based on the distribution of the EPD (Environmental Product Declaration) certification. Such tool has 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 certified and validated information. The same goal is pursued in the other regions through the use of the tool made available by the GCCA (Global Cement and Concrete Association), a worldwide industry organization in which we actively participate.

Non-financial statements

The company has prepared its consolidated non-financial statements pursuant to Legislative Decree no. 254/2016. Such statements are not included in the business review but they represent a distinct and separate report. The consolidated non-financial statements are part of the 2021 Sustainability Report and are available on the company website (buzziunicem.com) inside the "Sustainability" section.

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 provisions, by providing a more direct and complete knowledge of business events and more accurate valuations when determining an additional contingent liability.

In 2021 a significant increase of residual risks was observed compared to December 2020, 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 and sales.

Investment risks: new risks have been recorded following the conflict between Russia and Ukraine. For the subsidiary Dyckerhoff there is a risk of freezing the liquidity held in banks in Germany and failure to collect dividends, while for the Russian and Ukrainian companies there is a risk of expropriation or damage to the plants.

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 increase. In the risks assessment database we have considered a 10% fluctuation of the local currencies against the euro and a 100% one against the ruble, versus the exchange rate used in the budget.
For Poland, the Czech Republic, Ukraine and Russia, the net effect of currency exposure for EBITDA, liquidity and intercompany loans was recorded as growing due to the increase in the underlying values and the probability of occurrence.
Currency risks are further illustrated in note 3 to these consolidated financial statements.

Procurement risks: risk of an increase in the price of CO_2 emission rights. Furthermore, for almost all the geographical areas in which the group operates, risks were recorded for possible price increases and supply difficulties on the raw material and energy markets, with difficulties in entering into contracts with suppliers at stable prices and quantities for long periods.

Sales risks: significantly growing due to the increase in the risks of considerable loss of budgeted sales in Russia and Ukraine for the year 2022.

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. The sanctions against Russia will generate political instability and economic weakness in both countries.
Moreover, there are risks associated with climate change, which result from the targets of the energy policy in the EU, particularly of the EU Emission Trading System (EU ETS) and of the environmental protection laws and regulations, which 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 will have a significant impact on the cement industry, can be assumed. There could be a shortage of coal and petcoke due to the commitment to eliminate the use 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

The estimates developed during the budget process outlined for 2022 a moderate growth in operating results, thanks to generally optimistic forecasts regarding construction investments, both in Europe and the United States, driven by a robust demand in the residential sector, albeit attenuating compared to 2021, and by higher spending on public works, supported by the initial effects of infrastructure development plans (Next Generation EU, Infrastructure Investment and Jobs Act, etc.). In a context characterized by a high inflation rate of raw materials and energy, we set ourselves the goal of possibly transferring on selling prices the increase in production costs, thus reaching a substantial stability of operating results in the United States and Central Europe, as well as some improvement in Eastern Europe and Italy. Furthermore, we expected a positive contribution from the improvement in the dollar and ruble exchange rate.

The recent developments regarding the armed conflict between Russia and Ukraine obviously added a significant element of uncertainty to the macroeconomic and operating scenario initially outlined for 2022. Above all in Europe, the prices of raw materials and energy factors, instead of stabilizing on the (very high) levels achieved in the latter part of 2021, continued to grow exponentially, in particular starting from the second half of February. In this regard, we are concerned not only with the out-of-control dynamics of production costs but also with the scarcity of some basic raw materials for our production process.

In Ukraine, after the outbreak of war, with the consequent and necessary suspension of production and trade in both plants, we assume that the operating results for the current year will probably be negative.
In Russia, on the other hand, the international sanctions established by the United States and the European Union in response to the invasion of Ukraine led to a significant depreciation of the ruble and a strongly negative revision of the country's growth prospects. We believe that macroeconomic indicators will rapidly deteriorate, also affecting the demand for building materials. We therefore expect that the impact of currency devaluation and that of the probable economic recession will lead to a very sharp decrease in operating results, which could indicatively halve.

The effects of the war that started in Eastern Europe are having particularly negative repercussions in Italy. As well known, our country has few energy sources of its own (or does not use them properly), has abandoned the nuclear option, is suffering severe delays in increasing the share of electricity produced from renewable sources and hinders the use of alternative fuels derived from waste to replace fossil fuels. The extreme dependence on foreign gas, especially that from Russia, has made our economy very vulnerable in this phase of extreme tension with the supplier country. The high inflation rate and the difficulties in the procurement of raw materials are threatening to discontinue last year's economic recovery and causing us to fall back into a slowdown phase. The operating results of our operations are currently below budget. An improvement compared to 2021 would only be possible through a cooling of costs or a sequential increase in prices, which, moreover, could have a boomerang effect on the demand for cement and concrete.

In Central Europe, as well as in the Czech Republic and Poland, we assume that the trading conditions will develop in a more predictable way. The political and economic context is very challenging and complicated even in these markets, however, the lower dependence on traditional sources in the production of electricity and the extensive use of alternative fuels in the production of cement allow to mitigate the cost increases and therefore offer greater possibilities of passing on the burdens downstream, through an increase in selling prices.

Compared to Europe, the United States started the year in a very different situation, both because they are geographically distant from the conflict and because they are completely self-sufficient from an energy standpoint. The industry is not exempt from rather important cost increases, but the demand for cement is confirmed to be high and the main challenges rather concern the ability to achieve a maximum level of productivity and reliability in our plants. In addition, we have to better cope with a widespread lack of specialized personnel and concrete mixer drivers. Therefore, assuming that demand remains buoyant, the market should be able to accept generally higher prices, a pattern that would allow us to maintain profitability at excellent levels. The strength of the dollar, if confirmed, would contribute to the solidity of the expected results.

In conclusion, assuming that the military conflict in Ukraine will be continuing for a few months, at a consolidated level we expect for 2022 a decrease in recurring Ebitda of approximately 10% versus the record results achieved in the 2021 financial year. We shall take care of providing the market with more precise indications when we have better visibility on the unfolding of energy costs, on the shortage of raw materials and on the normalization of the supply chain.

As for our joint ventures, we expect further progress in operating results in Brazil, while in Mexico, despite a positive price effect, the increase in energy costs, fuel in particular, could penalize the operating profitability.

As regards the investment plan approved for 2022, we expect it to be more significant than in the previous year. Several projects are included, aimed at continually improving operational efficiency and reducing CO2 emissions, in line with the decarbonization targets set out in the strategic Roadmap which will be disclosed in May.

Russia-Ukraine conflict
Buzzi Unicem has 2 full-cycle cement plants in Ukraine, one located near Rivne (north-west region) and the other in Nikolayev (south region, west of the Southern Bug river). The group also operates in the ready-mix concrete sector, mainly in Kiev. After stopping the production activities, we have implemented an emergency plan having as a priority the safety of our staff, their families and, as far as possible, the physical integrity of the plants, waiting for the conditions to mature to resume the business in the country at the earliest. We specify that at the balance sheet date the book value of net assets in Ukraine amounted to €39 million.

In Russia, the group operates with 2 cement plants, in the region east of the Ural mountains. The international sanctions resulting from the invasion of Ukraine, in addition to negatively impacting the value of the ruble and the country's growth prospects, are significantly reducing trade with Western economies, thus entailing considerable difficulties in finding various spare parts and/or technical assistance services locally, which are essential for the maintenance and proper operation of the factories. At the balance sheet date, the book value of net assets in Russia amounted to €450 million (of which €101 million referring to goodwill).

As for crisis management, the group has raised its level of attention on the subject of cyber security, adopting mitigation actions based on the best protection methods in such domain.
The company is in close contact with local management and constantly monitors the evolution of the crisis, also in view of the investment plans envisaged in the two countries.

Based on the currently available information, it is not possible to precisely forecast about the repercussions of the conflict on the economic situation and the financial position of the group. In an extreme case, deemed unlikely, the impairment loss could reach about 10% of equity. This would mean an important impact but not such as to change the opinion on the financial soundness of the group.

Financial Information

Consolidated Income Statement

(thousands of euro)	Note	2021	2020
Net sales	7	**3,445,551**	**3,222,411**
Changes in inventories of finished goods and work in progress		(21,137)	(18,868)
Other operating income	8	73,647	50,189
Raw materials, supplies and consumables	9	(1,334,977)	(1,154,951)
Services	10	(781,666)	(736,190)
Staff costs	11	(513,335)	(508,785)
Other operating expenses	12	(73,439)	(73,005)
EBITDA		**794,644**	**780,801**
Depreciation, amortization and impairment charges	13	(249,048)	(256,911)
Operating profit (EBIT)		**545,596**	**523,890**
Equity in earnings of associates and joint ventures	14	106,056	173,080
Gains on disposal of investments	15	18,000	3,602
Finance revenues	16	63,440	106,742
Finance costs	16	(97,840)	(107,055)
Profit before tax		**635,252**	**700,259**
Income tax expense	17	(92,952)	(139,787)
Profit for the year		**542,300**	**560,472**
Attributable to:			
Owners of the company		541,903	560,246
Non-controlling interests		397	226

(euro)			
Earnings per share	18		
basic			
ordinary		2.820	2.719
savings		-	2.743

Consolidated Statement of Comprehensive Income

(thousands of euro)	2021	2020
Profit for the year	**542,300**	**560,472**
Items that will not be reclassified to profit or loss		
Actuarial gains (losses) on post-employment benefits	49,289	(26,745)
Fair value changes of equity investments	216	470
Income tax relating to items that will not be reclassified	(14,841)	10,645
Total items that will not be reclassified to profit or loss	**34,664**	**(15,630)**
Items that may be reclassified subsequently to profit or loss		
Currency translation differences	242,065	(352,605)
Share of currency translation differences of associates and joint ventures valued by the equity method	11,998	(81,133)
Total items that may be reclassified subsequently to profit or loss	**254,063**	**(433,738)**
Other comprehensive income for the year, net of tax	**288,727**	**(449,368)**
Total comprehensive income for the year	**831,027**	**111,104**
Attributable to:		
Owners of the company	830,618	110,886
Non-controlling interests	409	218

Consolidated Balance Sheet

(thousands of euro)	Note	31/12/2021	31/12/2020
Assets			
Non-current assets			
Goodwill	19	608,789	603,603
Other intangible assets	19	59,419	60,718
Right-of-use assets	20	78,627	87,725
Property, plant and equipment	21	3,076,662	2,909,405
Investment property	22	17,697	18,762
Investments in associates and joint ventures	23	462,404	409,210
Equity investments at fair value	24	12,222	11,402
Deferred income tax assets	40	81,967	81,961
Defined benefit plan assets	38	6,905	-
Derivative financial instruments	37	6,948	-
Other non-current assets	25	270,305	31,019
		4,681,945	**4,213,805**
Current assets			
Inventories	26	500,010	469,360
Trade receivables	27	455,735	399,222
Other receivables	28	74,593	72,204
Cash and cash equivalents	29	1,203,611	1,218,279
		2,233,949	**2,159,065**
Assets held for sale	30	5,889	13,890
Total Assets		**6,921,783**	**6,386,760**

(thousands of euro)	Note	31/12/2021	31/12/2020
Equity			
Equity attributable to owners of the company			
Share capital	31	123,637	123,637
Share premium	32	458,696	458,696
Other reserves	33	(59,094)	(314,922)
Retained earnings	34	3,853,886	3,337,796
Treasury shares		(7,699)	(7,699)
		4,369,426	**3,597,508**
Non-controlling interests	35	5,778	5,499
Total Equity		**4,375,204**	**3,603,007**
Liabilities			
Non-current liabilities			
Long-term debt	36	987,951	1,166,309
Lease liabilities	20	55,815	64,554
Derivative financial instruments	37	-	4,060
Employee benefits	38	364,845	445,140
Provisions for liabilities and charges	39	86,416	87,800
Deferred income tax liabilities	40	371,131	334,016
Other non-current liabilities	41	6,952	9,469
		1,873,110	**2,111,348**
Current liabilities			
Current portion of long-term debt	36	136,635	52,958
Short-term debt	36	12,476	12,901
Current portion of lease liabilities	20	22,450	21,443
Trade payables	42	294,043	229,247
Income tax payables	43	32,072	56,056
Provisions for liabilities and charges	39	64,626	47,986
Other payables	44	111,167	251,814
		673,469	**672,405**
Total Liabilities		**2,546,579**	**2,783,753**
Total Equity and Liabilities		**6,921,783**	**6,386,760**

Consolidated Statement of Cash Flows

(thousands of euro)	Note	2021	2020
Cash flows from operating activities			
Cash generated from operations	45	752,376	743,874
Interest paid		(26,345)	(29,196)
Income tax paid		(134,374)	(125,868)
Net cash generated from operating activities		**591,657**	**588,810**
Cash flows from investing activities			
Purchase of intangible assets	19	(3,124)	(5,239)
Purchase of property, plant and equipment	21	(211,323)	(222,900)
Acquisition of subsidiaries, net of cash acquired		(639)	-
Purchase of other equity investments	23, 24	(2,605)	(167)
Proceeds from sale of property, plant and equipment		21,561	8,112
Proceeds from sale of equity investments		18,001	5,982
Changes in financial receivables		(226,519)	(3,042)
Dividends received from equity investments	16, 23	59,823	198,161
Interest received		10,789	10,454
Net cash generated from (used in) investing activities		**(334,036)**	**(8,639)**
Cash flows from financing activities			
Repayment of long-term debt	36, 46	(111,985)	(26,414)
Net change in short-term debt	36, 46	(425)	(836)
Repayment of lease liabilities	20	(23,283)	(24,707)
Changes in other financial payables	46	(3,938)	(13,133)
Changes in ownership interests without loss of control	46	(1)	(29,222)
Purchase of treasury shares	31	-	(7,326)
Dividends paid to owners of the company	46, 47	(191,880)	(31,802)
Dividends paid to non-controlling interests	46	(59)	(190)
Net cash generated from (used in) financing activities		**(331,571)**	**(133,630)**
Increase (decrease) in cash and cash equivalents		**(73,950)**	**446,541**
Cash and cash equivalents at beginning of year		1,218,279	837,403
Currency translation differences		59,282	(65,641)
Change in scope of consolidation		-	(24)
Cash and cash equivalents at end of year	29	**1,203,611**	**1,218,279**

Consolidated Statement of Changes in Equity

	Attributable to owners of the company							
(thousands of euro)	Share capital	Share premium	Other reserves	Retained earnings	Treasury shares	Total	Non-con-trolling interests	Total Equity
Balance as at 1 January 2020	**123,637**	**458,696**	**116,798**	**2,986,360**	**(373)**	**3,685,118**	**5,703**	**3,690,821**
Profit for the year	**-**	**-**	**-**	**560,246**	**-**	**560,246**	**226**	**560,472**
Other comprehensive income for the year, net of tax	-	-	(433,407)	(15,953)	-	**(449,360)**	(8)	**(449,368)**
Total comprehensive income for the year	**-**	**-**	**(433,407)**	**544,293**	**-**	**110,886**	**218**	**111,104**
Dividends paid	-	-	-	(31,802)	-	**(31,802)**	(216)	**(32,018)**
Extraordinary dividend	-	-	-	(144,099)	-	**(144,099)**	-	**(144,099)**
Withholding tax on foreign dividends	-	-	-	(12,800)	-	**(12,800)**	-	**(12,800)**
Acquisition of non-controlling interests	-	-	-	486	-	**486**	(206)	**280**
Purchase of treasury shares	-	-	-	-	(7,326)	**(7,326)**	-	**(7,326)**
Other changes	**-**	**-**	1,687	(4,642)	-	**(2,955)**	-	**(2,955)**
Balance as at 31 December 2020	**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 paid	-	-	-	(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**

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 52.2% of the shares with voting rights.

These consolidated financial statements were authorized for issue by the board of directors on 25 March 2022.

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.

The measures adopted during 2021 to contain the Covid-19 pandemic did not result in significant restrictions on economic or production activities, and the vaccination campaigns allowed to secure the recovery of the manufacturing sector. Like in 2020, there were no obstacles to the flow of dividends within the group.
The second half of the year was marked by a significant increase in the prices of electricity, logistics, fuel, raw materials and services, which reached very high levels in several countries. However, this development, did not result in a significant impact on the valuations and estimates of financial information, or on the group's ability to continue as a going concern. In fact, Buzzi Unicem continued to generate a good cash flow 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; furthermore, 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.

The IASB withdrew IFRIC 3 Emission Rights in its June 2005 session. In the absence of new interpretations, the accounting method followed provides not to value as assets the emission allowances allocated for free and to recognize only the effects of emission rights purchasing and/or selling transactions. Moreover, a liability is recognized only when emissions exceed the allowances allocated and the deficit will have to be remedied through the purchase of the rights at fair value.

The legislative framework of the so-called ETS (Emissions Trading System) was revised in July 2021, when the European Commission adopted a series of legislative proposals that establish to achieve climate neutrality by 2050, including an intermediate target of at least a 55 percent net reduction (compared to 1990) in greenhouse gas emissions by 2030. The free allocation system was extended for another decade and revised to focus on sectors at highest risk of relocation. Under the start of the fourth phase of the so called ETS (period 2021-2030), the allowances freely allocated to Buzzi Unicem's manufacturing units in the EU countries are lower than the generated emissions and the shortage of allocated rights must be covered by purchases on the market or delivering banked rights related to the surplus accrued during phase 3 (2013-2020).

Standards, amendments and interpretations adopted in 2021
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.

- IFRS 16 Leasing (amendment): Covid-19-related rent concessions. As a practical expedient, it exempts the lessee from considering and accounting for as lease modifications the rent concessions from lessors as a direct consequence of the Covid-19 pandemic.

- IFRS 4 Insurance contracts (amendment): extension of the temporary exemption from applying IFRS 9.

- IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (amendments): Interest rate benchmark reform - phase 2. The amendments, as a result of the reform, complement those issued in 2019 and focus on the on-balance sheet effects of replacing the old benchmark interest rate, with an alternative rate. They relate to:
  - contractual cash flows: the book value of financial instruments will not have to be eliminated or adjusted, but instead the effective interest rate will have to be updated to reflect the change in the alternative reference rate;
  - hedge accounting: it will not have to be interrupted in order to make the changes required by the reform, if the other hedging criteria are met;
  - disclosure: information on the new risks arising from the reform and transition mode to alternative reference rates will need to be explained.

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.

- The following package of amendments (effective from 1 January 2022) includes narrow-scope amendments 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, prohibiting a company from deducting from the cost of property, plant and equipment the amounts received from the sale of items produced while the company is preparing the asset 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.

- 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. At the date of this report the European Union has not yet endorsed the standard.

- IAS 12 Income Tax: 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. 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)	2021	2020	2021	2020
US Dollar	1.1326	1.2271	1.1827	1.1422
Czech Koruna	24.8580	26.2420	25.6405	26.4551
Ukrainian Hryvnia	30.9219	34.7689	32.2592	30.8506
Russian Ruble	85.3004	91.4671	87.1527	82.7248
Polish Zloty	4.5969	4.5597	4.5652	4.4430
Hungarian Forint	369.1900	363.8900	358.5161	351.2494
Mexican Peso	23.1438	24.4160	23.9852	24.5194
Algerian Dinar	157.4077	162.1071	159.6527	144.8473
Brazilian Real	6.3101	6.3735	6.3779	5.8943

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 qualifying assets, which are assets 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 also tested for impairment.

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 €5,000. 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 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 37).

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.

Inventories include the emission rights acquired against payment and not yet returned, 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 generate 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.

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 continuous evolution of the macroeconomic scenario following the Covid-19 pandemic did not determine, as in 2020, any significant changes in the financial risk management. In particular, 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 pandemic, the approach to risk management has not changed and the related procedures have not been modified.

The rise in inflation in the second half of 2021 had no significant impact on the capital market, for the time being. Interest rates in euros remained at fairly low levels, both with regard to possible funding and, above all, with regard to liquidity investments. With reference to the US dollar, on the other hand, rates started to show a significant rise.

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, Czech koruna and the Russian ruble. 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 did not change due to the Covid-19 pandemic.

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)	2021	2020
Euro	(42,292)	(39,542)
US Dollar	(187,803)	(222,307)
Swiss Franc	(16)	(77)
Czech Koruna	7,833	15,947
Russian Ruble	5,599	(22,868)
Ukrainian Hryvnia	175	9
Polish Zloty	3,449	1,246

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 2021, 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 €17,075 thousand higher/lower (2020: €22,797 thousand higher/lower). Profit for the year is especially sensitive to the euro/dollar, euro/czech koruna and euro/ruble exchange rates.

Compared to the previous year, the net debt exposure to the dollar decreased as the concentration of the liquidity in this currency continued within the parent company, while the net exposure to the ruble detected in Germany changed as the debt decreased and the liquidity in ruble increased.

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.

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 92%, due to the expansive monetary policies that in the last years denoted the credit supply. Borrowings at variable rate at the end of 2021 were denominated in US dollar. 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 €11,600 thousand (2020: increase/decrease of €9,609 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 2021, 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 €6,018 thousand higher/lower (2020: €5,527 thousand higher/lower). These fluctuations are mainly a result of financial debt that is denominated in euro at the parent company level, partly offset by cash and equivalents euro denominated across the group.

At 31 December 2021, 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 €5,101 thousand higher/lower (2020: €3,605 thousand higher/lower), mainly reflecting a higher 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 is underway, 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. This is a process initiated by the main financial institutions and international regulatory bodies towards a new set of risk-free rates. In particular, the EONIA will no longer be quoted from 1 January 2022 and it has been 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 is adopting appropriate initiatives to adapt to the transition to the new reference rates, having also carried out an analysis of the financial contracts in place and the technical aspects that will support the transition. From this analysis it is clear that the reform will only apply to 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 potential material impacts on the consolidated income statement. Any new time deposit transactions in US dollars, for example, will already be 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. Policies are in place 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 27. 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:

	2021			2020		
(thousands of euro)	Trade receivables (gross)	Loss allowance	% loss coverage	Trade receivables (gross)	Loss allowance	% loss coverage
Not overdue	357,508	(1,119)	0.3%	305,609	(521)	0.2%
Days past overdue						
30 or less	76,571	(827)	1.1%	69,992	(509)	0.7%
Between 30 and 60	11,624	(512)	4.4%	13,840	(355)	2.6%
Between 61 and 90	3,466	(108)	3.1%	3,035	(186)	6.1%
Between 91 and 180	2,764	(1,019)	36.9%	3,062	(1,487)	48.6%
Over 180	19,281	(11,894)	61.7%	26,376	(19,634)	74.4%
	471,214	**(15,479)**		**421,914**	**(22,692)**	

The group limits its exposure to credit risk on trade receivables by establishing maximum payment terms in the various countries.
During 2021, the group confirmed its policy in order to limit its 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 36.

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 reduce debt.

On 19 November 2020, the Meetings of the ordinary and saving Shareholders approved the mandatory conversion of the 40,711,949 existing savings shares into 27,277,005 newly issued ordinary shares. The exchange was executed on 18 January 2021 (note 31).

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 2021 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 2021 and 2020 were as follow:

(thousands of euro)	**2021**	**2020**
Debt [A]	2,546,579	2,783,753
Equity [B]	4,375,204	3,603,007
Gearing [A/B]	**58%**	**77%**
Net financial position [C]	(235,516)	241,636
EBITDA [D]	794,644	780,801
Leverage [C/D]	**(0.30)**	**0.31**

The improvement in the two ratios during 2021 was achieved thanks to the favorable trend in cash flows from operating activities, and also to the slowdown of industrial capital expenditures compared to the budget approved. This slowdown was caused by disruptions in the supply chain of materials and difficulties in the execution of job orders, following the persisting of the Covid-19 pandemic.

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 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 (non-current)	-	-	6,948	**6,948**
Equity investments at fair value	-	-	12,222	**12,222**
Total Assets	**30,945**	**1,282**	**19,170**	**51,397**

The following table presents the assets and liabilities that are measured at fair value at 31 December 2020:

(thousands of euro)	Level 1	Level 2	Level 3	Total
Assets				
Other non-current assets	10,099	1,072	-	**11,171**
Current financial assets	-	46	-	**46**
Equity investments at fair value	-	-	11,402	**11,402**
Total Assets	**10,099**	**1,118**	**11,402**	**22,619**
Liabilities				
Derivative financial instruments (non-current)	-	-	(4,060)	**(4,060)**
Total Liabilities	**-**	**-**	**(4,060)**	**(4,060)**

During 2021 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.

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 balance of the item other non-current assets includes cash investments entrusted to asset management firms with a duration of more than twelve months, whose fair value changes are measured through profit or loss (note 25).

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 BCPAR SA. In April 2021, Companhia Nacional de Cimento (CNC), a wholly-owned subsidiary of BCPAR, the Brazilian holding company in which Buzzi Unicem owns a 50% interest together with Grupo Ricardo Brennand, acquired all the companies of the CRH group operating in Brazil (CRH Brazil and its subsidiaries). In the framework of this business combination, Buzzi Unicem and Grupo Ricardo Brennand have agreed upon some changes to the existing shareholders' agreements, in order to consider the new scope of consolidation. The deadlines for the exercise of the put options assigned to Grupo Ricardo Brennand (which will be exercisable only in the first half of the years 2023, 2024, 2025 and 2027) and of the call option available to Buzzi Unicem (which will be exercisable in the first half of 2026) have been partially revised. Moreover, the price of the put and call options will not be influenced, either positively or negatively, by the economic and financial performance of CRH Brazil and its subsidiaries, target of the acquisition. The value of the derivative financial instrument is based on the new 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 37).

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.

The estimates and assumptions also reflect the uncertainties and risks associated with the Covid-19 pandemic, with the energy transition and climate changes, in particular the roadmap towards a low-carbon economy, the effects of which, where present, are reported in the specific notes to the financial statements. Moreover, the assessment and, more specifically, the quantification of the above-mentioned risks, generally entail the formation of judgments regarding highly uncertain future developments, such as technological and regulatory developments. As a result of these uncertainties, it is only possible to partially determine what the actual and tangible risks will be in the long term.

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)

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 note 17.

- *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.

- *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 2021 include the company and 74 subsidiaries. The total number of consolidated subsidiaries decreased by 7 compared with that at the end of the previous year. Excluded from consolidation are 15 subsidiaries that are either dormant or immaterial.

During 2021 Buzzi Unicem acquired 100% interest of Falconeria Srl. The company was therefore consolidated on a line-by-line basis effective 2 March 2021.

In addition, in May 2021 the start-up Hinfra Srl was set-up, of which Buzzi Unicem holds a 60% interest but no control. Therefore, this new investment is being valued under the equity method.

In the second quarter of 2021 the group sold 100% of Cimalux Société Immobilière Sàrl and BSN Beton Service Nederland BV, which were previously consolidated on a line-by-line basis.

During the year, some mergers took place within the group, to continue streamlining and simplifying the organizational structure, without any material effect on the consolidated financial statements:

- the Luxembourg sub-holding Buzzi Unicem International Sàrl was merged by incorporation into Buzzi Unicem SpA, effective 1 January 2021;
- in Germany, the following subsidiaries were merged into Dyckerhoff Beton GmbH & Co. KG, effective 1 January 2021:
  - sibobeton Ems GmbH & Co. KG
  - sibobeton Enger GmbH & Co. KG
  - Ostfriesische Transport-Beton GmbH & Co. KG
  - sibobeton Wilhelmshaven GmbH & Co. KG
  - SIBO-Gruppe GmbH & Co. KG
  - BTG Beton-Transport-Gesellschaft mbH

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.

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	598,493	880,254	637,201	1,329,603	-	**3,445,551**	661,552	253,426
Intersegment revenue	(6,197)	(290)	-	-	6,487	**-**	-	-
Revenue from external customers	592,296	879,964	637,201	1,329,603	6,487	**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

2020

(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	496,267	878,547	587,020	1,260,577	-	**3,222,411**	573,797	139,099
Intersegment revenue	(4,824)	(361)	-	-	5,185	**-**	-	-
Revenue from external customers	491,443	878,186	587,020	1,260,577	5,185	**3,222,411**	573,797	139,099
Ebitda	34,357	145,599	156,916	444,243	(314)	**780,801**	265,011	47,962
Depreciation	(46,467)	(47,175)	(39,097)	(119,329)	(1,173)	**(253,241)**	(25,963)	(14,277)
Impairment charges	(4,097)	(430)	(16)	-	-	**(4,543)**	-	-
Write-ups	873	-	-	-	-	**873**	-	-
Operating profit (EBIT)	(15,334)	97,994	117,803	324,914	(1,487)	**523,890**	239,048	33,685
Equity earnings	169,835	3,057	188	-	-	**173,080**	(236)	-
Purchase of intangible and tangible assets	24,754	47,307	42,264	113,814	-	**228,139**	19,722	2,562
Purchase of equity investments	27,227	2,162	-	-	-	**29,389**	-	-

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

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**

2020

(thousands of euro)	Italy	Central Europe	Eastern Europe	United States of America	Total	Mexico 100%	Brazil 100%
Cement	292,710	472,310	429,139	967,967	**2,162,126**	508,391	139,099
Concrete and aggregates	203,557	406,237	157,881	292,610	**1,060,285**	65,406	-
					3,222,411	**573,797**	**139,099**

The group is domiciled in Italy. Revenue from external customers realized in Italy is €558,058 thousand (2020: €461,333 thousand) and total revenue from external customers in foreign countries is €2,887,493 thousand (2020: €2,761,078 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 €1,103,428 thousand (2020: €934,371 thousand), while the total of such non-current assets located in foreign countries is €3,482,698 thousand (2020: €3,197,593 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:

	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**

	2020		
(thousands of euro)	**Cement**	**Concrete and aggregates**	**Total**
Italy	292,710	203,557	**496,267**
Germany	375,256	313,960	**689,216**
Luxembourg and the Netherlands	97,054	92,277	**189,331**
Poland	86,064	31,724	**117,788**
Czech Republic and Slovakia	38,454	118,858	**157,312**
Russia	195,829	-	**195,829**
Ukraine	108,792	7,299	**116,091**
United States of America	967,967	292,610	**1,260,577**
	2,162,126	**1,060,285**	**3,222,411**

The increase of 6.9% compared to 2020 is due to favorable market trends for 8.9%, offset by unfavorable foreign currency effects for 2%.

In 2021, thanks to the improvement in the epidemiological situation due to the progress of the vaccination campaigns and the consequent mitigation of restrictions, demand remained resilient and the trend in shipments held positive in almost all countries in which the group operates.

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)	2021	2020
Recovery of expenses	6,388	5,381
Indemnity for damages	451	1,530
Revenue from leased properties	8,131	9,073
Gains on disposal of property, plant and equipment	11,147	4,538
Capital grants	610	1,361
Release of provisions	19,265	1,238
Internal work capitalized	1,628	2,022
Other	26,024	25,046
	73,647	**50,189**

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 (€6,624 thousand), Italy (€1,350 thousand), United States (€1,048 thousand) and Czech Republic (€769 thousand).

The caption release of provisions includes €17,717 thousand related to amounts set aside for the restoration of quarries, following a review of recultivation and restoration costs, mainly in Germany (note 39).

The caption other includes, among others, the sale of Energy Efficiency Certificates (EEC) in Italy for €6,099 thousand, as well as the proceeds from the concession of certain silos for the storage of fly ash in the United States for €1,026 thousand.

9. Raw materials, supplies and consumables

(thousands of euro)	2021	2020
Raw materials, supplies and consumables	745,971	699,167
Finished goods and merchandise	80,644	68,534
Electricity	239,359	190,475
Fuels	200,861	147,232
Emission rights	41,175	26,456
Other goods	26,967	23,087
	1,334,977	**1,154,951**

In 2021, significant price increases in energy factors, especially electricity and fuels, caused a general step up of the production and distribution costs.

The caption emission rights include the provisions for the shortage of CO_2 allowances in Germany (€23,552 thousand), Poland (€8,663 thousand), Luxembourg (€2,367 thousand) and the Czech Republic (€6,593 thousand), measured on an accrual basis.

10. Services

(thousands of euro)	2021	2020
Transportation	492,710	458,556
Maintenance and contractual services	139,838	139,589
Insurance	18,121	18,023
Legal and professional consultancy	12,686	16,764
Operating leases of property and machinery	11,785	11,163
Travel	3,468	2,956
Other	103,058	89,139
	781,666	**736,190**

The rise in services, especially transportation, was mainly due to the significant increase in diesel fuel for vehicles, trains, barges, concrete mixers, etc. As a matter of fact this is a cost element deeply affecting the distribution and logistics of our products.

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 €4,126 thousand, low-value assets for €754 thousand and variable amounts, which cannot be determined a priori and are generally based on the quantities produced, for €113 thousand. The caption also includes leases of quarry land and rents outside the scope of the new IFRS 16 standard for €6,792 thousand.

11. Staff costs

(thousands of euro)	2021	2020
Salaries and wages	383,401	381,048
Social security contributions and defined contribution plans	115,116	109,704
Employee severance indemnities and defined benefit plans	11,588	10,421
Other long-term benefits	211	798
Other	3,019	6,814
	513,335	**508,785**

The increase of the line item was partially mitigated by the negative exchange rate effect for an amount of €8,230 thousand.

The average number of employees is the following:

(number)	2021	2020
White collar and executives	3,690	3,674
Blue collar and supervisors	6,086	6,146
	9,776	**9,820**

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)	2021	2020
Write-down of receivables	854	302
Provisions for liabilities and charges	17,163	15,282
Association dues	6,588	6,176
Indirect taxes and duties	32,624	32,757
Losses on disposal of property, plant and equipment	1,836	1,946
Other	14,374	16,542
	73,439	**73,005**

The write-down of receivables is netted by releases in the specific allowance for €1,129 thousand (2020: €3,331 thousand) and it is primarily related to bad debt in Italy.

Provisions for liabilities and charges include €11,014 thousand related to quarry restoration (2020: €3,506 thousand, refer to note 39).

13. Depreciation, amortization and impairment charges

(thousands of euro)	2021	2020
Intangible assets	6,773	6,694
Right-of-use assets	24,425	25,180
Property, plant and equipment	212,795	221,367
Impairment losses of non-current assets	5,055	3,670
	249,048	**256,911**

The impairment losses mainly include €4,587 thousand related to equipment and land in Italy.

In 2020 the impairment losses included €677 thousand related to goodwill of the CGU ready-mix concrete Italy and €2,547 thousand related to equipment and land in Italy.

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)	2021	2020
Associates		
Société des Ciments de Hadjar Soud EPE SpA	920	609
Société des Ciments de Sour El Ghozlane EPE SpA	(3,333)	1,345
Bétons Feidt SA	77	454
Louisville Cement Assets Transition Company[1]	1,016	103,071
Laterlite SpA	4,654	1,654
Salonit Anhovo Gradbeni Materiali dd	3,148	3,891
TRAMIRA Transportbetonwerk Minden-Ravensberg GmbH & Co. KG	475	441
Other associates	910	480
	7,867	**111,945**
Joint ventures		
Corporación Moctezuma, SAB de CV	63,862	58,052
BCPAR SA	31,837	419
Lichtner-Dyckerhoff Beton GmbH & Co. KG	568	1,306
Other joint ventures	1,922	1,358
	98,189	**61,135**
	106,056	**173,080**

[1] formerly Kosmos Cement Company

In the previous period this line item was favorably impacted by the capital gain on the sale of all the assets of Louisville Cement Assets Transition Company (formerly Kosmos Cement Company) for €103,624 thousand.

15. Gains on disposal of investments

These are non-recurring revenues, realized from the sale of 100% of Cimalux Société Immobilière Sàrl, owner of a building plot in the city-state of Luxembourg.

In 2020, the capital gain mainly arose from the sale of the ownership interest in the associate Cobéton SA.

16. Finance revenues and Finance costs

(thousands of euro)	2021	2020
Finance revenues		
Interest income on liquid assets	8,301	9,457
Interest income on plan assets of employee benefits	6,733	9,116
Changes in the fair value of derivative instruments	11,007	-
Foreign exchange gains	33,824	87,139
Dividend income	138	178
Other	3,437	852
	63,440	**106,742**
Finance costs		
Interest expense on bank borrowings	(13,278)	(15,255)
Interest expense on senior notes and bonds	(11,510)	(11,500)
Interest expense on employee benefits	(12,641)	(16,460)
Interest expense on lease liabilities	(2,179)	(2,557)
Changes in the fair value of derivative instruments	-	(2,648)
Discount unwinding on liabilities	(2,195)	(6,651)
Foreign exchange losses	(52,793)	(49,233)
Other	(3,244)	(2,751)
	(97,840)	**(107,055)**
Net finance costs	**(34,400)**	**(313)**

The increase in net finance costs compared to the previous period was essentially determined by the unfavorable change in non-cash items, in particular foreign exchange gains and losses, partially offset by the fair value measurement of the put/call option on the outstanding 50% interest in BCPAR SA (note 37).

17. Income tax expense

(thousands of euro)	2021	2020
Current tax	111,928	144,599
Deferred tax	(2,839)	(4,058)
Tax relating to prior years	(16,137)	(754)
	92,952	**139,787**

The decrease in current taxes is mainly due to lower taxable income, considering that in the previous year they included the non-recurring gain realized by the associate Louisville Cement Assets Transition Company (formerly Kosmos Cement Company) for €30,993 thousand.

In 2021 deferred tax assets on tax loss carryforwards were used for €12,533 thousand in Germany, while in the United States, deferred tax liabilities of €18,010 thousand were recognized for accelerated depreciation on specific categories of assets.

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 includes 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)	2021	2020
Profit before tax	635,252	700,259
Italian income tax rate (IRES)	24.00%	24.00%
Theoretical income tax expense	**152,460**	**168,062**
Effect of permanent differences	(24,926)	(14,455)
Tax relating to prior years	(16,137)	(754)
Difference in foreign tax rate	(851)	(3,873)
Effect of rate changes on deferred income tax	(1,708)	(2,242)
Adjustments to deferred income tax	(7,793)	(10,478)
Italian regional income tax on production activities (IRAP)	230	72
Other differences	(8,323)	3,455
Income tax expense	**92,952**	**139,787**

The lower tax rate in 2021, equal to 15% of profit before tax (2020: 20%), is influenced by the decrease of tax relating to prior years illustrated above and by the lower taxable income produced in the geographical areas of operations where the tax burden is greater.

18. Earnings per share

On 18 January 2021, the mandatory conversion of savings shares into ordinary shares took effect (note 31), by which the no. 40,711,949 existing savings shares were converted into ordinary shares, on the basis of a conversion ratio equal to 0.67 ordinary for each savings. Earnings per share of the comparative period reflect the previous capital structure, consisting of two classes of shares.

Basic

Basic earnings per share is calculated, per each class of shares, by dividing net profit attributable to owners of the company by the weighted average number of shares outstanding during the period, excluding treasury shares. To calculate basic earnings per share attributable to ordinary shares in the previous year, net profit is adjusted for the amount of the preferential dividend to which savings shares were entitled.

		2021	2020
Net profit attributable to owners of the company	thousands of euro	541,903	560,246
attributable to ordinary shares	thousands of euro	541,903	448,787
attributable to savings shares	thousands of euro	-	111,459
Average number of ordinary shares outstanding		192,131,838	165,062,796
Average number of savings shares outstanding		-	40,635,539
Basic earnings per ordinary share	euro	2.820	2.719
Basic earnings per savings share	euro	-	2.743

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

(thousands of euro)	Goodwill	Other intangible assets: Industrial patents, licenses and similar rights	Assets in progress and advances	Other	Total
At 1 January 2020					
Cost/deemed cost	827,869	89,550	931	32,718	123,199
Accumulated depreciation and write-downs	(208,867)	(48,137)	-	(4,248)	(52,385)
Net book amount	**619,002**	**41,413**	**931**	**28,470**	**70,814**
Year ended 31 December 2020					
Opening net book amount	619,002	41,413	931	28,470	70,814
Exchange differences	(15,100)	(8,562)	(73)	-	(8,635)
Additions	-	4,282	830	-	5,112
Change in scope of consolidation	378	-	-	-	-
Amortization and impairment charges	(677)	(4,987)	-	(1,707)	(6,694)
Reclassifications	-	882	(413)	(348)	121
Closing net book amount	**603,603**	**33,028**	**1,275**	**26,415**	**60,718**
At 31 December 2020					
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**

At 31 December 2021, the column industrial patents, licenses and similar rights is made up of industrial licenses (€27,403 thousand), application software for plant and office automation (€2,918 thousand), mining rights (€2,486 thousand), industrial patents (€30 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 €23,697 thousand.

The increase in goodwill resulted from favorable translation differences on the Russia CGU of €2,802 thousand and on the United States CGU of €2,439 thousand, and unfavorable translation differences on the Poland CGU of €55 thousand.

Goodwill and impairment test
Goodwill at 31 December 2021 amounts to €608,789 and is broken-down as follows:

(thousands of euro)	**2021**	**2020**
Italy (Cement sector)	76,114	76,114
United States of America	38,879	36,440
Germany	129,995	129,995
Luxembourg	69,104	69,104
Poland	87,608	87,663
Czech Republic/Slovakia	105,944	105,944
Russia	101,145	98,343
	608,789	**603,603**

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.

In particular, the group's 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 2021	**1.60%**	**1.98%**	**1.80%**	**3.18%**	**3.32%**	**5.68%**	**3.20%**	**4.44%**	**2.46%**
31 December 2020	2.44%	2.38%	2.08%	3.44%	3.22%	5.40%	4.12%	3.92%	2.66%

- *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 2021	**6.69%**	**4.54%**	**4.62%**	**5.29%**	**5.52%**	**14.90%**	**4.58%**	**9.32%**	**6.24%**
31 December 2020	6.76%	4.51%	4.62%	5.36%	5.60%	14.93%	4.56%	8.95%	5.75%

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 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.

A further sensitivity analysis was carried out by assessing in a preliminary way the possible impacts of the conflict in Ukraine, both on the cash flows of the plans used for the impairment test and on the WACC discount rate; from this exercise it emerges that the recoverable amounts of the CGUs involved (Russia and Ukraine) would be significantly impacted, but that any impairment losses are currently unforeseeable and not measurable.

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 2020					
Cost/deemed cost	32,861	17,556	59,114	14,114	123,645
Accumulated depreciation and write-downs	(5,257)	(1,575)	(13,165)	(4,401)	(24,398)
Net book amount	**27,604**	**15,981**	**45,949**	**9,713**	**99,247**
Year ended 31 December 2020					
Opening net book amount	27,604	15,981	45,949	9,713	99,247
Exchange differences	(695)	(59)	(3,626)	(188)	(4,568)
Additions and other	4,501	1,169	8,532	4,860	19,062
Extinctions	(416)	(232)	-	(220)	(868)
Depreciation and impairment charges	(5,032)	(2,803)	(12,190)	(5,144)	(25,169)
Reclassifications	-	-	21	-	21
Closing net book amount	**25,962**	**14,056**	**38,686**	**9,021**	**87,725**
At 31 December 2020					
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**

Lease liabilities recorded in the balance sheet at 31 December 2021 amount to €78,265 thousand. During the period 2021, 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 € 4,191 thousand.

In 2021, there were no significant changes to contracts, such as extensions or reductions in lease payments directly related to the Covid-19 pandemic, therefore the practical expedient provided by the amendment to IFRS 16 was not applied.

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

(thousands of euro)	**2021**	**2020**
Within 6 months	10,625	11,919
Between 6 and 12 months	11,825	9,524
Between 1 and 5 years	43,529	50,677
Over 5 years	12,286	13,877
	78,265	**85,997**

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

(thousands of euro)	**2021**	**2020**
Short-term lease, low value and variable components	4,993	4,503
Interest amount	2,179	2,557
Principal amount	23,283	24,707
	30,455	**31,767**

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 2020						
Cost/deemed cost	2,867,048	4,984,211	429,290	173,946	132,025	8,586,520
Accumulated depreciation and write-downs	(1,132,516)	(3,852,766)	(320,368)	(29,736)	(101,137)	(5,436,523)
Net book amount	**1,734,532**	**1,131,445**	**108,922**	**144,210**	**30,888**	**3,149,997**
Year ended 31 December 2020						
Opening net book amount	1,734,532	1,131,445	108,922	144,210	30,888	3,149,997
Exchange differences	(122,457)	(78,312)	(10,023)	(13,176)	(3,117)	(227,085)
Additions	22,410	68,210	22,709	105,628	3,682	222,639
Change in scope of consolidation	1,563	559	-	-	-	2,122
Disposals and other	(10,991)	(900)	(59)	(1,139)	(175)	(13,264)
Depreciation and impairment charges	(44,999)	(149,163)	(21,588)	-	(8,281)	(224,031)
Reclassifications	34,932	49,116	4,950	(102,267)	12,296	(973)
Closing net book amount	**1,614,990**	**1,020,955**	**104,911**	**133,256**	**35,293**	**2,909,405**
At 31 December 2020						
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**

Total additions of €221,175 thousand in 2021 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 (€211,323 thousand).

Change in scope of consolidation under the column assets in progress and advances is attributable to land purchased through the acquisition of Falconeria Srl (note 51).

During the year the group capitalized borrowing costs amounting to €266 thousand on qualifying assets (2020: €354 thousand). Borrowing costs were capitalized at the rate of 1.96% (2020: 2.0%).

Assets in progress and advances include €16,892 thousand relating to the bulk purchase of second-hand machinery and equipment for the Korkino plant in Russia (Iskitim project), in 2019.

Positive exchange differences of €167,519 thousand reflect basically the strengthening in the dollar/euro, ruble/euro, hryvnia/euro exchange rate. In 2020 the trend in the exchange rate of the dollar, the ruble and the hryvnia had given rise to overall negative exchange differences of €227,085 thousand.

Real guarantees on assets of consolidated companies are represented by liens on industrial and commercial equipment for the amount of €104 thousand at 31 December 2021 (2020: €119 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, for a period of approximately 15 years, 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 €81,933 thousand at 31 December 2021. 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 €27,655 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 €4,661 thousand.

22. Investment property

It is accounted for using the cost model and it amounts to €17,697 thousand, showing a decrease of €1,065 thousand versus last year.
The fair value at the balance sheet date, based on internal and external independent appraisals, amounts to €23,461 thousand (2020: €27,490 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)	2021	2020
At 1 January		
Cost/deemed cost	23,396	35,864
Accumulated depreciation and write-downs	(4,634)	(15,068)
Net book amount	**18,762**	**20,796**
Exchange differences	79	(86)
Additions	122	-
Disposals and other	(1,101)	(1,491)
Depreciation and impairment charges	(293)	(457)
Reclassifications	128	-
At 31 December	**17,697**	**18,762**
Cost/deemed cost	21,335	23,396
Accumulated depreciation and write-downs	(3,638)	(4,634)
Net book amount	**17,697**	**18,762**

The caption disposals and other includes land and a building, located in Rotterdam, sold in December 2021 for €932 thousand.

Write-downs mainly relate to an industrial area pertaining to the concrete sector, located in Urbino (PU) for €268 thousand.

23. Investments in associates and joint ventures

The amounts recognized in the balance sheet are as follows:

(thousands of euro)	2021	2020
Associates valued by the equity method	156,351	154,809
Joint ventures valued by the equity method	306,053	254,401
	462,404	**409,210**

The net increase of €53,194 thousand was affected: upwards by the share of the investee's earnings for €106,056 thousand, exchange differences of €11,993 thousand, the incorporation of the start-up Hinfra Srl for €600 thousand; downwards by dividends received for €59,823 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 €3,847 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 significant cash flow decrease or an increase of 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 as at 31 December 2021 which, in the opinion of the directors, are material to the group. 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.

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	38,526	Equity
Société des Ciments de Sour El Ghozlane EPE SpA	Note 1	Algeria	35.0	32,654	Equity
Salonit Anhovo Gradbeni Materiali dd	Note 2	Slovenia	25.0	31,794	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.

All the 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)	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Summarized balance sheet						
Current assets						
Cash and cash equivalents	12,591	37,866	23,465	26,914	13,247	20,357
Other current assets (excluding cash)	29,470	27,485	32,835	33,733	38,331	30,000
	42,061	**65,351**	**56,300**	**60,647**	**51,578**	**50,357**
Non-current assets	**87,787**	**59,636**	**49,637**	**58,620**	**111,852**	**107,286**
Current liabilities						
Financial liabilities (excluding trade and other payables and provisions)	-	-	-	-	3,723	6,062
Other current liabilities (including trade and other payables and provisions)	11,849	9,935	7,158	6,962	23,268	14,365
	11,849	**9,935**	**7,158**	**6,962**	**26,991**	**20,427**
Non-current liabilities						
Financial liabilities (excluding other payables and provisions)	-	-	-	-	7,151	9,456
Other non-current liabilities (including other payables and provisions)	7,924	8,087	5,480	9,280	2,627	2,989
	7,924	**8,087**	**5,480**	**9,280**	**9,778**	**12,445**
Summarized income statement						
Net sales	33,243	35,027	28,437	33,450	97,955	88,446
Gains on disposal of property, plant and equipment	-	-	-	-	-	-
Depreciation, amortization and impairment charges	(8,393)	(10,400)	(19,331)	(9,864)	(9,165)	(9,379)
Finance revenues	971	1,218	677	399	424	413
Finance costs	(52)	(14)	(9)	(30)	(352)	(463)
Income tax expense	(1,048)	(2,425)	(1,242)	1,451	(1,249)	(983)
Profit for the year	**2,629**	**3,843**	**1,468**	**1,740**	**12,792**	**15,762**
Other comprehensive income	3,204	(22,653)	2,569	(19,671)	-	-
Total comprehensive income	**5,833**	**(18,810)**	**4,037**	**(17,931)**	**12,792**	**15,762**

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)	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Opening net assets at 1 January	106,965	129,028	92,173	112,943	123,883	116,150
Profit for the year	2,629	3,843	1,468	1,740	12,792	15,762
Dividends	(2,723)	(3,253)	(2,911)	(2,839)	(10,014)	(8,029)
Exchange differences	3,204	(22,653)	2,569	(19,671)	-	-
Closing net assets	**110,075**	**106,965**	**93,298**	**92,173**	**126,661**	**123,883**
Ownership share (35%; 35%; 25%)	38,526	37,438	32,654	32,261	31,665	30,971
Goodwill	-	-	-	3,735	129	178
Carrying value	**38,526**	**37,438**	**32,654**	**35,996**	**31,794**	**31,149**

23.2 Interests in joint ventures

Set out below are the two joint ventures as at 31 December 2021 which, in the opinion of the directors, are material to the group.

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	156,107	Equity
BCPAR SA	Brazil	50.0	142,974	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.
As at 31 December 2021, the fair value of our interest in Corporación Moctezuma, SAB de CV, which is listed on the Bolsa Mexicana de Valores, was €845,721 thousand (2020: €709,147 thousand).

BCPAR SA has a share capital consisting solely of ordinary shares, which is held directly by the company. BCPAR is the holding company of a group that manufactures and sells cement, by operating two full-cycle plants in Brazil, one in the north-eastern region of the country (state of Paraíba) and the other in the south-eastern area (state of Minas Gerais). In this case too, the investment is strategic for the group.
In April, with the authorization of the Brazilian antitrust authority (CADE) and based on the agreements communicated on 26 October 2020, Companhia Nacional de Cimento (CNC), a wholly-owned subsidiary of BCPAR, acquired all the CRH group companies operating in Brazil. The consideration paid considered the originally agreed price of $218 million and the changes in the financial position of the acquired companies since the signing of the agreement.
Buzzi Unicem has financed CNC, on an arm's length basis, for an amount of $242 million to support the whole transaction.
The CRH operations in Brazil (approximately 2.8 million tons of cement sold in 2020) consist of three full-cycle cement plants and two grinding plants, all of them located in the South-East of the country.

The acquired entities have therefore been consolidated on a line-by-line basis by BCPAR from 16 April 2021.
The accounting for the business combination was concluded in December 2021, after a specific independent valuation, through which the final identifiable net assets were re-determined. This mainly resulted in the alignment to fair value of land, plant and equipment. The final goodwill arising from the acquisition, recorded in CNC, amounted to €75,057 thousand; however, the carrying amount of Buzzi Unicem's investment in BCPAR was not affected by the combination, except for the recognition of the equity earnings of the period (€16,928 thousand).

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		BCPAR SA	
(thousands of euro)	**2021**	**2020**	**2021**	**2020**
Summarized balance sheet				
Current assets				
Cash and cash equivalents	183,262	126,915	95,996	53,025
Other current assets (excluding cash)	87,118	89,762	85,045	38,940
	270,380	**216,677**	**181,041**	**91,965**
Non-current assets	**293,716**	**290,453**	**474,588**	**272,751**
Current liabilities				
Financial liabilities (excluding trade and other payables and provisions)	2,806	2,600	14,849	19,605
Other current liabilities (including trade and other payables and provisions)	82,313	80,992	27,686	11,032
	85,119	**83,592**	**42,535**	**30,637**
Non-current liabilities				
Financial liabilities (excluding other payables and provisions)	1,186	2,493	282,548	80,615
Other non-current liabilities (including other payables and provisions)	15,661	22,990	48,295	29,212
	16,847	**25,483**	**330,843**	**109,827**
Summarized income statement				
Net sales	661,552	573,797	253,426	139,099
Depreciation, amortization and impairment charges	(27,737)	(25,963)	(15,690)	(14,938)
Finance revenues	14,082	23,168	34,950	3,227
Finance costs	(9,106)	(18,478)	(38,272)	(27,225)
Income tax expense	(70,822)	(71,855)	5,019	(5,819)
Profit for the year	**189,108**	**172,105**	**63,675**	**838**
Other comprehensive income	24,742	(58,934)	2,174	(65,674)
Total comprehensive income	**213,850**	**113,171**	**65,849**	**(64,836)**

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		BCPAR SA	
(thousands of euro)	**2021**	**2020**	**2021**	**2020**
Opening net assets at 1 January	398,220	434,343	173,146	238,022
Profit for the year	189,108	172,105	63,675	838
Actuarial gains (losses) on post-employment benefits	1,761	(130)	133	-
Dividends	(145,340)	(140,461)	(9,295)	-
Exchange differences	22,981	(58,934)	2,041	(65,674)
Other	(4,466)	(8,703)	(8)	(40)
Closing net assets	**462,264**	**398,220**	**229,692**	**173,146**
% of ownership (33%; 50%)	156,107	134,321	114,846	86,573
Goodwill	-	-	28,128	27,852
Carrying value	**156,107**	**134,321**	**142,974**	**114,425**

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 2021	350	11,052	11,402
Additions	-	1,003	1,003
Fair value changes	24	192	216
Reclassifications	534	-	534
Write-downs	-	(1,020)	(1,020)
Disposals and other	-	86	86
At 31 December 2021	**908**	**11,314**	**12,222**

Reclassifications refer to the company Bildungs-Zentrum-Deuna GmbH, previously included among investments in associates.

25. Other non-current assets

(thousands of euro)	2021	2020
Loans to third parties and leasing	2,376	2,561
Loans to associates and joint ventures	213,757	87
Loans to customers	9,306	8,328
Tax receivables	862	1,063
Non-current financial assets	19,907	-
Receivables from personnel	784	712
Guarantee deposits	13,493	12,336
Other	9,819	5,932
	270,305	**31,019**

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

Loans to associates and joint ventures include the financing of €213,667 thousand granted to Companhia Nacional de Cimento (CNC, a wholly-owned subsidiary of BCPAR SA), for the acquisition of the CRH group companies operating in Brazil (note 23.2).

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.

The caption non-current financial assets includes investments entrusted to asset management firms, subscribed for an initial nominal value of €20,000 thousand and subsequently valued at fair value.

Receivables from personnel include loans to employees equal to €335 thousand (2020: €356 thousand).

Guarantee deposits represent assets held in trust to secure the payment of benefits under certain pension plans in the United States for €12,320 thousand, besides insurance deposits.

The receivables included in this item expiring after more than five years amount to €20,243 thousand (2020: €20,348 thousand). The maximum exposure to credit risk is the carrying value of each class of receivable mentioned above.

26. Inventories

(thousands of euro)	2021	2020
Raw materials, supplies and consumables	320,429	281,891
Work in progress	69,962	77,414
Finished goods and merchandise	70,306	80,601
Advances	1,883	505
Emission rights	37,430	28,949
	500,010	**469,360**

Increases and decreases of the various categories depend on the trend in production and sales, on the price of the factors employed, 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 €34,160 thousand (2020: €31,404 thousand).

27. Trade receivables

(thousands of euro)	2021	2020
Trade receivables	457,943	410,542
Less: Loss allowance	(15,479)	(22,692)
Trade receivables, net	**442,464**	**387,850**
Other trade receivables:		
From associates	13,239	11,345
From parent companies	32	27
	455,735	**399,222**

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 mostly with firms operating in the ready-mix concrete segment.

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

(thousands of euro)	2021	2020
Euro	241,217	212,391
US Dollar	157,867	135,914
Russian Ruble	13,488	13,679
Czech Koruna	17,217	14,848
Polish Zloty	9,407	7,896
Other currencies	3,268	3,122
	442,464	**387,850**

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

(thousands of euro)	2021	2020
At 1 January	22,692	29,689
Exchange differences	586	(1,074)
Change in scope of consolidation	(18)	-
Increase recognized in profit or loss	1,915	3,189
Receivables written off as uncollectible	(8,795)	(6,594)
Unused amounts reversed and other	(901)	(2,518)
At 31 December	**15,479**	**22,692**

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.

28. Other receivables

(thousands of euro)	2021	2020
Tax receivables	38,011	32,940
Receivables from social security institutions	208	266
Receivables from unconsolidated subsidiaries and associates	793	-
Loans to customers	72	82
Receivables from suppliers	6,623	4,480
Receivables from personnel	403	256
Current financial assets	1,427	1,473
Loans to third parties and leasing	282	408
Accrued interest income	1,280	685
Other accrued income and prepaid expenses	11,461	11,072
Other	14,002	20,542
	74,593	**72,204**

Tax receivables include income tax payments in advance and the debit balance of periodic value added tax liquidation; 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 25).

Receivables from suppliers mainly include advances on the procurement of gas, electricity and other services.

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

The caption other includes, among others, the receivable from the sale of real estate in Wiesbaden for €2,400 thousand, and decreases mainly due to the repayment of the receivable in connection with the fine imposed in 2015 by the Polish Antitrust Authority (€6,873 thousand) and to the extinction of an escrow account to guarantee the compensation of a railway service provider in Russia (€2,714 thousand, see also note 49).

29. Cash and cash equivalents

(thousands of euro)	2021	2020
Cash at banks and in hand	692,004	862,883
Short-term deposits	511,607	355,396
	1,203,611	**1,218,279**

Foreign operating companies hold about 77.9% of the balance of €1,203,611 thousand (53.2% in 2020). At the closing date, short-term deposits and securities earn interest at about 1.02% on average (0.5% in 2020), yield in euro is around -0.11%, in dollar 0.11% and in other currencies 5.11%. 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)	2021	2020
Euro	185,792	365,277
US Dollar	790,985	663,745
Russian Ruble	132,055	104,668
Other currencies	94,779	84,589
	1,203,611	**1,218,279**

30. Assets held for sale

They mainly refer to land located in San Antonio, TX (€2,751 thousand), some plant and machinery of the mothballed Travesio, PN facility (€1,235 thousand), and quarries and land in Italy for €1,494 thousand.

At the end of 2020, assets held for sale mainly referred to some quarry land in Germany, belonging to the idle plant of Seibel & Söhne, which was sold in January 2021 for €8,126 thousand; to some plants and machinery of the mothballed Travesio, PN (€1,235 thousand) and Sorbolo, PR (€1,650 thousand) plants and to a building plot in Luxembourg for €123 thousand.

31. Share capital

On 18 January 2021, the mandatory conversion of the 40,711,949 existing savings shares into 27,277,005 newly issued ordinary shares took place, on the basis of a conversion ratio of 0.67 ordinary shares for each savings share, with simultaneous elimination of the indication of the unit nominal value of any outstanding shares. The conversion had a dilutive effect on the voting rights of the ordinary shareholders of approximately 14%.

At the balance sheet date the share capital of the company is composed only of ordinary shares, as follows:

(number of shares)	2021	2020
Shares issued and fully paid		
Ordinary shares	192,626,154	165,349,149
Savings shares	-	40,711,949
	192,626,154	**206,061,098**
Share capital (thousands of euro)	123,637	123,637

The number of shares outstanding changed during 2021 and at the balance sheet date is the following:

(number of shares)	Ordinary	Savings	Total
At 1 January 2021			
Shares issued	165,349,149	40,711,949	206,061,098
Less: Treasury shares	(401,158)	(139,030)	(540,188)
Outstanding at beginning of year	**164,947,991**	**40,572,919**	**205,520,910**
Conversion			
Shares issued	27,277,005	(40,711,949)	(13,434,944)
Purchase of treasury shares (withdrawal)	-	(12)	(12)
Less: Treasury shares	(93,158)	139,042	45,884
At 31 December 2021			
Shares issued	192,626,154	-	192,626,154
Less: Treasury shares	(494,316)	-	(494,316)
Outstanding at end of year	**192,131,838**	**-**	**192,131,838**

32. 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 2021 and it is unchanged versus last year.

33. Other reserves

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

(thousands of euro)	**2021**	**2020**
Exchange differences	(514,160)	(768,221)
Revaluation reserves	88,286	88,286
Merger surplus	249,177	247,530
Other	117,603	117,483
	(59,094)	**(314,922)**

The exchange differences reflect the foreign exchange rate fluctuations that occurred starting from the first-time consolidation of financial statements denominated in foreign currencies. The positive change in the balance of €254,061 thousand results from the improvement in the exchange rates of all the functional currencies involved in the consolidation process: €205,809 thousand for the US dollar, €25,731 thousand for the Russian ruble, €1,296 thousand for the Brazilian real, €8,251 thousand for the Ukrainian hryvnia, €7,761 thousand for the Mexican peso, €2,130 thousand for the Algerian dinar and €3,083 thousand for the other currencies in Eastern Europe.

34. 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 €144 thousand.

The changes in gains and losses generated by the actuarial valuations of liabilities for employee benefits, net of related deferred tax, in 2021 brought to an increase in retained earnings equal to €34,477 thousand.

35. Non-controlling interests

The balance refers to Cimalux SA for €3,560 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	
		2021	2020	2021	2020	2021	2020
Cimalux SA	Luxembourg	1.57%	1.57%	371	215	3,549	3,278

(thousands of euro)	2021	2020
Summarized balance sheet		
Non-current assets	86,168	88,409
Current assets	183,191	159,087
Non-current liabilities	21,465	18,003
Current liabilities	21,642	20,548
Net assets	**226,252**	**208,945**
Summarized income statement		
Net sales	108,971	99,589
Operating expenses	(94,869)	(80,995)
Depreciation, amortization and impairment charges	(7,291)	(7,336)
Finance revenues	19,078	5,715
Finance costs	(488)	(333)
Income tax expense	(1,717)	(2,920)
Profit for the year	**23,684**	**13,720**
Other comprehensive income	920	(536)
Total comprehensive income	**24,604**	**13,184**
Total comprehensive income attributable to non controlling interests	**14**	**(9)**
Dividends paid to non-controlling interests	111	104
Summarized statement of cash flows		
Cash flows from operating activities		
Cash generated from operations	17,354	12,372
Interest paid	(5)	(7)
Income tax paid	(3,267)	(2,482)
Net cash generated from operating activities	**14,082**	**9,883**
Net cash generated from (used in) investing activities	**14,393**	**431**
Net cash generated from (used in) financing activities	**(27,505)**	**(11,292)**
Increase (decrease) in cash and cash equivalents	**970**	**(978)**
Cash and cash equivalents at beginning of year	**4,744**	**5,722**
Cash and cash equivalents at end of year	**5,714**	**4,744**

36. Debt and borrowings

(thousands of euro)	2021	2020
Long-term debt		
Senior notes and bonds	498,802	497,917
Unsecured term loans	489,149	668,392
	987,951	**1,166,309**
Current portion of long-term debt		
Unsecured term loans	136,635	52,958
	136,635	**52,958**
Short-term debt		
Bank debts	942	1,070
Accrued interest expense	11,534	11,831
	12,476	**12,901**

During 2021 the average interest rate on financial indebtedness was equal to 2.05% (2020: 1.90%).

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)	2021	2020
Within 6 months	42,565	65,687
Between 6 and 12 months	106,546	172
Between 1 and 5 years	986,953	1,125,411
Over 5 years	998	40,898
	1,137,062	**1,232,168**

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 are due in a single installment on 28 April 2023. This bond is carried at amortized cost, corresponding to an interest rate of 2.312% and to an amount of €498,802 thousand.in the balance sheet.

Term loans and other borrowings
The change for the year is essentially stemming from a decrease due to principal repayments of €111,985 thousand. No new borrowings were taken out during the 2021 financial year.

As at 31 December 2021 the group has undrawn committed facilities for €203,552 thousand (2020: €320,969 thousand), thereof €196,885 thousand available to the company, at floating rate with maturity in 2023, and the remaining €6,667 thousand to Dyckerhoff GmbH and its subsidiaries, always at floating rate, with maturity in 2022.

In respect to interest rate and currency, the gross indebtedness at 31 December 2021 can be shortly split as follows: 7.8% floating and 92.2% fix; 18% dollar-denominated and 82% euro-denominated.

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

	2021		2020	
(thousands of euro)	Carrying amount	Fair value	Carrying amount	Fair value
Floating rate borrowings				
Unsecured term loans	88,190	90,170	192,616	200,545
Fix rate borrowings				
Senior notes and bonds	498,802	504,895	497,917	517,405
Unsecured term loans	538,536	569,495	529,804	567,992
	1,125,528	**1,734,055**	**1,220,337**	**1,285,942**

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.

37. Derivative financial instruments

Within the context of the transaction for the acquisition of the Brazilian companies owned by CRH, Buzzi Unicem and Grupo Ricardo Brennand agreed upon some amendments to the existing shareholders' agreements, in order to take into account the new scope of reference. In addition, the exercise time of the put options granted to Grupo Ricardo Brennand was also partially revised. The new agreements provide that the price of the put and call options will not be affected by the economic and financial performance of the companies being acquired (note 23.2).

As at 31 December 2021 the value of the derivative financial instrument relating to the put and call option on the remaining 50% of the capital of BCPAR SA, based on the new calculation methods agreed between the parties, corresponds to an asset of €6,948 thousand. It is defined as the difference between the exercise price of the option and the fair value of the share 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:

	2021		2020	
(thousands of euro)	Notional	Fair value	Notional	Fair value
BCPAR SA takeover option	254,325	6,948	210,743	(4,060)

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 €14,877 thousand (2020: €16,738 thousand), have a weighted average duration of approximately 8 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 15 years.

The pension obligations in Germany totaling €273,032 thousand (2020: €296,995 thousand) are partly funded through a contractual trust agreement. The value of trust assets is €74,705 thousand (2020: €31,639 thousand) and reduces the amount to be recognized as a liability. In 2021, the plan assets were increased by €40,000 thousand through the signing of a new contractual trust agreement and related cash payment.

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 €1,116 thousand (2020: €1,095 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 €799 thousand (2020: €747 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 €307,899 thousand (2020: 300,119 thousand), is covered by an external pension fund; its fair value of €277,450 thousand (2020: €248,037 thousand) reduces the amount to be recognized as a liability. In 2021, following the recognition of actuarial gains, the fair value of a specific fund resulted above the value of the obligation, determining a surplus of €6,905 thousand, which was recognized as an asset. These pension plans have been closed since 1 January 2011 and the weighted average duration is approximately 14 years. There are also unfunded obligations for a small group of individuals, whose weighted average duration is between 9 and 14 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 10 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 €1,168 thousand (2020: €1,918 thousand) and are funded by specific accounting provisions. In 2021, the number of employees entitled to the benefits decreased due to a change in the collective agreement. 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)	2021	2020
By category		
Post-employment benefits:		
Pension plans	259,305	341,758
Healthcare plans	81,249	77,228
Employee severance indemnities	14,877	16,738
Other long-term benefits	9,414	9,416
	364,845	**445,140**
By geographical area		
Italy	16,508	18,342
Germany, Luxembourg, Netherlands	219,028	287,508
United States of America	125,056	134,777
Other countries	4,253	4,513
	364,845	**445,140**

Defined benefit plan assets, amounting to €6,905 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)	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Present value of funded obligations	577,370	593,316	-	-	-	-
Fair value of plan assets	(352,954)	(280,423)	-	-	-	-
	224,416	**312,893**	**-**	**-**	**-**	**-**
Present value of unfunded obligations	27,984	28,865	81,249	77,228	14,877	16,738
Defined benefit plan assets	6,905	-	-	-	-	-
Liability in the balance sheet	**259,305**	**341,758**	**81,249**	**77,228**	**14,877**	**16,738**

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

	Pension Plans		Healthcare plans		Employee severance indemnities	
(thousands of euro)	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
At 1 January	622,181	660,713	77,228	76,751	16,738	18,149
Current service cost	9,522	8,975	1,959	1,788	-	-
Past service cost	(701)	107	-	-	-	-
Losses (gains) from plan changes	(1)	(1,871)	-	-	-	-
Other costs	(32)	17	-	-	12	-
	8,788	**7,228**	**1,959**	**1,788**	**12**	**-**
Interest expense	10,790	14,075	1,790	2,237	56	137
(Gains) losses from changes in demographic assumptions	(3,969)	704	402	-	(4)	-
(Gains) losses from changes in financial assumptions	(31,970)	48,282	(1,160)	9,442	49	703
Experience (gains) losses	2,444	1,886	770	(499)	99	(356)
	(33,495)	**50,872**	**12**	**8,943**	**144**	**347**
Employee contributions	14	12	539	624	-	-
Benefit payments	(28,208)	(36,846)	(6,415)	(6,364)	(2,315)	(1,895)
Settlements	(58)	(44,827)	-	-	-	-
Exchange differences	25,346	(29,046)	6,136	(6,751)	-	-
Change in scope of consolidation	(6)	-	-	-	-	-
Other changes	2	-	-	-	242	-
At 31 December	**605,354**	**622,181**	**81,249**	**77,228**	**14,877**	**16,738**

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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)	**2021**	**2020**	**2021**	**2020**
Active members	230,796	243,313	13,933	13,280
Deferred members	38,424	40,697	25,427	24,277
Pensioners	336,134	338,171	41,889	39,671
At 31 December	**605,354**	**622,181**	**81,249**	**77,228**

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

	Pension Plans	
(thousands of euro)	2021	2020
At 1 January	280,423	322,454
Interest income	6,733	9,116
Employer contributions	5,102	269
Employee contributions	14	12
Benefit payments	(14,949)	(16,848)
Additions	40,000	-
Settlements	(266)	(45,577)
Actuarial gains (losses)	14,842	33,485
Exchange differences	21,055	(22,488)
At 31 December	**352,954**	**280,423**

Plan assets are comprised as follows:

	Germany		United States of America	
(thousands of euro)	2021	2020	2021	2020
Cash and cash equivalents	**12,249**	**1,037**	**7,763**	**4,663**
Equity instruments	**27,651**	**13,868**	**-**	**-**
Euro equities	18,936	8,951	-	-
Europe ex Euro equities	8,715	4,917	-	-
Debt instruments	**27,130**	**15,724**	**62,856**	**41,155**
Euro corporate investment grade	7,781	6,662	-	-
Euro corporate unrated	93	75	-	-
Euro non-investment grade companies	1,567	-	-	-
Euro sovereigns investment grade	12,613	6,616	-	-
Dollar corporate investment grade	1,405	948	-	-
Dollar sovereign investment grade	223	-	62,856	41,155
Other corporate investment grade	1,783	1,423	-	-
Other investment grade sovereigns	1,665	-	-	-
Derivative financial instruments	**(67)**	**11**	**-**	**-**
Equity derivatives	(67)	11	-	-
Investment funds	**7,741**	**1,000**	**206,832**	**202,218**
Dollar corporate bonds	-	-	40,380	35,737
Dollar sovereign bonds	-	-	48,004	63,433
Euro indexed equities	1,609	1,000	-	-
Dollar indexed equities	4,380	-	67,586	35,753
Other indexed equities	-	-	50,943	63,320
Different euros	1,752	-	-	-
Dollar sundries	-	-	(81)	3,975
	74,704	**31,640**	**277,451**	**248,036**

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 2021, the fair value of these investments amounted to €799 thousand (2020: €747 thousand 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. 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 regarding 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 an annual limit of losses. Four 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. 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 €13,398 thousand.

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

(thousands of euro)	**Pension Plans**	**Healthcare plans**	**Employee severance indemnities**
Year 2022	29,784	6,079	719
Year 2023	31,885	6,136	692
Year 2024	28,740	6,239	1,129
Year 2025	28,682	5,858	1,115
Year 2026	28,769	5,690	1,439
Year 2027-2031	141,532	26,491	5,546
	289,392	**56,493**	**10,640**

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:

	2021						2020					
(in %)	ITA	GER	LUX	NLD	USA	RUS	ITA	GER	LUX	NLD	USA	RUS
Pension plans discount rate	1.0	1.1	1.1	1.3	3.0	8.4	0.3	0.7	0.7	0.9	2.7	6.0
Salary growth rate	2.7	2.8	2.8	2.5	4.2	4.1	1.7	2.8	2.8	2.5	4.1	4.0
Pension growth rate	-	1.8	-	-	-	4.1	-	1.8	-	-	-	4.0
Healthcare discount rate	-	-	-	-	2.7	-	-	-	-	-	2.3	-
Medical cost growth rate	-	1.8	-	-	5.8	-	-	1.8	-	-	6.0	-

The assumptions listed above reflect the current economic period 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%	8,285	-	-
	Decrease 1%	(8,100)	-	-
Discount rate				
	Increase 1%	(78,320)	(7,226)	(290)
	Decrease 1%	99,933	8,635	297
Pension growth rate				
	Increase 1%	19,740	-	-
	Decrease 1%	(30,347)	-	-
Medical cost growth rate				
	Increase 1%	-	4,651	-
	Decrease 1%	-	(4,053)	-
Mortality				
	Increase 1%	19,978	560	-
	Decrease 1%	(20,011)	(556)	-

39. Provisions for liabilities and charges

(thousands of euro)	Environmental risks and restoration	Antitrust	Legal claims Tax risks	Other risks	Total
At 1 January 2021	75,460	6,888	5,358	48,080	135,786
Additional provisions	13,140	-	2,464	49,080	64,684
Discount unwinding	2,158	-	-	-	2,158
Unused amounts released	(18,728)	-	(399)	(1,193)	(20,320)
Used during the year	(3,482)	-	(4,266)	(31,317)	(39,065)
Exchange differences	1,494	(56)	237	1,419	3,094
Change in scope of consolidation	-	-	(124)	(20)	(144)
Other changes	1,670	-	3,181	(2)	4,849
At 31 December 2021	**71,712**	**6,832**	**6,451**	**66,047**	**151,042**

Total provisions can be analyzed as follows:

(thousands of euro)	Environmental risks and restoration	Antitrust	Legal claims Tax risks	Other risks	Total
Non-current	69,091	-	3,287	14,038	86,416
Current	2,621	6,832	3,164	52,009	64,626
	71,712	**6,832**	**6,451**	**66,047**	**151,042**

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 related requirements concerning quarries, safety, health and environment. Movements during the period include a provision of €11,014 thousand and a release of €17,717 thousand, relating to the review of recultivation and restoration costs for quarry land, mainly in Germany (notes 8 and 12).

The provision for tax risks amounts to €5,915 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 €42,168 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 €42,755 thousand corresponding to the estimated deficit for 2021 and uses of €27,256 thousand matching the emission rights consumed in 2020 and surrendered to the competent authority.

Other risks also include the amounts set aside by the individual consolidated entities in connection with miscellaneous contractual and commercial litigations and disputes, among which are included restructuring costs for €5,412 thousand and workers compensation claims not covered by insurance for €13,845 thousand, such as indemnities paid to employees and compensation in case of accidents. The additions include €4,832 thousand for workers compensation claims not covered by insurance, against uses for the same reason of €1,974 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)	2021	2020
Deferred income tax assets:		
To be recovered after more than 12 months	(174,600)	(196,460)
To be recovered within 12 months	(30,692)	(28,271)
	(205,292)	(224,731)
Deferred income tax liabilities:		
To be settled after more than 12 months	464,862	446,503
To be settled within 12 months	29,594	30,283
	494,456	476,786
Net deferred income tax liabilities	**289,164**	**252,055**

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

(thousands of euro)	2021	2020
Deferred income tax assets related to:		
Provisions for liabilities and charges	(13,682)	(15,153)
Trade receivables	(3,277)	(3,779)
Employee benefits	(48,919)	(85,330)
Long-term debt	(4,724)	(12,908)
Property, plant and equipment	(7,042)	(7,396)
Inventories	(5,666)	(5,056)
Tax loss carryforwards (theoretical benefit)	(74,502)	(107,671)
Other	(70,761)	(61,339)
Total deferred income tax assets	**(228,573)**	**(298,632)**
Valuation allowances	23,281	73,901
Net deferred income tax assets	**(205,292)**	**(224,731)**
Deferred income tax liabilities related to:		
Accelerated depreciation	144,920	109,710
Employee benefits	47	16
Property, plant and equipment	313,726	297,799
Inventories	3,792	2,956
Gains on disposal of fixed assets	287	-
Financial assets	2,327	13,024
Other	29,357	53,281
Total deferred income tax liabilities	**494,456**	**476,786**
Net deferred income tax liabilities	**289,164**	**252,055**

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)	2021	2020
At 1 January	252,055	293,619
Income statement charge (credit)	(2,839)	(4,058)
Statement of comprehensive income charge (credit)	14,876	(10,624)
Exchange differences	25,072	(26,882)
At 31 December	**289,164**	**252,055**

41. Other non current liabilities

(thousands of euro)	2021	2020
Purchase of equity investments	2,712	2,681
Non-controlling interests in partnerships	1,503	1,411
Payables to social security institutions	-	2,700
Payables to personnel	241	248
Financial tax payables	210	324
Other	2,286	2,105
	6,952	**9,469**

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

Payables to social security institutions in the comparative period, refer to certain 2020 obligations that have been postponed to 2022, as a result of the Coronavirus Aid, Relief and Economic Security Act (Cares Act), approved in the United States to cope with the pandemic. The amount was reclassified to current liabilities.

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)	2021	2020
Trade payables	292,023	228,030
Other trade payables:		
To associates	2,020	1,217
	294,043	**229,247**

43. Income tax payables

This item reflects current income tax liabilities, net of advances, withholdings and tax credits. The decrease in the item compared to the previous year is attributable to the taxation on the capital gain realized in 2020 by the associate Kosmos Cement.

44. Other payables

(thousands of euro)	2021	2020
Advances	6,039	4,925
Purchase of equity investments	119	217
Payables to social security institutions	17,637	16,742
Payables to personnel	36,951	35,509
Payables to customers	11,249	11,423
Deferred interest income	38	58
Other accrued expenses and deferred income	7,843	6,720
Tax payables	13,641	16,225
Extraordinary dividend	-	144,099
Financial tax payables	4,968	3,578
Payables to antitrust authority	-	356
Other	12,682	11,962
	111,167	**251,814**

The caption payables to social security institutions includes €2,925 thousand referring to certain 2020 obligations that have been postponed to 2022, as a result of the Coronavirus Aid, Relief and Economic Security Act (Cares Act) approved in the United States to deal with the pandemic.

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 €3,961 thousand (2020: €6,059 thousand). It also includes an amount of €782 thousand referring to the tax on real estate transfers in Germany, whose taxable event was reaching full ownership in Dyckerhoff a few years ago.

The extraordinary dividend combined with the conversion of savings shares into ordinary shares was paid in February 2021.

45. Cash generated from operations

(thousands of euro)	2021	2020
Profit before tax	**635,252**	**700,259**
Adjustments for:		
Depreciation, amortization and impairment charges	249,048	256,911
Equity in earnings of associates and joint ventures	(106,056)	(173,080)
Gains on disposal of fixed assets	(27,311)	(6,194)
Net change in provisions and employee benefits	(47,112)	(12,465)
Net finance costs	34,400	313
Other non-cash movements	(180)	(2,158)
Changes in operating assets and liabilities:		
Inventories	(16,714)	8,345
Trade and other receivables	(15,933)	(30,785)
Trade and other payables	46,982	2,728
Cash generated from operations	**752,376**	**743,874**

46. Financing activities

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

			Cash		Non-cash				
(thousands of euro)	**Note**	**Beg balance**	**Proceeds**	**Repay-ment**	**Accruals**	**Exchange differen-ces**	**Fair value**	**Other**	**Ending balance**
Long-term debt									
Senior notes and bonds	36	497,917	-	-	-	-	885	-	498,802
Unsecured term loans	36	668,392	-	(59,000)	-	15,979	400	(136,622)	489,149
		1,166,309	**-**	**(59,000)**	**-**	**15,979**	**1,285**	**(136,622)**	**987,951**
Current portion of long-term debt									
Unsecured term loans	36	52,958	-	(52,985)	-	-	40	136,622	136,635
		52,958	**-**	**(52,985)**	**-**	**-**	**40**	**136,622**	**136,635**
Total from Statement of Cash Flows		**-**	**-**	**(111,985)**	**-**	**-**	**-**	**-**	**-**
Short-term debt									
Bank debts	36	1,070	942	(1,070)	-	-	-	-	942
Accrued interest expense	36	11,831	-	(11,831)	11,534	-	-	-	11,534
		12,901	**942**	**(12,901)**	**11,534**	**-**	**-**	**-**	**12,476**
Total from Statement of Cash Flows		**-**	**-**	**(425)**	**-**	**-**	**-**	**-**	**-**
Lease liabilities									
Lease liabilities	20	64,554	9,988	-	-	2,567	533	(21,827)	55,815
Current portion of lease liabilities	20	21,443	1,986	(23,283)	-	1,050	-	21,254	22,450
		85,997	**11,974**	**(23,283)**	**-**	**3,617**	**533**	**(573)**	**78,265**
Total from Statement of Cash Flows		**-**	**-**	**(23,283)**	**-**	**-**	**-**	**-**	**-**
Non-current financial liabilities									
Others	41	6,033	-	(3,050)	(888)	-		4,266	6,361
Total from Statement of Cash Flows		**-**	**-**	**(3,938)**	**-**	**-**	**-**	**-**	**-**
Changes in ownership interests without loss of control		**-**	**-**	**(1)**	**-**	**-**	**-**	**-**	**-**
Dividends paid to owners of the company	**47**	**-**	**-**	**(191,880)**	**-**	**-**	**-**	**-**	**-**
Dividends paid to non-controlling interests		**-**	**-**	**(59)**	**-**	**-**	**-**	**-**	**-**

47. Dividends

Dividends distributed in 2021 and 2020 were respectively €48,033 thousand (25 eurocent per ordinary share, after the mandatory conversion of savings shares concluded in January 2021) and €31,802 thousand (15 eurocent per ordinary share and 17,4 eurocent per savings share). As part of the conversion of savings shares into ordinary shares, an extraordinary dividend of €144,099 thousand (75 cents per outstanding and newly issued ordinary shares, paid on February 3, 2021) was awarded.

As for the year ended 31 December 2021 the board of directors is proposing to the Annual General Meeting of 12 May 2022 a dividend of 40 eurocents per share. Therefore, expected dividend distribution amounts to a total of €74,053 thousand. These financial statements do not reflect such payable to the shareholders.

48. Commitments

(thousands of euro)	**2021**	**2020**
Guarantees granted	30,965	28,619
Other commitments and guarantees	57,382	235,228
	88,347	**263,847**

Guarantees granted include commitments toward banks in favor of investee companies, including an amount of €27,027 thousand for loans granted to the associate BCPAR SA.

Capital expenditure contracted for at the balance sheet date to acquire property, plant and equipment amounts to €57,155 thousand (2020: €44,703 thousand). It can be basically traced back to different modernization projects in the United States (€19,396 thousand), Germany (€14,033 thousand), Italy (€8,946 thousand), Luxembourg (€1,648 thousand), Russia (€8,518 thousand), Ukraine (€1,887 thousand), Czech Republic (€1,771 thousand) and Poland (€956 thousand).

The total amount of future minimum payments is related to 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)	**2021**	**2020**
Within 1 year	2,887	2,750
Between 1 and 5 years	8,479	7,911
Over 5 years	32,701	34,196
	44,067	**44,857**

46. 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 recognized 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 after 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 2021 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 2016 for a total amount of approximately €19.2 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 instance judgment, the municipality ordered the provisional payment of an amount €4.9 million, which the company paid in full, as well as of an amount of approximately €3.1 million which was for the most part not due as a result of the judgment at second instance. Nevertheless, 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. Anyway, 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. With reference to the 4 executive notices of assessment notified in 2020 (for about €3.8 million) referring to IMU and TASI in the years 2014 and 2015, the company recorded tax charges of €1.5 million in the balance sheet relating to the notice of assessment (IMU 2015) which obtained an unfavorable sentence in the first instance, while it did not record the remaining amount requested as it relates to assessments deemed unfounded or which obtained a favorable sentence in first instance. The company also did not record in the balance sheet the amounts, always requested by the Municipality of Guidonia Montecelio (Rome), with two more executive notices of assessment for IMU and TASI 2016 notified at the end of 2021 (for a total of approximately €1.5 million) as they are considered unfounded.

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 €16 million. The company, as mentioned, believes that it has acted in full compliance with antitrust regulations and has therefore appeared before the court to prove its non-involvement in any violation. Furthermore, during 2021, two summons (relating to a plurality of plaintiffs) were notified to Buzzi Unicem and other companies involved in the antitrust proceeding aimed at compensating the alleged damages connected with the same antitrust case, for a total of about €87 million, of which approximately €10 million directly attributable to Buzzi Unicem. Also in relation to these claims, the company has appeared and/or will appear before the court to prove its extraneousness to 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 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 (SR) 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.

There have been no judicial rulings or significant procedural developments with respect to the final project for the safety enhancement and clean-up of the areas on the land areas and the aquifer, which was 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.

With reference to these judgments, 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 its 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 - as non-responsible owner - has so far voluntarily taken care of the remediation process of the areas it owns, 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 Dutch subsidiary Dyckerhoff Basal Betonmortel received a claim for compensation of approximately €1 million for alleged contractual infringements relating to land in the port of Amsterdam. On 18 May 2021, the Court of First Instance decided on the payment to the applicant of approximately €40,000 for participation in the rental costs, rejecting all other requests. The proceeding was concluded with the waiver of the applicant to appeal.

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. Our subsidiary, deeming the purchase agreement terminated, is representing itself at court and does not expect negative impacts on the financial statements.

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. Cimalux SA will continue to defend itself in the proceeding and does not expect a negative impact on the financial statements.

At the end of April 2020, our Russian subsidiary SLK Cement received a contractual claim for compensation from a railway service provider for a total amount of 387 million rubles, later reduced to 286 million rubles. The Court of First Instance on 10 July 2020 decided on a payment to the applicant of 240 million rubles. This decision was confirmed on 30 September 2020 by the Court of Appeal and on 18 January 2021 by the Court of Cassation. The company on 26 February 2021 paid the full amount. The proceeding is closed as it was deemed inadmissible by both the Supreme Court and the Constitutional Court. Our subsidiary requested compensation of 243 million rubles from the counterparty for damages arising from negligent breach of contract. Our request was accepted in the first instance but subsequently rejected on appeal and by the Court of Cassation. The proceeding is closed as it was deemed inadmissible by the Supreme Court.

A second railway service provider, which had already opened and partially won a dispute against SLK Cement in 2019, filed a new claim in the amount of 20.3 million rubles, claiming that it leased all the railway cars used by SLK Cement itself from another company to which it had to pay demurrage in the amount of 32.5 million rubles on the basis of a court ruling. The Court of First Instance ruled in favor of the applicant. The Court of Appeal reduced the request to 18.8 million rubles. The decision was confirmed by the Court of Cassation. The proceeding is closed as it was deemed inadmissible by the Supreme Court. The company paid the full amount claimed.

Our Russian subsidiary SLK Cement received, following a tax audit of the years 2016-2018, a request for payment in the amount of 56 million rubles. As a result of the audits subsequently conducted, the tax authorities reduced the amount to 30.4 million rubles, of which an amount of 22.9 million rubles settled in 2021 and the residual part in early 2022.

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 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)	2021	in % of reported balance	2020	in % of reported balance
Sales of goods and services:	55,907	1.6	49,171	1.5
associates and unconsolidated subsidiaries	32,357		37,669	
joint ventures	23,365		11,425	
parent companies	26		22	
other related parties	159		55	
Purchases of goods and services:	61,577	2.8	56,649	2.9
associates and unconsolidated subsidiaries	74,867		55,079	
joint ventures	(13,955)		923	
parent companies	7		5	
other related parties	658		642	
Internal works capitalized:	-	-	5	0.2
other related parties	-		5	
Finance revenues:	2,467	3.9	14	-
associates and unconsolidated subsidiaries	3		14	
joint ventures	2,464		-	
Trade receivables:	13,402	2.9	11,431	2.9
associates and unconsolidated subsidiaries	5,821		6,720	
joint ventures	7,433		4,622	
parent companies	32		27	
other related parties	116		62	
Loans receivable:	214,548	87.4	97	0.9
associates and unconsolidated subsidiaries	87		97	
joint ventures	214,461		-	
Other receivables:	16,836	17.0	18,512	17.9
associates and unconsolidated subsidiaries	322		1,311	
joint ventures	774		-	
parent companies	15,740		17,201	
Trade payables:	6,800	2.3	2,778	1.2
associates and unconsolidated subsidiaries	6,725		2,728	
joint ventures	58		21	
parent companies	7		12	
other related parties	10		17	
Loans payable:	4,988	97.3	4,979	3.4
parent companies	4,988		4,979	
Other payables:	4,931	4.2	424	0.2
associates and unconsolidated subsidiaries	-		21	
parent companies	4,931		403	
Guarantees granted:	28,527		218,347	
joint ventures	28,527		218,347	

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)	2021	2020
Salaries and other short-term employee benefits	4,535	4,595
Post-employments benefits	908	897
	5,443	**5,492**

51. Business combinations

On 2 March 2021 Buzzi Unicem acquired 100% of Falconeria Srl. The consideration paid was €650 thousand.

The business combination was finalized with the support of a specific independent valuation report, through which the values of the final identifiable net assets (€2,125 thousand) were assessed. In particular, property, plant and equipment were aligned to fair value, recording a revaluation of €557 thousand.

If the above acquisition had taken place on 1 January 2021, consolidated net revenues and net income would not have changed significantly.

52. 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.

For this purpose, 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 (euro)	Amount of the economic benefit granted	Description of the kind of benefit granted
Eni Fuel SpA	25,987	Reimbursement of excise duties on diesel for industrial use
INAIL Istituto Nazionale per l'Assicurazione contro gli Infortuni sul lavoro - Pubbliche amministrazioni IPA	103,671	INAIL - reduction of the insurance premium for prevention/training
Ministero Sviluppo Economico	215,085	Law 488/92 - project 41928/11

53. Other information

Material non-recurring events and transactions

As stated in the review of operations, the year ended 31 December 2021 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 €1,290 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 2021, as defined in Consob Communication no. DEM/6064293 of 28 July 2006.

Net financial position

The net financial position is shown in the following table:

(thousands of euro)	2021	2020
Cash and short-term financial assets:		
Cash and cash equivalents	1,203,611	1,218,279
Other current financial receivables	3,885	2,648
Short-term financial liabilities:		
Current portion of long-term debt	(136,635)	(52,958)
Current portion of lease liabilities	(22,450)	(21,443)
Short-term debt	(12,476)	(12,901)
Extraordinary dividend	-	(144,099)
Other current financial liabilities	(6,025)	(4,210)
Net short-term cash	**1,029,910**	**985,316**
Long-term financial liabilities:		
Long-term debt	(987,951)	(1,166,309)
Lease liabilities	(55,815)	(64,554)
Derivative financial instruments	-	(4,060)
Other non-current financial liabilities	(2,922)	(3,005)
Net debt	**(16,778)**	**(252,612)**
Long-term financial assets:		
Derivative financial instruments	6,948	-
Other non-current financial receivables	245,346	10,976
Net financial position	**235,516**	**(241,636)**

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	2021	2020
Other current financial receivables		**3,885**	**2,648**
Receivables from unconsolidated subsidiaries and associates	28	793	-
Loans to customers	28	72	82
Loans to third parties and leasing	28	282	408
Accrued interest income	28	1,280	685
Current financial assets	28	1,427	1,473
Other current financial payables		**(6,025)**	**(4,210)**
Purchase of equity investments	44	(119)	(217)
Financial tax payables	44	(4,968)	(3,578)
Other financial payables	44	(900)	-
Payables to antitrust authority	44	-	(356)
Deferred interest income	44	(38)	(58)
Other non-current financial receivables		**245,346**	**10,976**
Loans to third parties and leasing	25	2,376	2,561
Loans to associates and joint ventures	25	213,757	87
Loans to customers	25	9,306	8,328
Non-current financial assets	25	19,907	-
Other non-current financial payables		**(2,922)**	**(3,005)**
Purchase of equity investments	41	(2,712)	(2,681)
Financial tax payables	41	(210)	(324)

54. Events after the balance sheet date

At the end of February 2022, following the outbreak of the conflict in Ukraine, a scenario of considerable uncertainty arose, with a presumable decline in general confidence and a sharp slowdown in the economic situation, especially in the countries involved. After the first two months of the year during which the operating activity was confirmed in line with the budget assumptions, the most recent developments, marked by the disruption of operations in Ukraine and the sanctions imposed on Russia, suggest for the coming months a decline in business for these two countries, as well as in the rest of Europe, the extent of which cannot currently be reliably estimated.

On 9 February 2022, the company started a share buyback program, within the authorization and the purposes resolved by the Shareholders' Meeting of 7 May 2021.
Under this program, between 5 February and 30 March 2022, Buzzi Unicem SpA purchased all 7,000,000 ordinary shares authorized by the shareholders, with a total cash outflow of approximately €123 million.
Therefore, Buzzi Unicem SpA holds a total of no. 7,494,316 ordinary treasury shares, equal to 3.891% of the share capital.

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

Casale Monferrato, 25 March 2022

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
Calcestruzzi Zillo SpA	Casale Monferrato (AL)	EUR	4,004,676	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
Serenergy 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	El Mohammadia - 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
MKB Mörteldienst Köln-Bonn GmbH & Co. KG	Neuss DE	EUR	125,500	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	20,000,000	OOO SLK Cement	100.00
OOO Dyckerhoff Suchoi Log obshestvo po sbitu tamponashnich zementow	Suchoi Log RU	RUB	4,100,000	OOO SLK Cement	100.00
OOO Omsk Cement	Omsk RU	RUB	779,617,530	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 Holding Company	Wilmington US	USD	10	RC Lonestar Inc.	100.00
Hercules Cement Company LP	Harrisburg US	USD	n/a	RC Lonestar Inc. Hercules Cement Holding Company	99,00 1,00
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
BCPAR 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
Brennand Projetos SA	Recife BR	BRL	13,406,955	BCPAR SA	100.00
Mineração Bacupari SA	Recife BR	BRL	7,143,950	BCPAR SA	100.00
Companhia Nacional de Cimento - CNC	Recife BR	BRL	691,520,831	BCPAR SA	100.00
Agroindustrial Delta de Minas SA	Recife BR	BRL	26,319,159	BCPAR SA	100.00
Brennand Cimentos Paraíba SA	Recife BR	BRL	265,173,765	BCPAR 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	Brennand Projetos SA	100.00
Mineração Delta de Sergipe SA	Aracaju, BR	BRL	823,184	Brennand Projetos SA	100.00
Mineração Delta do Rio SA	Recife BR	BRL	1,669,385	Brennand Projetos SA	100.00
Mineração Delta do Paraná SA	Recife BR	BRL	5,294,139	Brennand Projetos SA	100.00
Agroindustrial Árvore Alta SA	Recife BR	BRL	632,000	Brennand Projetos 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	Brennand Cimentos Paraíba SA	85.00
Ravenswaarden BV	Lochem NL	EUR	18,000	Dyckerhoff Basal Toeslagstoffen BV	50.00
Roprivest NV	Grimbergen BE	EUR	105,522	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
Nord Est Logistica Srl	Gorizia	EUR	640,000	Calcestruzzi Zillo SpA	32.38
Warsteiner Kalksteinmehl GmbH & Co. KG	Warstein DE	EUR	51,129	Dyckerhoff GmbH	50.00
Warsteiner Kalksteinmehl Verwaltungsgesellschaft mbH	Warstein DE	EUR	25,600	Dyckerhoff GmbH	50.00
CI4C 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 gGmbH	Deuna DE	EUR	25,565	Dyckerhoff GmbH Bildungs-Zentrum-Deuna gGmbH	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 2021 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 2021**
Audit	EY SpA	Parent – Buzzi Unicem SpA	163
	EY SpA	Subsidiaries	67
	Network EY	Subsidiaries	1,158
Attestation	Network EY	Parent – Buzzi Unicem SpA (1)	28
Total			**1,416**

1) 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;

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 2021:

  - 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, 25 March 2022

Chief Executive Finance	Manager responsible for preparing financial reports
Pietro Buzzi	**Elisa Bressan**

Buzzi Unicem S.p.A.

Consolidated financial statements as at December 31, 2021

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

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, 2021, 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, 2021, 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, 2021 goodwill amounted to € 609 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 with them all matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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 with the provisions of the Delegated Regulation.

In our opinion, the consolidated financial statements 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.

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, 2021, 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, 2021 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, 2021 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 5th, 2022

EY S.p.A.
Luigi Conti, Auditor

This report has been translated into the English language solely for the convenience of international readers.

Buzzi Unicem

Buzzi Unicem SpA

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Share Capital €123,636,658.80

Company Register of Alessandria-Asti no. 00930290044

Cover photo:
BUilt headquarters, Innovation and Technology lab of Buzzi Unicem located in Vercelli, Italy