



MEDIOBANCA
SECURITIES

CO₂ Focus Roadshow

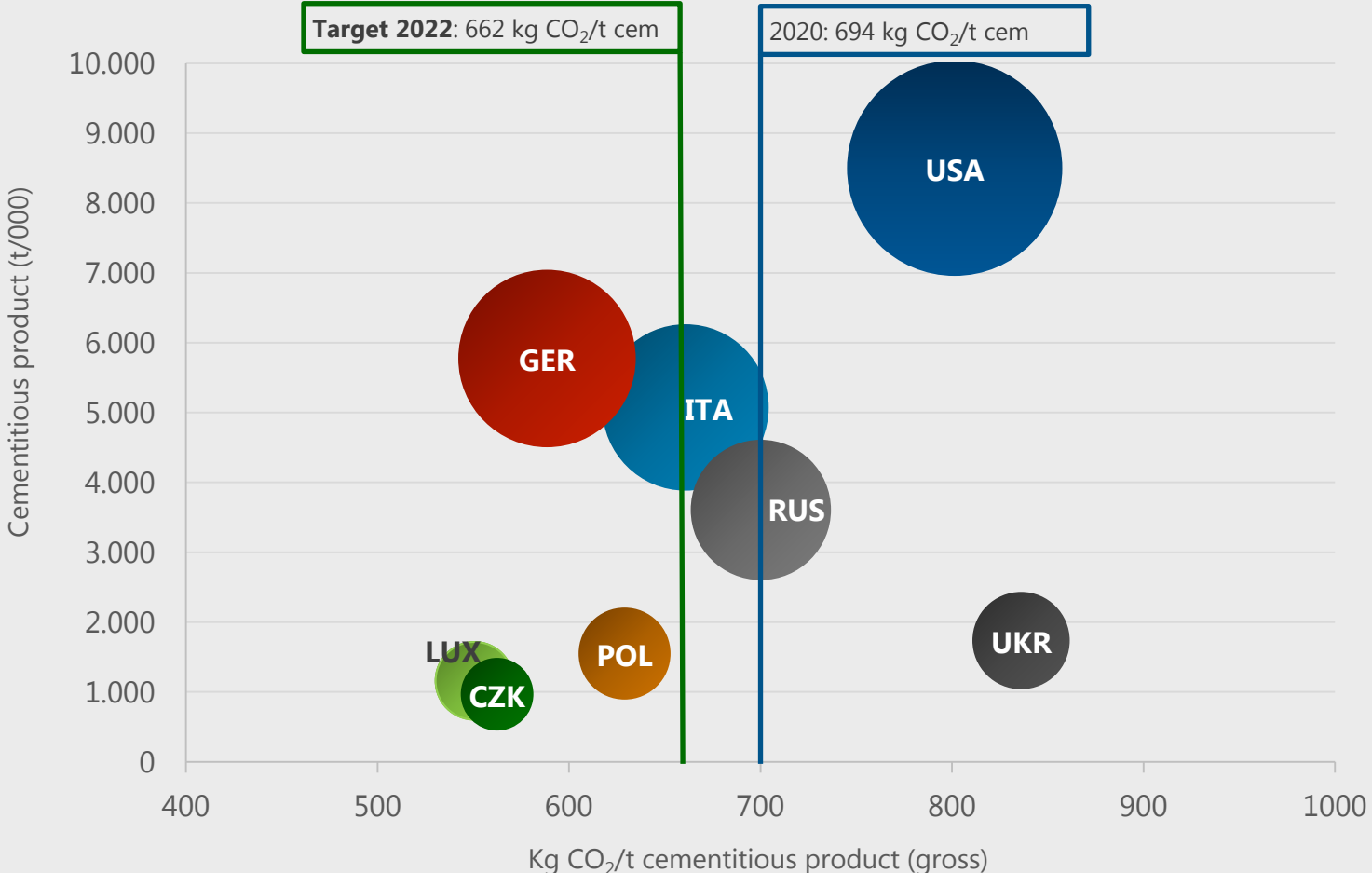
Casale M.to, 27 April 2021



Executive summary

- ➡ What we have achieved so far
- ➡ Buzzi Unicem vs reference competitors
- ➡ Focus on CO₂ initiatives by country
- ➡ Capex requirements and financial headroom
- ➡ Next steps: towards 2050 Roadmap

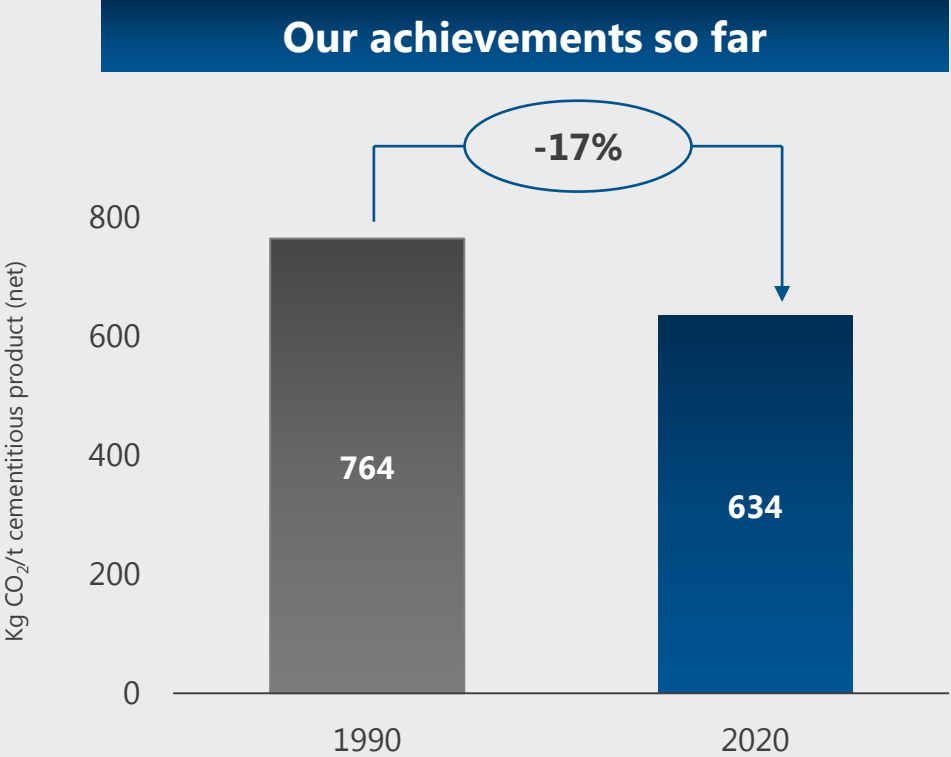
2020 Buzzi Unicem breakdown of gross CO₂ emission by country



Specific CO₂ emission
(Kg CO₂/t cem product)

	2020	2019	Δ %
Gross	694	688	+0.9
Net	634	637	-0.5

Specific Net CO₂ emissions: What we have achieved so far

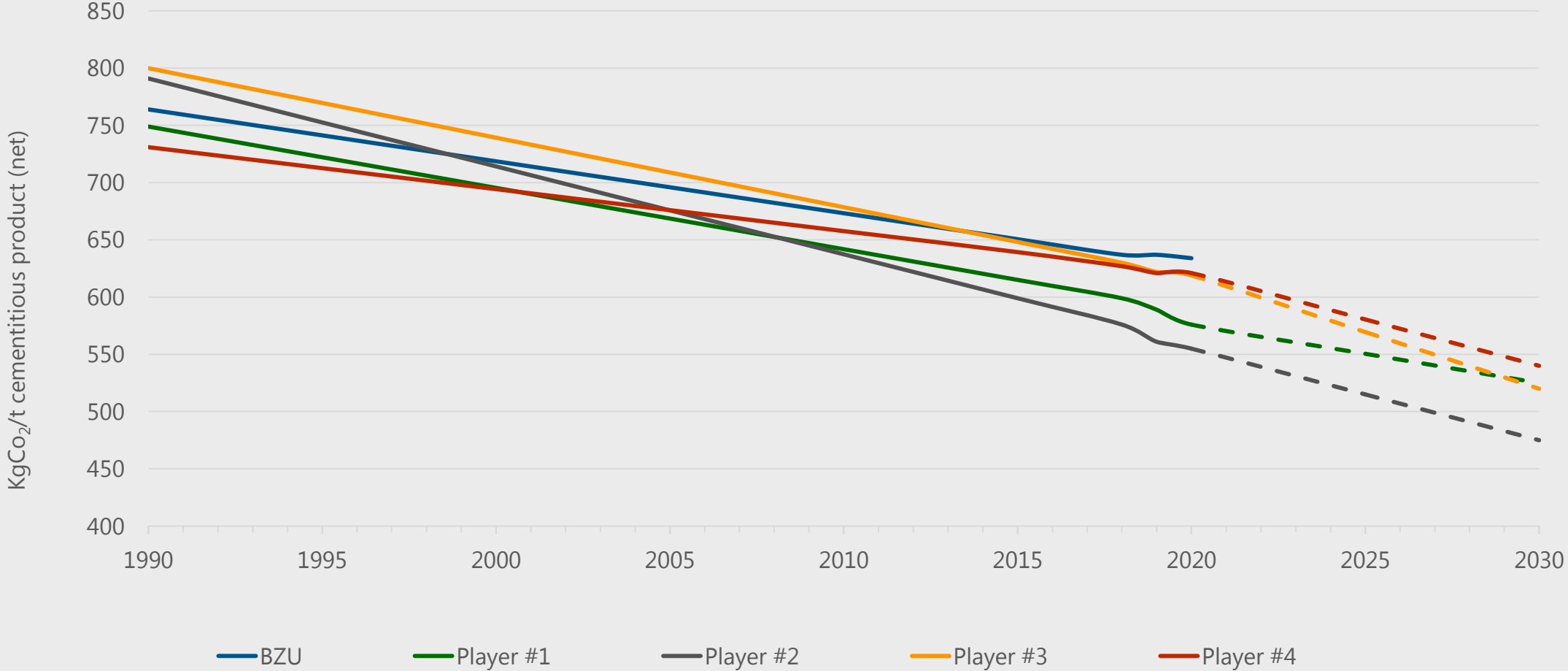


By 2020, we have reduced by approx. **17%** the specific net CO₂ emissions compared to 1990 level (plants taken into consideration according to SBTi methodology)

Reduction's drivers:

- Higher alternative fuels utilization
- Thermal energy optimization
- Lower clinker to cement ratio
- Improved technologies

CO₂ Intensity emission: Buzzi Unicem compared to reference competitors



Key CO₂ emissions drivers: Buzzi Unicem compared to reference competitors

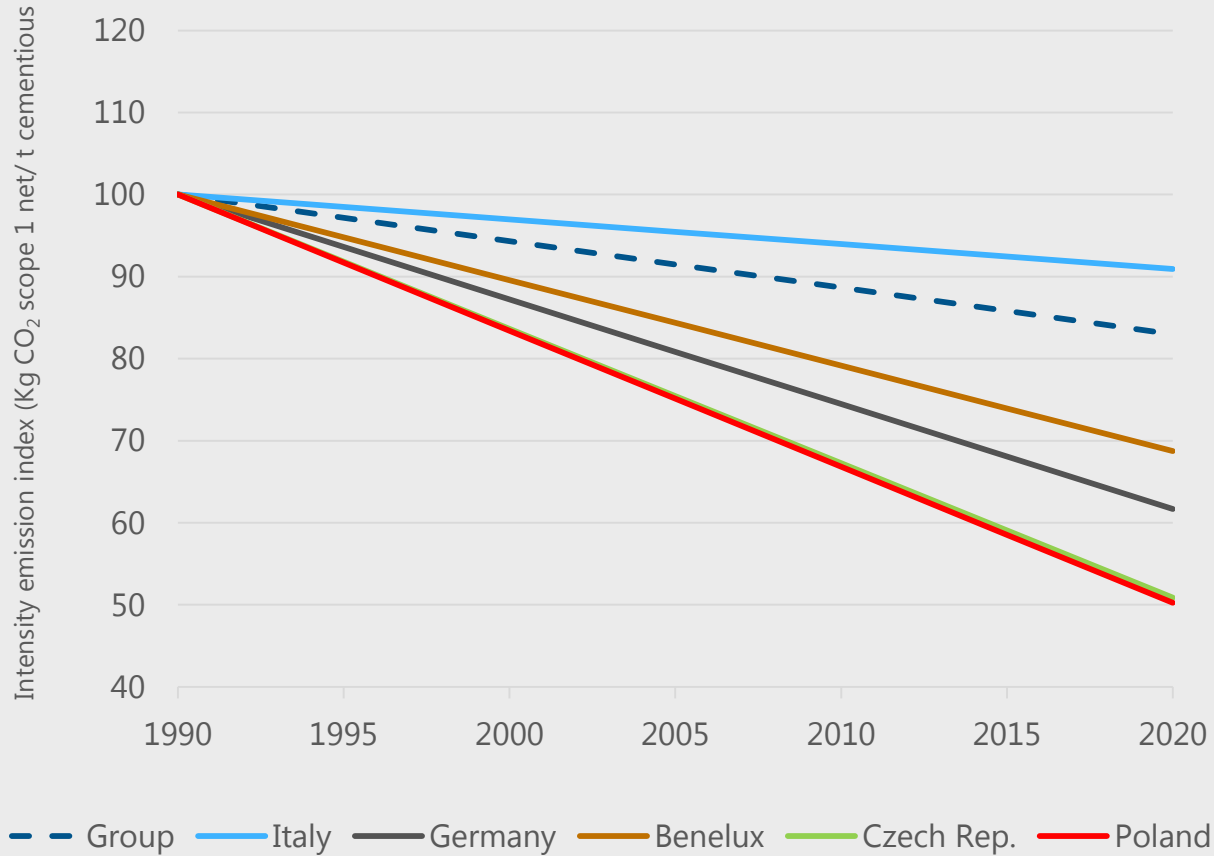
	Buzzi Unicem			Player #1			Player #2			Player #3			Player #4		
	2020	2019	Δ %	2020	2019	Δ %	2020	2019	Δ %	2020	2019	Δ %	2020	2019	Δ %
Clinker/cement ratio (%)	80.9	79.7	+1.5	74.3	74.5	-0.3	70.6	70.8	-0.3	77.0*	77.8*	-1.0	79.1	80.5	-1.7
Thermal substitution (%)	29.2	27.6	+5.8	25.7	24.0	+7.1	21.0*	20.0*	+5.0	25.3	28.0	-9.6	25.8	26.5	-2.6
Specific Thermal consumption (MJ/t clk)	4,109	4,080	+0.7	n.a.	3,573	-	3,538	3,526	+0.3	4,024	3,999	+0.6	3,552	3,507	+1.3
Specific Electricity consumption (kWh/ t cementitious product)	121	122	-0.8	n.a.	n.a.	-	100*	100*	=	123	122	+0.8	102*	101*	+1.0

*value recalculated to be compared with our metrics

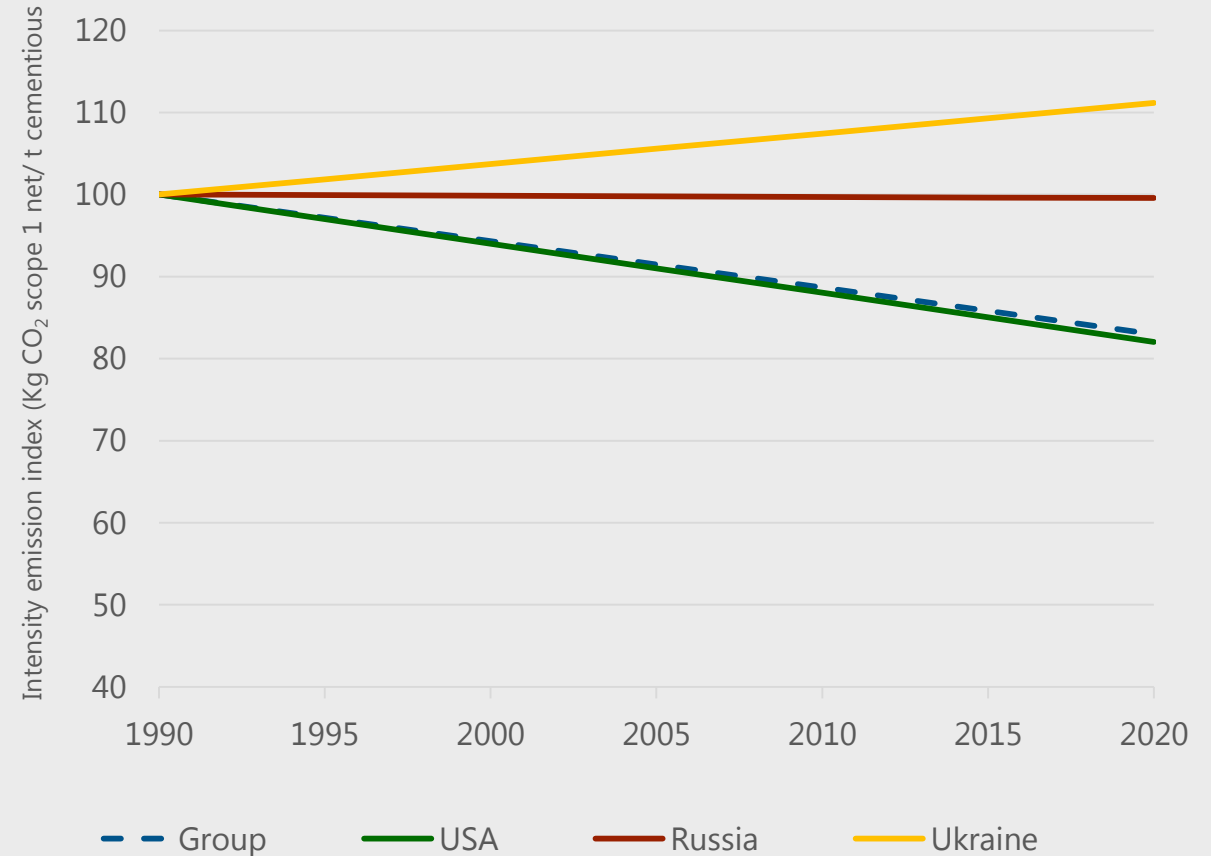
- Our exposure in non-ETS countries (USA, Russia and Ukraine) is equal to 50% of the total cement volumes sold, higher than the reference competitors and clearly influences the group metrics.
- For this reason, we are still convinced that a fair comparison has to be by country.

Buzzi Unicem CO₂ Intensity emission index by country: 2020 vs 1990

EU ETS countries



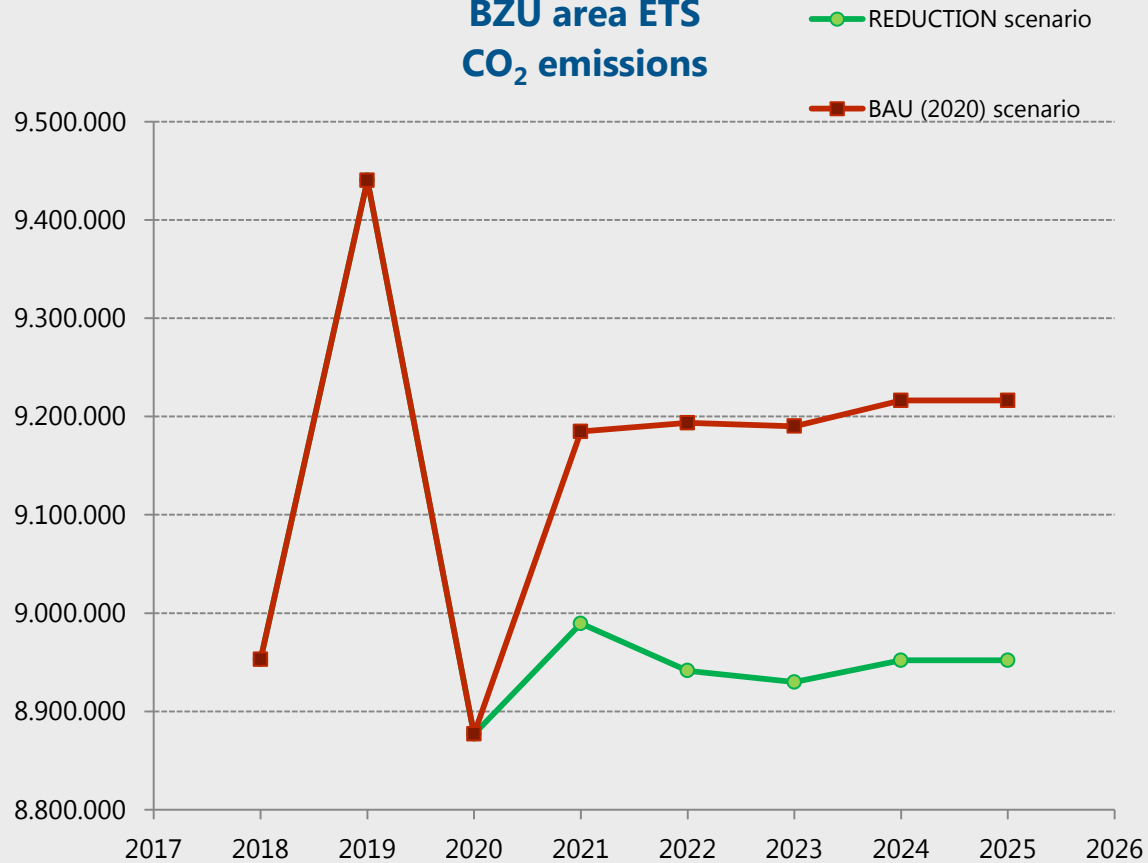
Non ETS countries



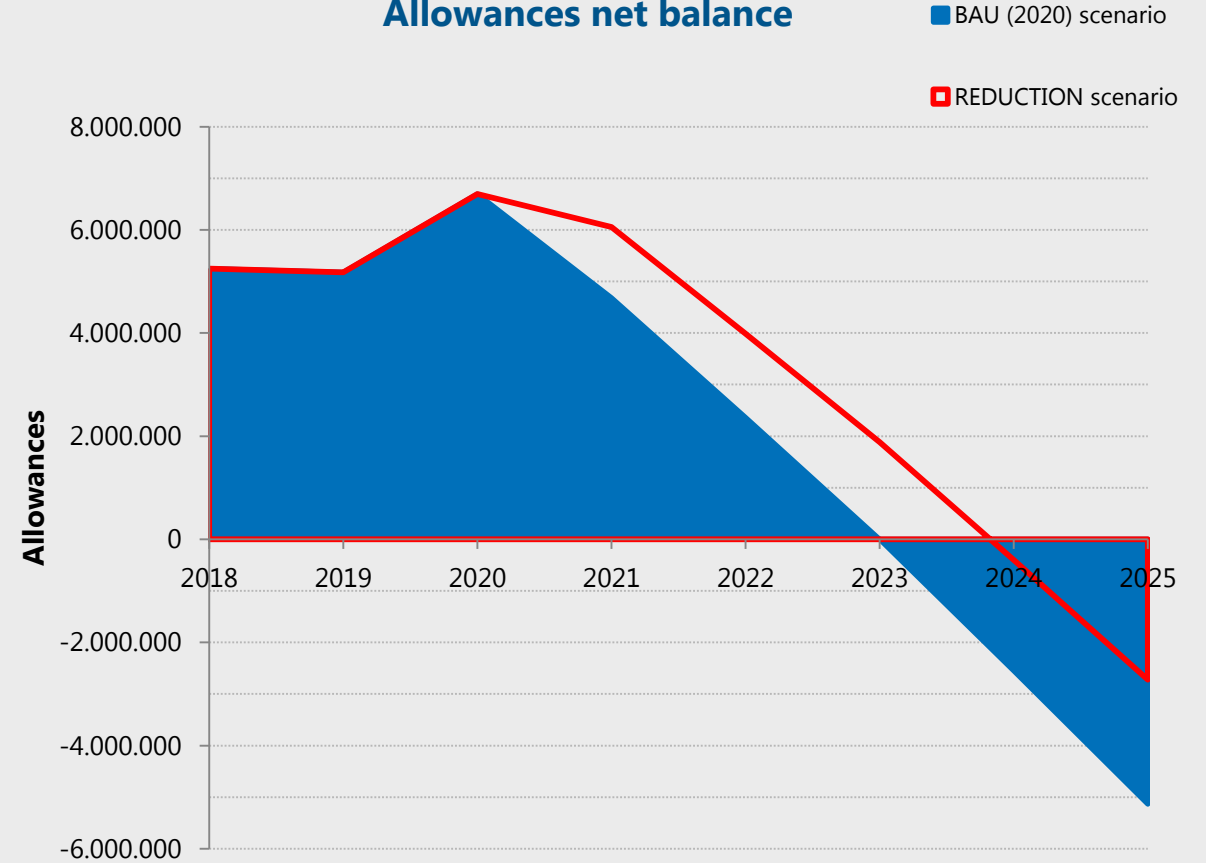
EU ETS phase IV (2021-2030): Update on CO₂ emissions and allowances net balance

Estimated trend **first half** phase IV period
(reduction scenario includes CO₂ reduction projects and >/< 15% rule)

BZU area ETS CO₂ emissions



Allowances net balance



Our initiatives for decarbonization over the next 5 years

Category	Italy	USA	Germany	Russia	Czech Rep.	Poland	Ukraine	Luxembourg	Group	Potential short term CO ₂ reduction
Reducing clinker content in cement	19	6	8	3	1	2	2	-	41	High
Low Carbon concrete	-	-	2	-	1	-	-	-	3	Low
Reducing CO ₂ intensity in energy consumption	3	2	4	4	4	1	2	-	20	High
Increasing fuel substitution	5	8	4	-	-	2	-	1	20	High
In-house production of electrical power	-	1	2	-	2	-	-	1	6	High
Reducing transportation's emissions	-	2	3	1	1	-	1	-	8	Low
R&D – Pilot Testing (i.e. low carbon clinker, CCU/S, CO ₂ Mineralisation, kiln electrification, etc.)	4	1	6	-	-	-	-	-	11	Low
Total initiatives by country	31	20	29	8	9	5	5	2	109	

Initiatives for decarbonization: focus on new types of cement

Calcined clay cement

Calcined clay is produced by heating sources of kaolin (clay, paper sludge etc.) to between 650°C and 750°C, to produce a material that can be added to cement in place of clinker.

Blends of Portland cement with calcined clay are fairly widely tested and accepted in standards around the world, including in Europe and North America

The project intends to develop a concept based on the production, with low capex requirement, of the calcined clay directly at the cement plant, to produce cement with lower clinker content (<50%), becoming independent from slag and fly ash suppliers

- **Where:** Industrial testing in Germany and Ukraine

CEM II/C cement

This type of cement enables the reduction of the clinker content (clinker content \approx 50%), the slag need and the CO₂ emission by reaching high strengths data and good durability performances.

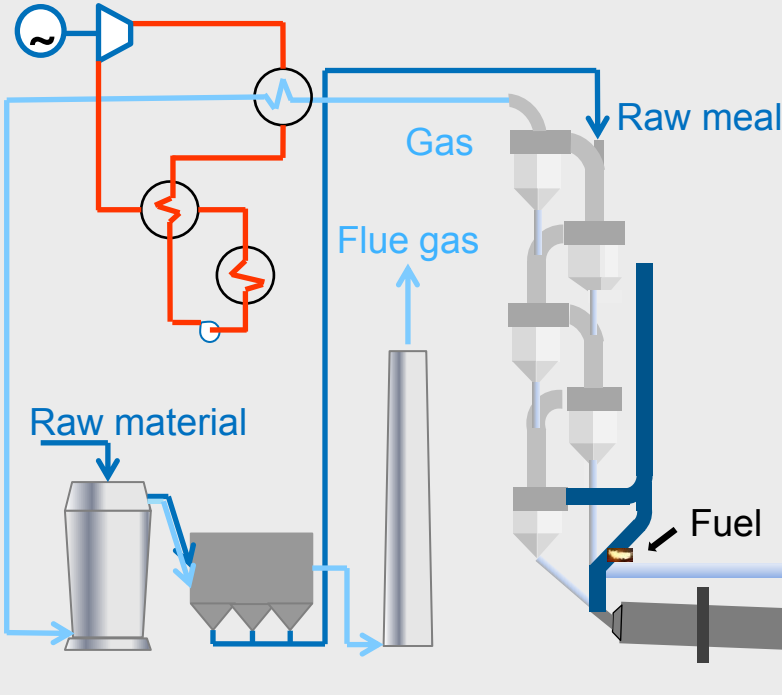
CEM II/C cements are not yet authorised by EN standard but Buzzi Unicem is already selling them in Germany since 2020, having obtained a European Technical Assessment (ETA).

- **Where:** Germany

Initiatives for decarbonization: focus on WHR and H2

WHR - waste heat recovery

- **Where:** Hranice, Czech Republic
- **Description:** The cement plant uses thermal energy to produce clinker. Excess heat is only partially used to dry the raw material. The WHR Power Plant shall utilize the available waste heat for electricity production



H2

- **Where:** San Antonio, USA
- **Description:** H2 and O2, as combustion enhancer, are injected into the existent burner. By increasing the speed of combustion, we obtain a reduction on CO₂ emissions.

Initiatives for decarbonization: focus on CCU/S

OxyFuel – Catch 4 climate

- **Where:** CI4C, Germany
- **Technology:** Oxyfuel
- **Type:** Semi-industrial scale

For additional information:
<https://www.buzziunicem.com/170>



ANICA - ACT

- **Where:** Darmstadt, Germany
- **Technology:** Indirectly heated carbonate looping (IHCaL)
- **Type:** Pilot phase
- **Capex:** EU Commission has financed with EUR 2.4m the ANICA project

For additional information:
<http://www.act-ccs.eu/anica>



Cleanker

- **Where:** Vernasca, Italy
- **Technology:** Integrated Ca-looping
- **Type:** Pilot phase
- **Capex:** EUR 9m fully covered by EU Commission

For additional information:
www.cleanker.eu



Financial Headroom for industry transformation: Buzzi Unicem compared to reference competitors

	Buzzi Unicem	Player #1	Player #2	Player #3	Player #4
# Plants incl. JVs	42	153	269	64	16
EBITDA (EURm)	781	3,707	5,247	2,158	557
Net Debt (EURm)	242	6,893	7,926	8,857	1,202
Net Debt/EBITDA ratio	0.3x	1.9x	1.5x	4.1x	2.2x
Headroom (EURm)*	2,882	7,395	13,062	0	1,026
Headroom coverage (%plants)**	69	52	49	0	64

Source: 2020 Annual Report

* Headroom to 4.0x Net Debt/EBITDA

** Headroom Coverage (%) if investment of 100 EURm per plant

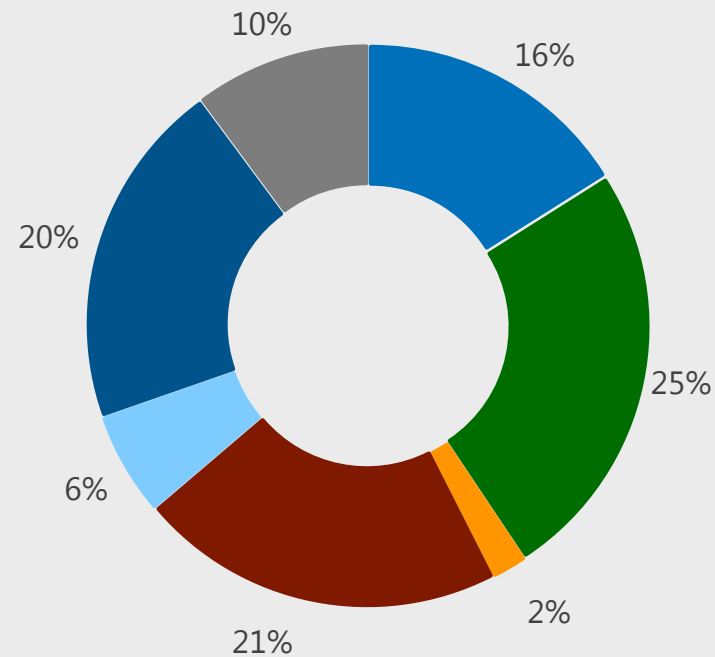
To stay in business and to achieve the carbon neutrality goal, significant capex are likely to be required in the long run

Capex Requirements

- Over the next 5 years, Buzzi Unicem will be involved in more than 100 initiatives aiming to reduce CO₂ emissions
- This plan leads to CO₂ specific capex per year equal to approx **10-15%** of the annual avg capex spending

CO₂ Capex breakdown by initiatives

- R&D - Pilot Testing
- Increasing fuel substitution
- Low carbon concrete
- In-house production of electrical power
- Reducing transportation's emissions
- Reducing clinker content in cement
- Reducing CO₂ intensity in energy consumption



- Approx. 75% of CO₂ specific capex will be dedicated to initiatives with high short term potential of CO₂ reduction, such as: increasing fuel substitution, reducing clinker content in cement, in-house production of electrical power and reducing CO₂ intensity in energy consumption
- Within R&D-Pilot Testing category, the most important initiative will be CCU/S

Next steps: towards 2050 Roadmap

- Following Cembureau's 2050 Carbon Neutrality Roadmap (announced in May 2020), GCCA and PCA are planning to announce their own Roadmap (expected by the end of 2021). As member of these associations, we have been and we will be actively involved in the definition of these roadmaps.
- About the risk and opportunities assessed according to TCFD recommendations, in 2021 we have started a dedicated project in cooperation with a leading expert. Outcomes are expected by September this year.
- As soon as PCA and GCCA Roadmaps are announced, we will disclose our own 2050 Roadmap (expected in H1 2022) which, of course, will be tailored on our geographical exposure and on the different markets and regulations of the regions we operate in.

Appendix

Buzzi Unicem at a glance

- International multi-regional, “heavy-side” group, focused on cement, ready-mix and aggregates
- Dedicated management with a long-term vision of the business
- Highly efficient, low cost producer with strong and stable cash flows
- Successful geographic diversification with leading positions in attractive markets
 - Italy (# 2 cement producer), United States (# 4 cement producer), Germany (# 2 cement producer), material joint venture assets in Mexico and Brazil
 - Significant positions in Luxembourg, The Netherlands, Poland, Czech Republic, Slovakia, Russia and Ukraine, as well as entry point in Slovenia and Algeria
- High quality and environmentally friendly assets
- Leading product and service offering
- Conservative financial profile and balanced growth strategy

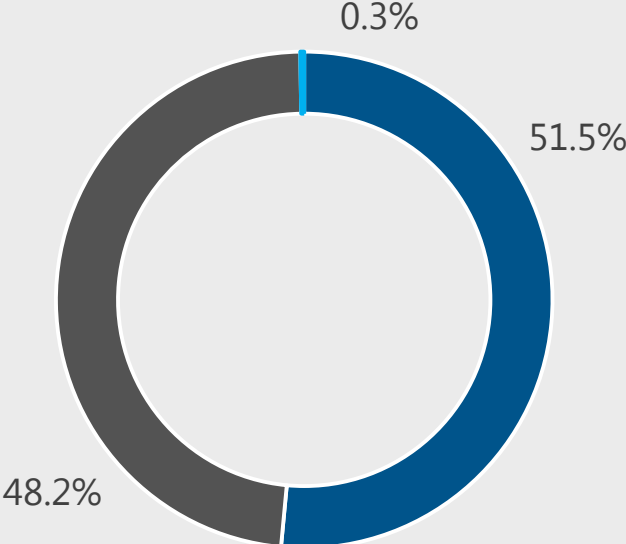
“Value creation through lasting, experienced know-how and operating efficiency”

Shares and Shareholders | Dividends

Share Capital

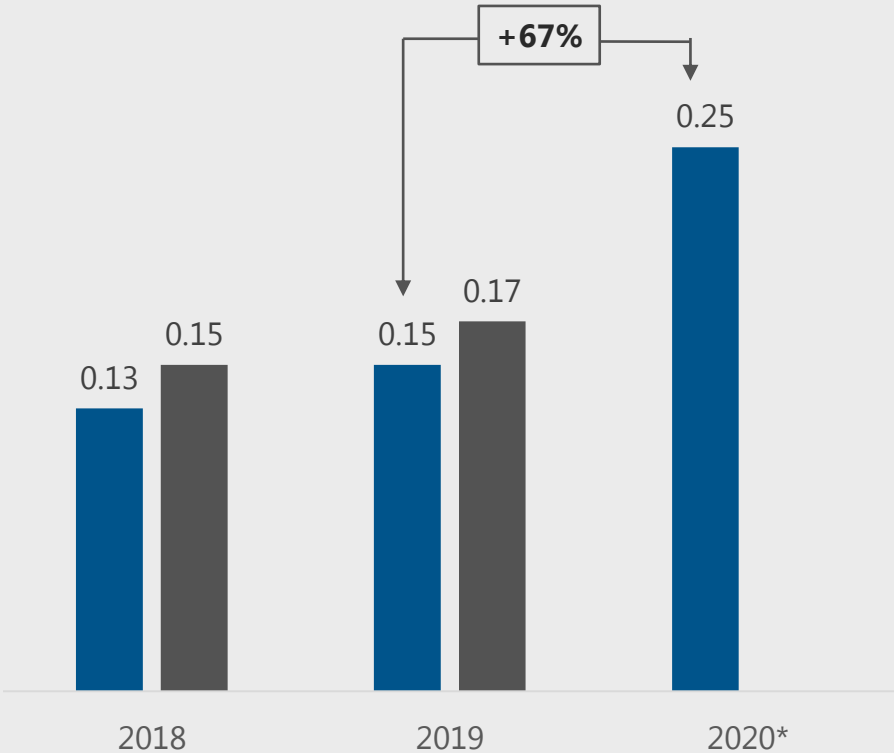
Number of shares 192,626,154

- Buzzi Family Holdings
- Free Float
- Treasury shares



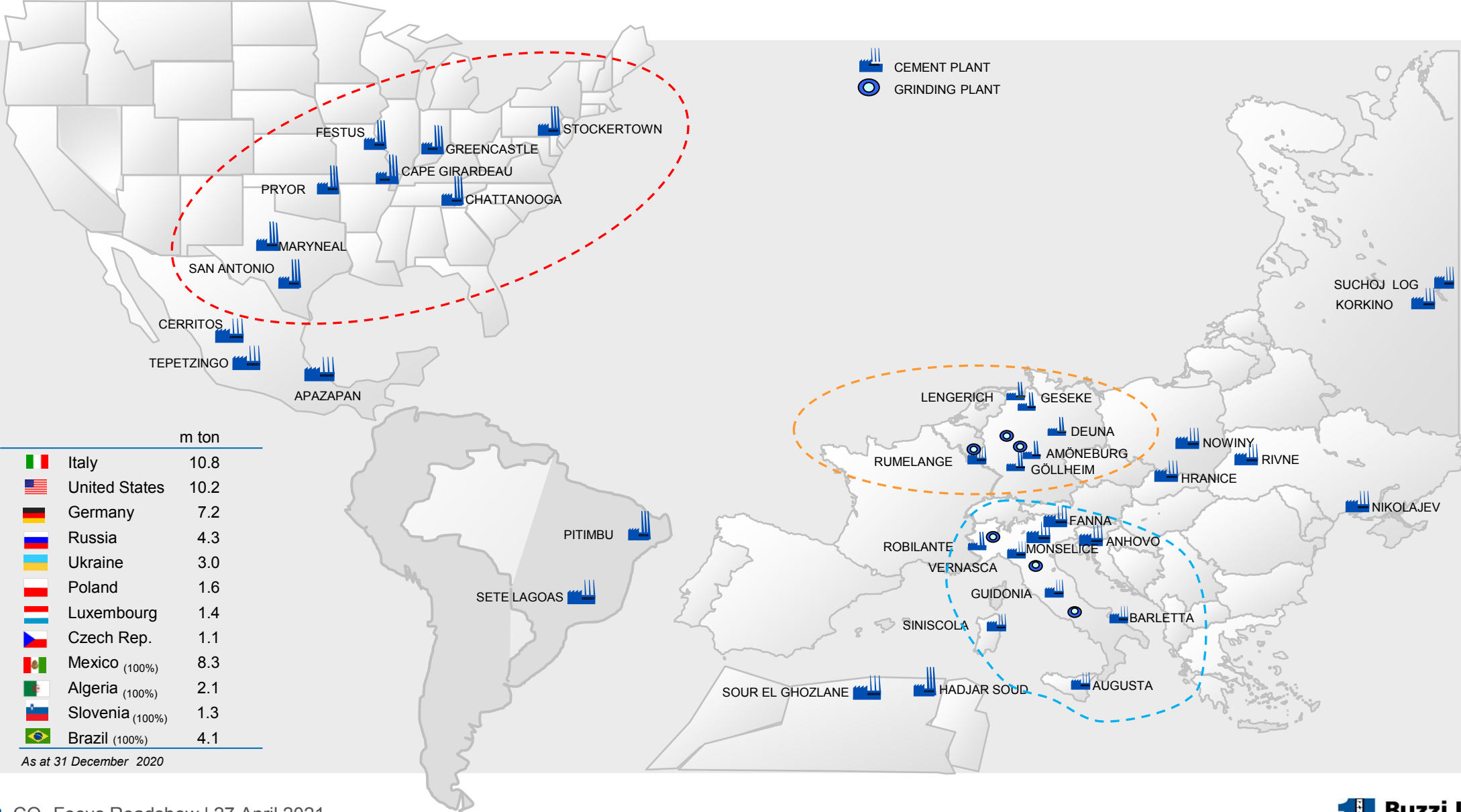
Dividend per Share (Eur)

- Ordinary shares
- Savings shares



*Dividend proposal to AGM at 7th May 2021

Cement plants location and capacity





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