



CLIMATE & ENERGY

Supporting the world's transition to
a zero-carbon economy

March 2023



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INTRODUCTION

The effects of climate change are already plain to see. Limiting greenhouse gas (GHG) emissions is one of the biggest and most pressing challenges of our time. It is estimated that the mining sector as a whole is responsible for 4 to 7 percent of GHG emissions globally*, meaning that we all have a vital role to play in setting and achieving targeted reductions.

In August 2021, Sibelco announced an ambitious target to reduce Scope 1 and 2 emissions intensity (tonnes CO₂ / revenue) by 5% per year from 2021 to 2030 – cumulatively a reduction of 37%, assuming the same scope of activities. An engagement target for scope 3 emissions was announced in 2022 after detailed consultation with customers and suppliers.

All of our near-term (2030) targets for scopes 1, 2 & 3 have been validated by the Science Based Targets initiative (SBTi) and are aligned with the Paris Agreement's goal to limit global warming to well below 2°C compared to pre-industrial levels. Our 2021 and 2022 CO₂ data and base year recalculation were assessed through a Limited Assurance Audit in 2023.

Our 5% per year scope 1-2 intensity reduction target is one of the toughest set by any business in the industrial minerals sector to date. We will invest approximately €90 million in new technologies and operational excellence initiatives over the next nine years to help us achieve this goal.

Climate and energy forms part of Sibelco's overall sustainability framework, developed via a comprehensive materiality assessment which helped us to identify the environmental, social and governance issues most relevant to our business and stakeholders. You can find out more at: www.sibelco.com/sustainability

The world faces a clear and urgent climate challenge. The solutions are complex, but we can all play our part. This report outlines Sibelco's approach to energy and GHG emissions reduction, demonstrating our resolute commitment to contribute to a zero-carbon economy.

GREEN ELECTRICITY FOR OUR PLANT
IN DESSEL IS PROVIDED BY 3 GIANT
WIND TURBINES AND OVER 17,000
FLOATING SOLAR PANELS

OUR TARGETS

Following in-depth research and analysis with the support of external experts, we have established a set of clear and ambitious GHG reduction targets.

These targets are in line with best practices promoted by the Science Based Targets initiative (SBTi) and aligned with the Paris Agreement's goal to limit global warming to well below 2°C compared to pre-industrial levels. The Science Based Target initiative approved Sibelco's near term targets:

SCOPE 1 & 2 EMISSIONS

We commit to reduce scope 1 and 2 GHG emissions **5%** year on year per euro revenue (tonnes CO₂ / ex-works revenue), equivalent to a **22.5%** absolute reduction*, by 2030 from a 2021 base year.

The target boundary includes biogenic emissions and removals from bioenergy feedstocks.

The intensity target leads cumulatively to a reduction of 37% of absolute emissions assuming the same scope of activities

We will invest approximately **€90 million** in new technologies and operational excellence initiatives over the next nine years to help us to achieve this goal.

SCOPE 3 EMISSIONS

We commit that **68.9%** of our suppliers and customers by emissions, covering **37%** of upstream transportation and distribution emissions and **85%** of processing of sold products emissions, will have science-based targets by 2026.

Our CO₂ framework (targets and KPIs) was assessed by Sustainalytics in a second party opinion in June 2022. Follow this [link](#) to the report.

Our 2021 and 2022 CO₂ data and base year recalculation were assessed through a Limited Assurance Audit conducted by EY in February-March 2023 on absolute emissions data on scope 1, 2 & 3. [Link](#) to the Report.

**The absolute emissions reduction target of 22.5% takes into account potential business growth. When we keep the same scope of activities the intensity emissions reduction will lead to a reduction of 37% from 2021 to 2030.*

OUR APPROACH

PLANNING

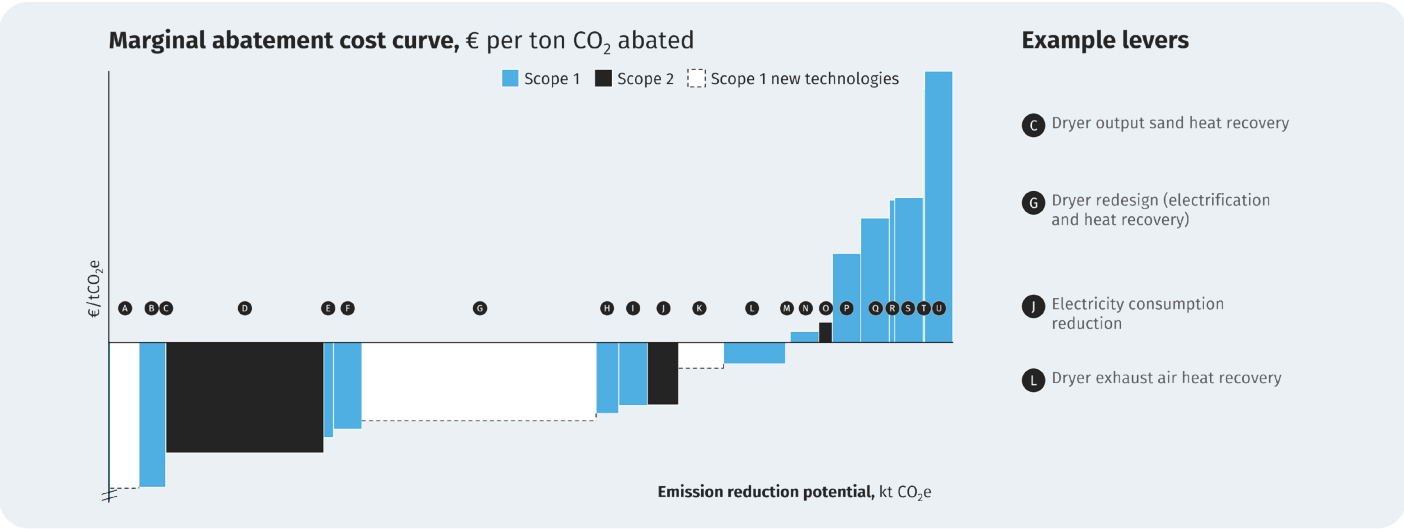
To ensure our targets are achieved, we have a CO₂ reduction strategy focused on scope 1,2 & 3 emissions.

For scope 1&2 we have set up a time-bound action plan which centres around decarbonisation programmes to tackle the main sources of emissions across our business.

Resulting actions and projects are identified, prioritised and resourced appropriately. Actions can be short, medium and long-term (up to 2030) and the programmes include the piloting of new low-carbon technologies.

We use the marginal cost abatement curve (MAC) to evaluate different CO₂ reduction initiatives at global and local level.

For scope 3 we have developed an engagement strategy that will be rolled out by our commercial teams as from Q2 2023.



GOVERNANCE

We have installed a core CO₂ team and steering committee dedicated to GHG emissions reduction, made up of representatives from all key business functions.

The CO₂ Steering Committee:

- sets the direction for our decarbonisation strategy (targets, KPIs, internal carbon price, partnerships with customers etc.)
- approves and validates initiatives and projects of the CO₂ Core Team
- approve CO₂ budgets - Sibelco will invest €90 million in new technologies and operational excellence initiatives over the next nine years to help us achieve our GHG targets

The CO₂ Core Team:

- pro-actively manages the decarbonisation strategy with decarbonisation programmes implemented under the coordination of dedicated programme managers
- ensures consistent and accurate reporting of CO₂ emissions of sites and global reporting dashboards
- develops guidelines, work instructions and procedures for site management
- performs top-down analyses and test bottom-up CO₂ reduction initiatives
- provides accurate footprint calculations
- ensures correct application of internal carbon pricing
- ensures verification of the CO₂ strategy (limited / reasonable assurance reports)

RENUMERATION

The Sibelco senior management team’s annual bonus structure is linked to progress towards GHG reduction targets, whilst a new internal carbon fee is linked to the bonus scheme of our operational teams.

EMPLOYEE TRAINING

All of our people can play an active role supporting our drive for energy efficiency. As well as communication to raise awareness and encourage participation, we provide:

- basic climate change training for all relevant business functions
- sharing of energy saving best practices across the whole community
- distribution of the Sibelco Energy Handbook to help increase the energy efficiency of installed equipment

AUDITING

Energy audits are performed internally as part of ISO 50 001:2018 requirements. Internal experts led by the Center of Excellence for Energy conduct yearly assessments to monitor the progress of energy management at all major Sibelco sites and define the area of interventions.

Our CO₂ framework (targets & KPIs) was validated by Sustainalytics in a Second Party Opinion. We performed a readiness check on our CO₂ inventory in 2022 and a Limited Assurance Audit was conducted by EY on CO₂ data for 2021 and 2022 including the base year adjustment according to GHG Protocol in February-March 2023.

OUR DECARBONISATION PROGRAMMES

GLOBAL PROGRAMS

To ensure that we achieve our decarbonisation goals, we have identified three priority programmes which focus on Sibelco’s biggest sources of CO₂ emissions:

- Dryer Decarbonisation: including efficiency improvement, waste heat recovery, advanced automation, redesign, and exploration of new technologies.
- Calciner Decarbonisation: including efficiency improvement, heat recovery, redesign and new technologies.
- Scope 2 Reduction: including renewables, green energy purchased and virtual PPAs (Power Purchase Agreements).

All three programmes are centrally managed and locally implemented with the support of our skilled engineering, optimisation and technology & innovation teams. To support our decarbonisation, we invest approximately €10 million per year in new technologies and operational excellence initiatives.

OPERATIONAL EXCELLENCE & ENERGY EFFICIENCY

Energy efficiency is a key pillar of our global Operations Optimisation programme, which has become part of our way of working and is now central to continuous improvement.

The core elements of the programme are:

- productivity enhancement
- energy efficiency
- yield improvement
- value driven maintenance
- quality assurance

Each workstream is centrally led by a dedicated Centre of Excellence, working in partnership with our local Change Agents. Lean methodology (with a special focus on performance dialogue and problem-solving tools) is commonly applied and embedded across our operations.

This approach has supported a continuous reduction in energy consumed by our processes, monitored through the Production Energy Efficiency Report (PEER). Local energy and production data is fed into PEER each month, automatically highlighting energy consumption and efficiency per site / work centre / product. This forms the basis for monthly CO₂ Scope 1 and 2 internal reporting.

CLIMATE & ENERGY

At the beginning of 2023, we launched Process and Energy Audits to address our most energy intensive processing sites, focusing on the major emitters. Internal and external specialists will spend time in the field to define the current status and find new opportunities to decarbonise processes.

RENEWABLE ENERGY

In 2021 and 2022 Sibelco covered 4% of its electricity demand from renewable energy sources including wind turbines, solar panels (roof mounted, ground mounted, floating) and gravitational energy recovery systems.

We expect to increase the amount of electricity covered by renewables thanks to the commissioning of new solar parks at Sibelco operations in Portugal, Italy, Spain, Germany, UK and Greece, and further renewable installation projects are in the pipeline for 2023-24.

As well renewable energy projects at our sites, we implemented a strategy for green energy certificates from 2022-24. This allows additional time needed to set up a longer-term solution.

FUEL SWITCHING

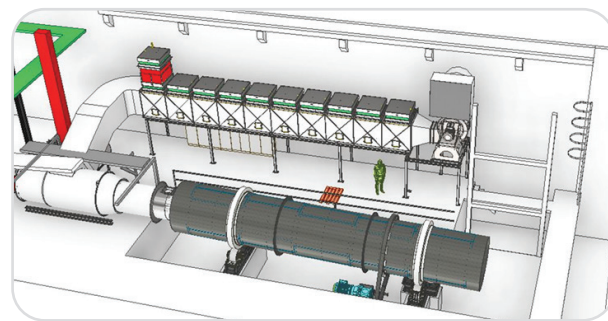
The core of our CO₂ reduction strategy focuses on thermal processes in our dryers and calciners, for which we are also exploring new technologies. By 2022 we switched all of our operations to gas, eliminating coal completely.

We performed multiple fuel switch projects, including the electrification of a diesel fuelled dryer in Norway, a diesel-to-LPG dryer in the UK, a diesel-to-gas boiler in the US, and an LPG-to-biomass project in Brazil.

We are now investigating other opportunities for electrification in Norway, biomass in Sweden, and for heat storage. We aim to progressively replace diesel-powered

mobile work equipment with electric versions. At one of our sites in the Netherlands, all forklift trucks are now fully electric. Along with our suppliers, we are looking at ways to make heavy mining plant more environmentally friendly.

Within a few years one of our mines in Germany will be fully electrified with electric mobile equipment and conveyor belts.



Hybrid dryer in Stjernoy, Norway

As part of the capex dedicated to CO₂ in 2022, several decarbonisation projects were planned and executed, leading to an expected abatement potential of more than 10,000 tons of CO₂e per annum. Full CO₂ benefit will be effective in 2023. This includes replacement of an LPG-fueled burner, the above mentioned hybrid dryer, replacement of lignite burners with natural gas burners, and installation of solar panels.

As part of our CO₂ strategy, EACs (Energy Attribute Certificates) were retrieved in 2022 to secure green electricity for our sites located in the AIB Countries. In total, 60,000 MWh were adopted, corresponding to the abatement of approximately 24 kton CO₂e.

legal team, and will become effective and customised once a decarbonisation questionnaire has been circulated and the first responses collected.

To guarantee that our customers benefit from real data, CO₂ emissions by product family are being measured following the LCA approach including the life cycle stages (A1: raw material, A2: transport, A3: manufacturing).

A COMPREHENSIVE DECARBONISATION ATTITUDE

WORKING WITH OUR CUSTOMERS

We are partnering with some of our biggest customers to help reduce energy demand in the glassmaking process. Our technical experts are developing and trialing new batch materials and technologies to help save energy during the melting, forming and annealing phases of the glass manufacturing process. Our engagement strategy will be supported by Sibelco's

PROCUREMENT

As part of our scope 3 target, we engage with suppliers to reduce GHG emissions, including third-party transport suppliers (a significant percentage of our emissions total). We consider a company's GHG emissions and reduction efforts when selecting suppliers.

Our supply chain and procurement team will lead the engagement process which begins with the decarbonisation questionnaire.

CARBON SEQUESTRATION THROUGH LAND RESTORATION

As a minerals company, we also include land use in our carbon strategy. Sibelco owns over 15,00 hectares of land and leases a further 3,000. Hence, we have developed a methodology to evaluate land use changes in relation to CO₂.

In Belgium, we have initiated a pilot research project to evaluate the use of 2,235 hectares of land in Dessel, Mol and Lommel. The study is evaluating land use over several timeframes (2025, 2030, 2040 and 2050)

and assessing the impact of different rehabilitation scenarios, for example wetland creation. In the Flanders region, a hectare of wetland can capture up to 4.5 tonnes of carbon per year.

Initial results show that Sibelco can make a positive impact with smart restoration / closure planning and through pro-active management before, during and after operations. Once the pilot exercise is completed and a methodology formulated, we plan to roll this out across Sibelco and calculate the land use impact and potential of our activities in all countries.

EMPLOYEE TRANSPORT

Remote / hybrid working is supported where practical, allowing many non-operational employees to reduce commuting-related emissions.

We promote sustainable transport for our employees via local car policies. For example, in Belgium we offer a mobility package to qualifying employees, allowing them to combine a company car with public transport. All new company cars must be hybrid or electric.

OUR PILOT STUDY IN BELGIUM IS ASSESSING THE IMPACT OF DIFFERENT MINE REHABILITATION SCENARIOS, FOR EXAMPLE WETLAND CREATION FOR CARBON CAPTURE

KPIS, MONITORING & REPORTING

Key Performance Indicators

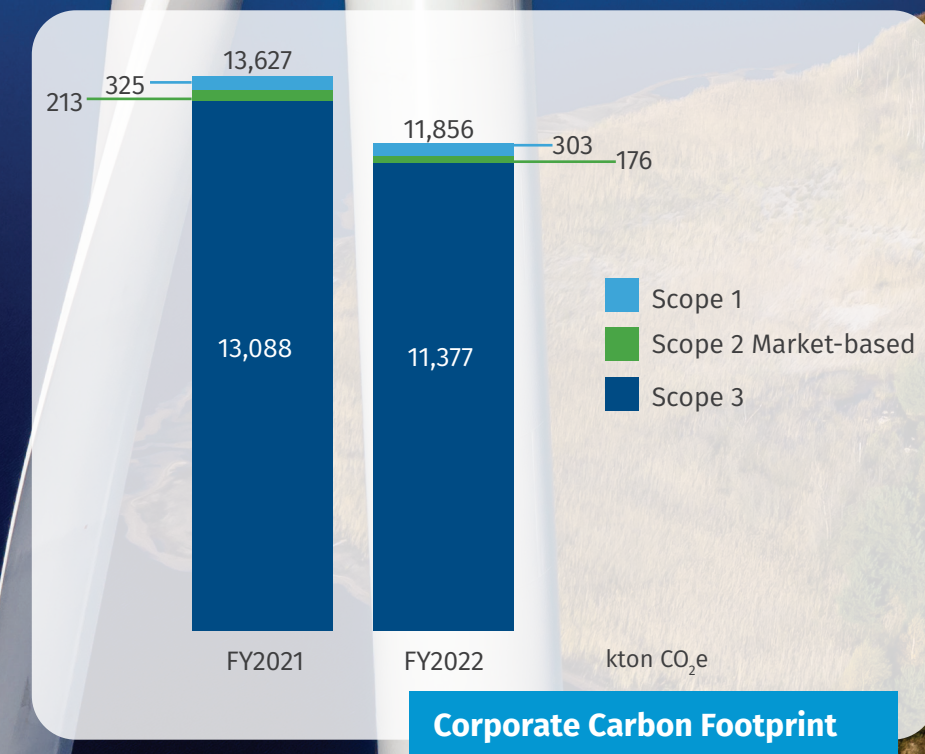
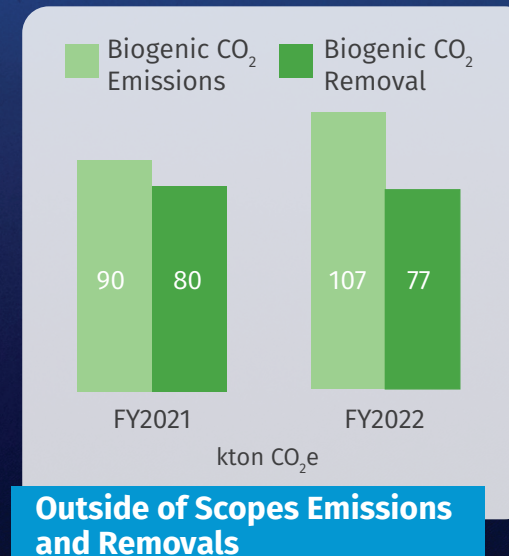
Scope 1 and 2			
Absolute Emissions		FY2021 – adjusted base year	FY2022
Total Scope 1 GHG Emissions	tonnes of CO ₂ equivalent (tCO ₂ eq)	325,009	302,581
Total Scope 2* GHG Emissions (market-based)		213,108	176,246
Total Scope 2 GHG Emissions (location-based)		164,552	154,349
Energy Consumption		FY2021 – adjusted base year	FY2022
Total Energy Consumption	MWh	2,225,138	2,085,534
Total Renewable Energy** Consumption		26,763	26,630
Total Biomass Energy Consumption		226,552	219,909
Financial Intensity KPI		FY2021 – adjusted base year	FY2022
CO ₂ Financial Intensity Scope 1&2	kg CO ₂ eq/€ ex-works revenue	0.39	0.30

Scope 3			
Absolute Emissions		FY2021 – adjusted base year	FY2022
Total Gross Scope 3 GHG Emissions	tonnes of CO ₂ equivalent (tCO ₂ eq)	13,088,499	11,376,834
Total Gross Scope 3 Upstream GHG Emissions		2,117,613	2,007,750
Total gross Scope 3 Downstream GHG Emissions		10,970,887	9,369,084
Engagement KPI		FY2021 – adjusted base year	FY2022
Percentage of customers and logistic suppliers, by emissions, committing to SBTi ***	%	8%	19%

*Market-based (MB) approach emission factors are obtained from our power suppliers and the overview includes also the unbundled green certificates retrieved..

**Includes self consumption from wind turbines, solar panels (roof mounted, ground mounted, floating) and gravitational energy recovery systems.

*** Engagement KPI has been recalculated based on the commitment date reported on SBTi website.



KPIS, MONITORING & REPORTING

Key Performance Indicators

Scope 3 Categories			
Absolute Emissions		FY2021 – adjusted base year (biogenic)	FY2022 (biogenic)
Category 1: Purchased Goods and Services	tonnes of CO ₂ equivalent (tCO ₂ eq)	333,200 (0)	372,238 (0)
Category 2: Capital Goods		39,242 (0)	34,131 (0)
Category 3: Fuel- and Energy-Related Activities		70,127 (0)	65,524 (0)
Category 4: Upstream Transportation and Distribution		1,597,267 (0)	1,458,723 (0)
Category 5: Waste Generated in Operations		73,185 (0)	68,864 (0)
Category 6: Business Travel		1,608 (0)	4,540 (0)
Category 7: Employee Commuting		2,984 (0)	3,729 (0)
Category 8: Upstream Leased Assets		-	-
Category 9: Downstream Transportation and Distribution		828,362 (0)	649,011 (0)
Category 10: Processing of Sold Products		9,862,454 (0)	8,441,701 (0)
Category 11: Use of Sold Products		-	-
Category 12: End-of-Life Treatment of Sold Products		280,070 (0)	278,371 (0)
Category 13: Downstream Leased Assets		-	-
Category 14: Franchises		-	-
Category 15: Investments		-	-

CALCULATION METHODOLOGY*

Our decarbonisation strategy is based on robust facts and figures. GHG emissions were calculated following GHG Protocol with the support of an external partner experienced in climate change topics. Our CO₂ framework and inventory have been checked by a revisor. Relevant GHG emissions are monitored for their entire scope. We have applied operational boundaries to our inventory, meaning that all Sibelco's subsidiaries over which we have operational control are included.

We rely as much as possible on primary raw data and try to improve data quality year-over-year. The next steps will involve refinement with real data for categories 10 (Processing of Sold Products), 4-9 (Upstream & Downstream Transportation), 2 (Capital Goods) and 6 (Business Travel).

Emissions are always reported in CO₂ equivalent, including all the GHG components - CO₂, CH₄, N₂O, HFCs, PFCs, SF₆.

We perform an annual base year adjustment following our verified base year recalculation policy. This guarantees transparent like-per-like comparison.

[Click here for link to policy](#)

2021 was selected as the base year, as this was the most recent full-year period representative of our business.

**Remark : the GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.*

The base year recalculation accounts for the following modifications

- Divestments (Asia Lime, Abrasives and Sibelco workshop Borgo)
- New acquisitions (Recyverre, Krynicki, Kremer Zand en Grind, Echasa S.A., Bassanetti Group)
- Increased quality level in the Market Based emission factors hierarchy
- Updated refrigerants emission factors according to IPCC AR6
- Consolidation of energy data

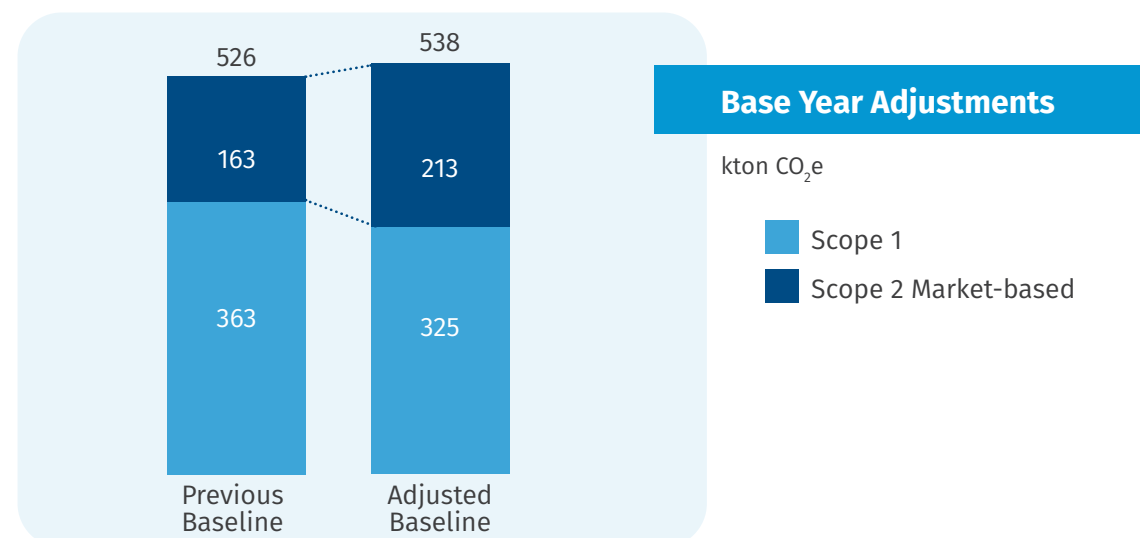
2 new greenfield sites - Act&Sord (BE) and San Cesario (ITA) - and 1 acquisition not operating in 2021 - Ravenna Plant (ITA) - are part of organic growth and do not therefore trigger any base year recalculations.

MONITORING AND REPORTING

We have a GHG monitoring inventory in place to collect emissions data in accordance with GHG protocol. We update our full inventory at least once per year while scope 1 & 2 emissions are calculated on a monthly basis via an automatic system based on PEER (our energy and efficiency monitoring system). Scope 1 and 2 emissions are then related to financial figures to build KPIs which are closely and frequently analysed to ensure we quickly act as soon as a deviation is identified.

We will also start to monitor supplier/customer engagement via input from our commercial/supply chain teams.

We share our GHG emissions data internally with all employees, and externally via this report and as part of our Annual Report.



METHODOLOGY

SCOPE 1		
Scope 1	It includes direct emissions from fossil fuel burnt (gas, gasoil, coal), from biomass (excluding biogenic CO ₂), explosives, refrigerants refill and other direct emissions (eg. fugitives). It includes company cars, for which emissions are calculated based on distances. Local energy consumption is monitored monthly, ensuring reconciliation with invoices, then centrally consolidated via a customised system called PEER. Other non-energy related data is collected annually via questionnaires. Emission factors are derived from DEFRA database (yearly update) and IPCC6 AR.	
SCOPE 2		
Scope 2 Market Based	Purchased electricity from the grid is locally monitored each month ensuring reconciliation with invoices, then centrally consolidated via a customised system called PEER. Offices and warehouses consumptions, not being material, are estimated base on footprint. Emission factors are directly communicated from the suppliers and, according to the country rules, we might include the residual mix, the supplier mix without renewables, the supplier mix with the amount of renewables not sold via GOs. In case of unavailability of specific emission factors, the Location Based Emission factor is adopted. Emission factors are generally updated in the year+1.	
Scope 2 Location Based	Purchased electricity from the grid is monitored locally each month ensuring reconciliation with invoices, then centrally consolidated via a customised system called PEER. Office and warehouse consumption, not being material, is estimated based on footprint. Emission factors are derived from the IEA database, which are updated in year+1.	
SCOPE 3		% of data from suppliers/partners
Category 1: Purchased Goods and Services	The purchase of raw material is accounted considering the volumes acquired and location of provenience per each facility. According to the typology of raw material, Ecolnvent v3.8 “production” GWP 100 emission factors are applied. If unavailable, the best proxy is considered. For material to be recycled, “0” emissions are accounted (eg. municipal waste or glass disposed). To account for the remaining “purchased goods and services”, financial inputs from the P&L are used and Exiobase emissions factors per country applied. Main categories are packaging, auxiliary material and third-party services.	0%
Category 2: Capital Goods	All capital expenditures including mobile and non-mobile equipment which occur in the reference year are considered. Exiobase emission factors per country are applied.	0%
Category 3: Fuel- and Energy-Related Activities	Energy consumption reported for Scope 1 and 2 are used as reference. For scope 1 DEFRA WTT (Well-to-Tank) emission factors apply, while for scope 2 IEA T&D (transmission and distribution losses) and trade adjustments emission factors are accounted.	0%
Category 4: Upstream Transportation and Distribution	It includes both the insourcing of raw material and all the transportation Sibelco pays for (including intercompany logistics). Data sources are the sales summary and the overview of the insourced raw materials. The direct distance is calculated between Sibelco facilities and the destinations/origins based on the longitude/latitude. If precise location is not available, country capital city is considered. Fixed correction factors, one for terrestrial and one for maritime, are applied to convert direct distances into real distances. Different typologies of means of transportation (e.g. truck, train, vessel) are associated to each transportation leg according to a detailed transportation matrix and controls on data quality are defined. WTW (Well-to-Wheel) emission factors expressed in (kgCO ₂ e/t*km) are imported from DEFRA database.	0%

Category 5: Waste Generated in Operations	The amount of annual waste produced by Sibelco operations is recorded annually via questionnaires and centrally consolidated. Major waste categories as part of hazardous and non-hazardous and the treatment processes are the criteria applied to classify the waste typology. DEFRA emission factors are applied.	0%
Category 6: Business Travel	Business travel is calculated on spent base per country multiplied by Exiobase emission factors.	0%
Category 7: Employee Commuting	Average distance between private houses and workplace has been assessed in a pilot study in Belgium, taking also into consideration the share between means of transportation. The results have been extrapolated to the employees of the whole company. DEFRA emission factors are applied.	0%
Category 8: Upstream Leased Assets	Not relevant for Sibelco. Leased assets are accounted in our Scope 1 and 2.	-
Category 9: Downstream Transportation and Distribution	It includes all the transportation Sibelco’s customers pay for. Data sources are the sales summary. The direct distance is calculated between Sibelco facilities and the destinations/ origins based on the longitude/latitude. If precise location is not available, country capital city is considered. Fixed correction factors, one for terrestrial and one for maritime, are applied to convert direct distances into real distances. Different typologies of means of transportation (e.g. truck, train, vessel) are associated to each transportation leg according to a detailed transportation matrix and controls on data quality are defined. WTW (Well-to-Wheel) emission factors expressed in (kgCO ₂ e/t*km) are imported from DEFRA database.	0%
Category 10: Processing of Sold Products	Data source is the sales report including the amount of material sold per market segment per customer. For each market, three main pieces of information are calculated from Ecolnvent v3.8 database: Scope 1 emissions per ton, electricity used, % of Sibelco products in the batch starting from the most representative bills of material. The IEA Scope 2 emissions factors are applied to the power consumptions according to the country of the customer. The total emissions per customer are estimated multiplying the sum of Scope 1 and 2 emissions per unit of volume by the % of Sibelco material in the batch by the amount of volume sold to the customer itself based on the market segment to which it belongs. Subtotals and totals are obtained from the consolidation of the single values.	0%
Category 11: Use of Sold Products	Not relevant for Sibelco. The use of our products does not generate emissions by itself.	-
Category 12: End-of-Life Treatment of Sold Products	Data source is the sales report including the amount of material sold per market segment per customer. Based on the market and products made, the most probable end-of-life treatment is identified (eg. recycling, landfilling, incineration) and the DEFRA emission factors applied.	0%
Category 13: Downstream Leased Assets	Not relevant for Sibelco. Leased assets are accounted in our Scope 1 and 2.	0%
Category 14: Franchises	Not relevant for Sibelco. No franchises in place.	-
Category 15: Investments	Not significant for Sibelco. Operational boundaries apply to Sibelco CO ₂ inventory. The Joint Ventures (JV) that are out of the boundaries contribute for < 0.5% of the total carbon footprint.	-
OUTSIDE OF SCOPES		
Out of scopes	Biogenic CO ₂ emissions are derived from the combustion of biomass and biofuel. DEFRA emission factors apply. Biogenic CO ₂ removal is reported separately and accounted only if certificates of sustainable forestry management are obtained.	

SUSTAINABLE PRODUCTS

Our minerals are used to create solutions that tackle climate change, such as solar panels, wind turbines and building insulation materials. And as we shift towards a circular economy, we are finding new ways to introduce more secondary materials to our portfolio.

Sibelco is already Europe's leading glass recycler. Every year we transform over 3 million tonnes of waste glass into high-quality cullet which is used to make brand new glass and other products. This ensures that less glass waste goes to landfill, whilst reducing the amount of primary raw materials needed to make new glass. It takes considerably less energy to melt recycled glass (cullet) than it takes to melt raw materials – every 1,000 tonnes of cullet used during the glass manufacturing process saves approximately 314 tonnes of CO₂.

In April 2022 we opened our new glass recycling facility at San Cesario sul Panaro (IT). The state-of-the-art plant combines established decarbonisation technologies (such as roof mounted solar panels) with new innovations, including partial dryer by-pass and capacity maximisation via detection cameras. This enables us to maximise production yields whilst minimising waste and environmental impact.

Other examples of secondary raw material solutions include a new process (developed at our Maastricht site) which recycles waste generated from fibreglass manufacturing. The recycled material is returned to our customers to replace primary raw materials in the production of new fibreglass, resulting in a 30% reduction in CO₂ emissions.

Sibelco is also a partner in Act&Sorb, the first company to have developed a sustainable and value-adding process for recycling wood residues such as MDF. Using a carbonisation and activation technology, wood residue is converted into high value activated carbon – an essential product used to purify water and to clean air.

Our goal is to increase the percentage of company revenue generated from products supporting the circular economy to at least 20% by 2030.

We are currently exploring the use of olivine as a negative emissions technology with three projects underway. The first is assessing the potential of olivine to remove atmospheric CO₂ and to counteract ocean acidification through enhanced silicate weathering. A second project is looking at the transformation of CO₂ into valuable products via mineral carbonation, whilst the third project is experimenting with production of magnesium hydroxide from olivine.

EVERY YEAR WE TRANSFORM OVER 3 MILLION TONNES OF WASTE GLASS INTO HIGH-QUALITY CULLET WHICH IS USED TO MAKE BRAND NEW GLASS AND OTHER PRODUCTS

