



VALBRUNA GROUP

# Carbon Footprint Result – 2022 and 2023

Analysis conducted on the following sites:

- Bolzano site (Acciaierie Valbruna SpA)
- Vicenza site (Acciaierie Valbruna SpA)
- Welland site (Valbruna ASW Inc.)
- Fort Wayne site (Valbruna Slater Stainless Inc.)

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# Executive Summary

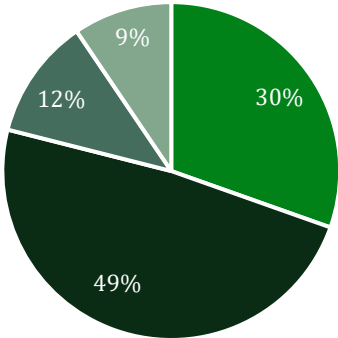
- Valbruna Group’s (selected sites) carbon footprint analysis is based on the GHG Protocol Corporate Accounting and Reporting Standard.
- To assess the GHG footprint, three types of emissions (or scopes) are considered: Scope 1 and Scope 2 and Scope 3.
- For 2022 and 2023, Valbruna Group assessed Scopes 1 & 2 of its four main production sites i.e.:
  - Acciaierie Valbruna SpA – Bolzano site (Italy)
  - Acciaierie Valbruna SpA - Vicenza site (Italy)
  - Valbruna Slater Stainless Inc. – Fort Wayne site (USA)
  - Valbruna ASW Inc. – Welland Site (Canada)

<b>Emissions summary</b>	<b>2022 (tCO<sub>2</sub>e)</b>	<b>2023 (tCO<sub>2</sub>e)</b>
Scope 1	121,044	124,446
Scope 2 (Location-based)	78,403	81,514
Scope 2 (Market-based)	122,408	126,432
<b>Total Scope 1 + Scope 2 emissions (Location-based)</b>	<b>199,447</b>	<b>205,960</b>
<b>Total Scope 1 + Scope 2 emissions (Market-based)</b>	<b>243,452</b>	<b>250,877</b>
Biogenic emissions	79	66

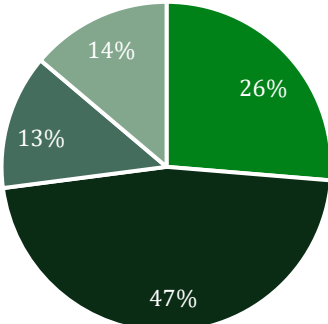
# Executive Summary

## Inventory results – Scope 1 & 2: Production sites contribution for 2022 and 2023

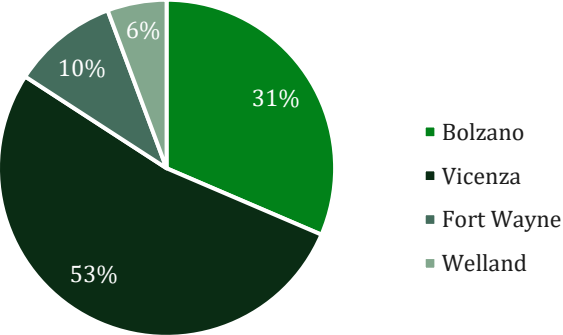
Scope 1 + 2 (Location-based) - 2022



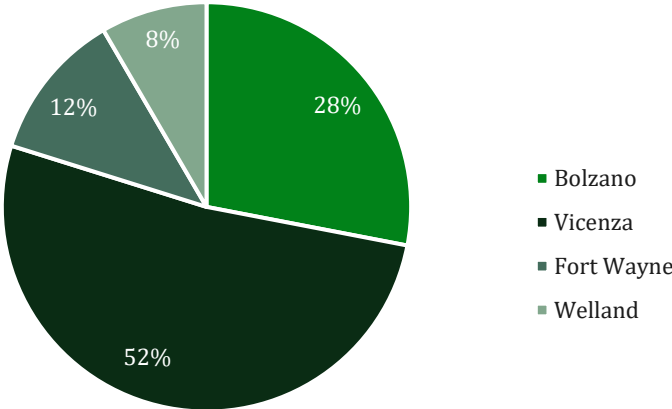
Scope 1 + 2 (Location-based) - 2023



Scope 1 + 2 (Market-based) - 2022



Scope 1 + 2 (Market-based) - 2023



- Vicenza production site has generated the higher amount of GHG emissions, followed by Bolzano. The higher emissions from Vicenza production site are linked to the greater steel production compared to the other sites
- Bolzano is the second production site in terms of emissions. Compared to the other sites, it has the highest electricity consumption per ton of steel produced and the second highest natural gas consumption per ton of steel produced

# Executive Summary

## Data used

The table below summarizes the overall primary data collected for 2022 and 2023 for the four production sites objective of the assessment. Please refer to the Excel file in Annex to the report for further details.

Sites: Bolzano (Acciaierie Valbruna SpA, Italy); Vicenza (Acciaierie Valbruna SpA, Italy); Fort Wayne (Valbruna Slater Stainless Inc. USA); Welland (Valbruna ASW Inc.)

Scope	Source	GHG emission source	Quantity 2022	Quantity 2023	Unit	EF reference	Comment
Scope 1	Stationary combustion	Natural gas	38,103,562	35,595,041	m3	DEFRA 2023	Fort Wayne site's and Welland site's consumption already considered in direct process emissions.
		Diesel	349,712	304,489	l	DEFRA 2023	Fort Wayne site's and Welland site's consumption already considered in direct process emissions.
	Mobile combustion	Petrol	22,914	16,631	l	DEFRA 2023	
		Fuel oil	283,554	278,856	l	DEFRA 2023	
	Refrigerants HFC	R-134a	53	5	kg	DEFRA 2023	Stack emissions measured at site level, related to production processes and oxidation of production inputs.
		R-143a	0	1	kg	DEFRA 2023	
		R-410a	34	27	kg	DEFRA 2023	
		R-22	3	0	kg	DEFRA 2023	
		R-407c	0	6	kg	DEFRA 2023	
		R-124	0	68	kg	DEFRA 2023	
	Direct process emissions	CO2	41,189	49,842	t	-	Stack emissions measured at site level, related to production processes and oxidation of production inputs.
		CH4	0.50	0.66	t	-	
		N2O	0.50	0.64	t	-	
Scope 2	Electricity purchased	Electricity from grid	318,310,283	329,463,009	kWh	IEA 2023/2022 (location based); AIB 2023/2022 (market based)	Supplier specific emission factor used for Welland site.

# Methodology

VALBRUNA GROUP – CARBON FOOTPRINT RESULT – 2022 & 2023



# The GHG Protocol provides requirements and guidance for companies preparing a corporate-level GHG emissions inventory

**The GHG Protocol is the most widely used international methodology for government and business leaders to understand, quantify, and manage greenhouse gas emissions – GHG Protocol**

## Corporate Accounting and Reporting Standard

- Requirements for companies preparing a corporate-level GHG emissions inventory
- Introduces Scope 1, 2 and 3 reporting

## Corporate Value Chain Accounting and Reporting Standard

- Provides methodology for accounting for Scope 3 GHG emissions

## Specific Industry Guidance

- Partnership for Carbon Accounting Financials (PCAF) Standard for the Financial Industry
- IPIECA standard for the petroleum industry
- Pharmaceutical Supply Chain Initiative (PSCI) guidance for the pharmaceutical Industry

Estimation of emissions begins with identifying boundaries for each category and data available for estimation. Data used for each category may be driven by materiality. Exclusions should be clearly stated.



# Valbruna Group Carbon Footprint

## GHG accounting and reporting standards

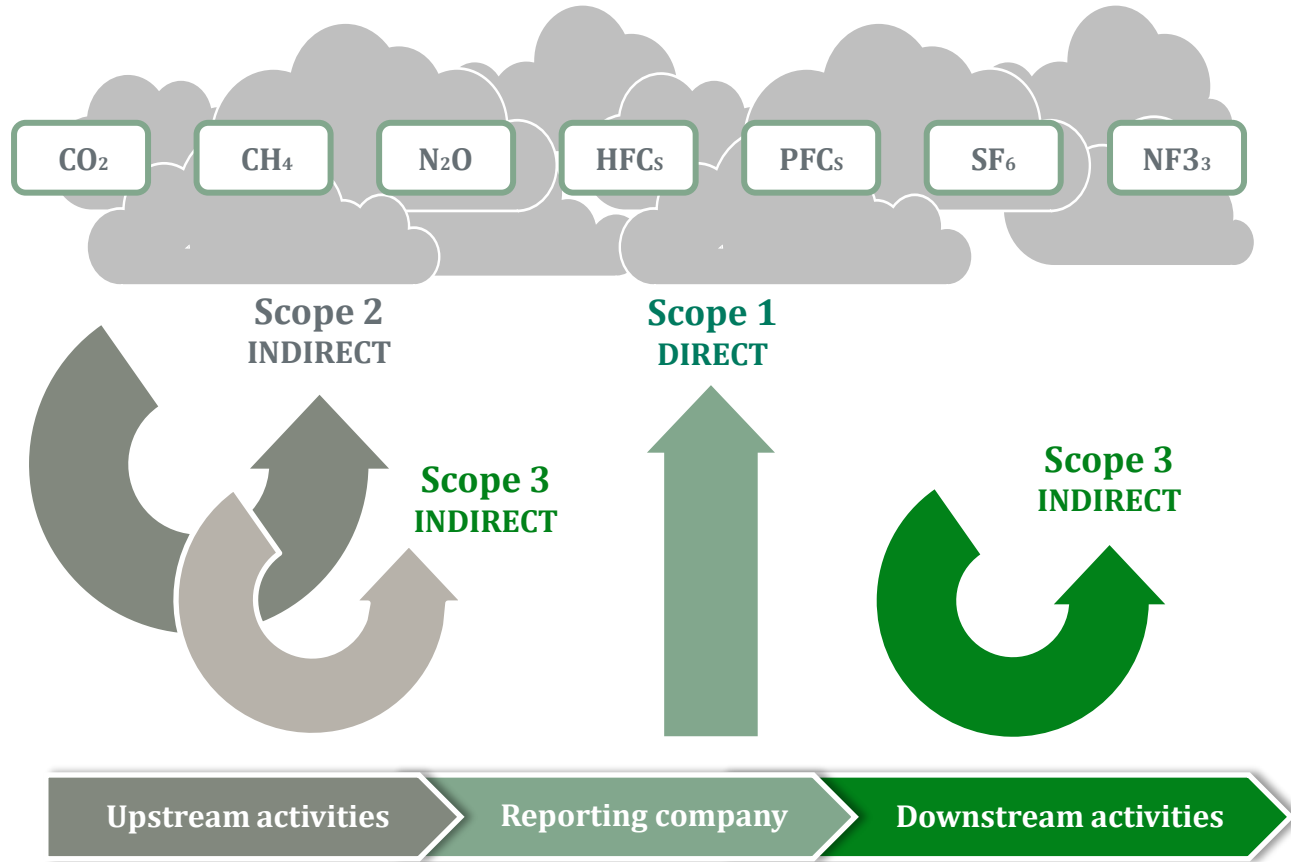
GHG accounting and reporting practices are evolving; however, the principles listed below are derived in part from generally accepted financial accounting and reporting principles. They also reflect the outcome of a collaborative process involving stakeholders from a wide range of technical, environmental, and accounting disciplines. GHG accounting and reporting shall be **based on the following principles**:

- **RELEVANCE**: Ensure the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users – both internal and external to the company.
- **COMPLETENESS**: Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.
- **CONSISTENCY**: Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.
- **TRANSPARENCY**: Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
- **ACCURACY**: Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.

These principles are intended to underpin **all aspects of GHG accounting and reporting**. Their application will ensure that the **GHG inventory constitutes a true and fair representation of the company's GHG emissions**.



# What are Scope 1, 2 & 3 emissions?



Scope 3 emissions are generated from sources owned or controlled by other entities and not accounted for in Scope 1 or 2

## Scope 2 - INDIRECT

 Purchased electricity, steam, heating & cooling for own use

## Scope 3 - INDIRECT

-  Purchased goods and services
-  Capital goods
-  Fuel and energy related activities
-  Upstream transportation and distribution
-  Waste generated in operations
-  Business travel
-  Employee commuting
-  Upstream leased assets

## Scope 1 - DIRECT

-  Company facilities
-  Company vehicles

## Scope 3 - INDIRECT

-  Downstream transportation and distribution
-  Processing of sold products
-  Use of sold products
-  End-of-life treatment of sold products
-  Downstream leased assets
-  Franchises
-  Investments

Upstream activities

Reporting company

Downstream activities