Carbon emissions - detailed breakdown

steelstat

Country:	*country*
Organization:	*company*
Site:	*location*
Year	*year*
Type / boundary limit	**Integrated (Sinter, Coke, BF, BOF, CC, rolling mills)**

Crude steel output (tonnes)	2,856,960

	Units	Purchased Procured	Sold Delivered	Units	Scope 1 emissions	Scope 2 emissions	Scope 3 emissions	Scope 1+2 emissions	Scope 1+2+3 emissions	Units	Total energy
				t CO2	**4,704,373**	**63,743**	**683,138**	**4,768,116**	**5,451,254**	Tj	**55,359**
				tCO2/tCS	1.65	0.02	0.24	1.67	1.91	GJ/t CS	19.38
Iron ore (fines, concentrate, lump)	dry t	2,054,351	-	t CO2	76,011	-	-	76,011	76,011	Tj	-
Sinter	t	-	-	t CO2	-	-	-	-	-	Tj	-
Pellets	t	1,724,429	-	t CO2	-	-	236,247	-	236,247	Tj	3,621
Coking coal (incl. anthracite)	dry t	1,275,518	-	t CO2	3,692,624	-	-	3,692,624	3,692,624	Tj	41,072
BF injection coal	dry t	383,207	-	t CO2	1,131,609	-	-	1,131,609	1,131,609	Tj	11,918
Sinter/BOF coal	dry t	66,101	-	t CO2	184,092	-	-	184,092	184,092	Tj	1,937
Steam coal	dry t	-	-	t CO2	-	-	-	-	-	Tj	-
EAF coal	dry t	-	-	t CO2	-	-	-	-	-	Tj	-
SR/DRI coal	dry t	-	-	t CO2	-	-	-	-	-	Tj	-
Coke	dry t	-	44,523	t CO2	- 145,011	-	- 9,973	- 145,011	- 154,984	Tj	- 1,340
Charcoal	dry t	-	-	t CO2	-	-	-	-	-	Tj	-
Petroleum coke	t	-	-	t CO2	-	-	-	-	-	Tj	-
Used plastic	t	-	-	t CO2	-	-	-	-	-	Tj	-
Used tyres	t	-	-	t CO2	-	-	-	-	-	Tj	-
Heavy oil	m3	34,618	-	t CO2	100,636	-	9,555	100,636	110,191	Tj	1,305
Light oil	m3	829	-	t CO2	2,155	-	205	2,155	2,360	Tj	29
Kerosene	m3	-	-	t CO2	-	-	-	-	-	Tj	-
LPG	t	-	-	t CO2	-	-	-	-	-	Tj	-
LNG	k.m3N	-	-	t CO2	-	-	-	-	-	Tj	-
Natural gas	k.m3N	116,586	-	t CO2	234,921	-	-	234,921	234,921	Tj	4,185
Green hydrogen	t	-	-	t CO2	-	-	-	-	-	Tj	-
Blue hydrogen	t	-	-	t CO2	-	-	-	-	-	Tj	-
Grey hydrogen	t	-	-	t CO2	-	-	-	-	-	Tj	-
Fossil free biogas	t	-	-	t CO2	-	-	-	-	-	Tj	-
Limestone	dry t	266,926	-	t CO2	117,448	-	-	117,448	117,448	Tj	-
Burnt lime	t	209,788	-	t CO2	-	-	199,298	-	199,298	Tj	944
Crude dolomite	dry t	-	-	t CO2	-	-	-	-	-	Tj	-
Burnt dolomite	t	55,855	-	t CO2	-	-	61,440	-	61,440	Tj	251
EAF / BOF electrodes	t	742	-	t CO2	2,716	-	482	2,716	3,198	Tj	-
Low carbon iron units	t	-	-	t CO2	-	-	-	-	-	Tj	-
Hot metal	t	-	-	t CO2	-	-	-	-	-	Tj	-
Pig iron (cold)	t	-	-	t CO2	-	-	-	-	-	Tj	-
Charcoal based pig iron	t	-	-	t CO2	-	-	-	-	-	Tj	-
Biomass	t	-	-	t CO2	-	-	-	-	-	Tj	-
Gas based DRI	t	-	-	t CO2	-	-	-	-	-	Tj	-
Coal based DRI	t	-	-	t CO2	-	-	-	-	-	Tj	-
Low carbon DRI	t	-	-	t CO2	-	-	-	-	-	Tj	-
Ferro-Nickel	t	-	-	t CO2	-	-	-	-	-	Tj	-
Ferro-Chromium	t	-	-	t CO2	-	-	-	-	-	Tj	-
Ferro-Molybdenum	t	-	-	t CO2	-	-	-	-	-	Tj	-
Ferro-Manganese	t	20,872	-	t CO2	3,820	-	58,208	3,820	62,028	Tj	-
Ferro-Silicon	t	5,585	-	t CO2	22	-	22,342	22	22,364	Tj	-
Silico-Manganese	t	1,470	-	t CO2	26	-	2,058	26	2,084	Tj	-
Silicon (Metal)	t	-	-	t CO2	-	-	-	-	-	Tj	-
Electricity	MWh	135,048	-	t CO2	-	63,743	-	63,743	63,743	Tj	1,215
Steam	t	-	-	t CO2	-	-	-	-	-	Tj	-
Oxygen	k.m3N	283,822	-	t CO2	-	-	100,757	-	100,757	Tj	1,958
Nitrogen	k.m3N	11,974	-	t CO2	-	-	1,233	-	1,233	Tj	24
Argon	k.m3N	12,490	-	t CO2	-	-	1,286	-	1,286	Tj	25
Process gas (Coke oven, BF, BOF)	k.m3N	-	3,139,762	t CO2	- 511,781	-	-	- 511,781	- 511,781	Tj	- 9,733
Waste heat	GJ	-	-	t CO2	-	-	-	-	-	Tj	-
Coal tar	t	-	45,330	t CO2	- 153,625	-	-	- 153,625	- 153,625	Tj	- 1,677
Benzole	t	-	9,252	t CO2	- 31,290	-	-	- 31,290	- 31,290	Tj	- 375