Benchmark flat rate update	2021-2025	2026-2030
Hot metal	-0,2%	-0,2%
Coke	-1,6%	-1,6%
Sintered ore	-0,5%	-0,5%
Fuel / Heat (fallback)	-1,6%	-1,6%
EAF steel	-1,6%	-1,6%
Basic oxygen steel (indirect compensat	-1,6%	-1,6%

CBAM Reductio Factor	
starting year	2023
starting value [%]	50
end year	2030
end value [%]	0
Carbon price	
starting year	2021
starting value [€]	50
end year	2030
end value [€]	100

	Carbon price (€/t CO2 eq)										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Carbon price (50€ in 2021 linearly increasing to 100€ to 2030)	50,00	55,56	61,11	66,67	72,22	77,78	83,33	88,89	94,44	100,00	

	Crude steel production (ktonne)										TOTAL
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
BF-BOF	91.746	91.136	90.522	89.902	89.277	88.646	88.010	87.368	86.720	86.067	889.393
EAF	69.961	70.570	71.185	71.805	72.430	73.061	73.697	74.339	74.987	75.640	727.676
Total crude steel	161.707	161.707	161.707	161.707	161.707	161.707	161.707	161.707	161.707	161.707	1.617.069

Crude steel production for applicable period (ktonne)			
2021-2025	2026-2030	2021-2030	
452.582,39	436.810,71	889.393,10	
355.952,06	371.723,74	727.675,80	
808.534,45	808.534,45	1.617.068,89	

Production baseline for applicable period			
2021-2025	2026-2030	2021-2030	
92.365	91.580		
65.164	69.966		
157.529	161.546		

	CO2 emissions (MtCO2)										TOTAL
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Gross direct emissions	200,31	200,07	199,83	199,59	199,35	199,11	198,87	198,64	198,40	198,16	**1.992**
Gross indirect emissions	32,25	32,45	32,64	32,84	33,03	33,23	33,43	33,63	33,83	34,03	**331**
Gross total emissions	232,57	232,52	232,47	232,43	232,38	232,34	232,30	232,26	232,22	232,19	**2.324**

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
999,16	993,18	1.992,34
163,21	168,14	331,35
1.162,37	1.161,32	2.323,69

	Preliminary free allocation and indirect cost compensation (MtCO2 eq)										TOTAL
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Preliminary Free allocation	159,11	159,11	159,11	159,11	159,11	154,23	154,23	154,23	154,23	154,23	**1.567**
Indirect compensation	15,59	15,57	15,56	15,54	15,53	15,03	15,02	15,00	14,98	14,97	**153**
Sum	174,69	174,68	174,66	174,65	174,63	169,26	169,24	169,23	169,21	169,20	**1.719**

Preliminary free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
795,53	771,13	1.566,66
77,79	75,00	152,79
873,32	846,14	1.719,45

	CBAM related reduction factor (%)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CBAM reduction factor	100,00	100,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00

	Final free allocation and Final indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Final Free allocation	159,11	159,11	127,28	127,28	127,28	123,38	123,38	123,38	123,38	123,38
Final Indirect compensation	15,59	15,57	12,45	12,43	12,42	12,03	12,01	12,00	11,99	11,98
Sum	174,69	174,68	139,73	139,72	139,71	135,41	135,39	135,38	135,37	135,36

Final free allocation and Final indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
700,06	616,91	1.316,97
68,46	60,00	128,47
768,53	676,91	1.445,44

	Shortage in free allocation and indirect cost compensation (MtCO2 eq)										TOTAL
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Free allocation shortage	41,21	40,97	72,55	72,31	72,07	75,73	75,49	75,25	75,02	74,78	**675**
Indirect compensation shortage	16,67	16,87	20,19	20,40	20,61	21,20	21,41	21,63	21,84	22,05	**203**
Total shortage (direct & indirect)	57,87	57,84	92,74	92,71	92,68	96,93	96,91	96,88	96,86	96,83	**878**

Shortage in free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
299,10	376,27	675,37
94,75	108,14	202,88
393,84	484,41	878,25

	Direct and indirect costs (MC)										TOTAL
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Direct costs	2.060,33	2.275,90	4.433,44	4.820,49	5.204,90	5.890,24	6.291,06	6.689,25	7.084,81	7.477,76	**52.228**
Indirect costs	833,30	937,44	1.234,11	1.360,12	1.488,50	1.649,14	1.784,51	1.922,33	2.062,63	2.205,41	**15.477**
Total costs	2.893,62	3.213,34	5.667,55	6.180,61	6.693,41	7.539,38	8.075,57	8.611,58	9.147,44	9.683,17	**67.706**

Direct and indirect costs (MC)		
2021-2025	2026-2030	2021-2030
18.795,05	33.433,12	52.228,17
5.853,47	9.624,02	15.477,49
24.648,53	43.057,14	67.705,66

	Direct and indirect costs per tonne of steel (€/t crude steel)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	12,74	14,07	27,42	29,81	32,19	36,43	38,90	41,37	43,81	46,24
Indirect costs	5,15	5,80	7,63	8,41	9,20	10,20	11,04	11,89	12,76	13,64
Total costs	17,89	19,87	35,05	38,22	41,39	46,62	49,94	53,25	56,57	59,88

Direct and indirect costs (€/t crude steel)		
2021-2025	2026-2030	2021-2030
23,25	41,35	32,30
7,24	11,90	9,57
30,49	53,25	41,87

Benchmark flat rate update	2021-2025	2026-2030
Hot metal	-0,2%	-0,2%
Coke	-1,6%	-1,6%
Sintered ore	-0,5%	-0,5%
Fuel / Heat (fallback)	-1,6%	-1,6%
EAF steel	-1,6%	-1,6%
Basic oxygen steel (indirect compensat	-1,6%	-1,6%

CBAM Reductio Factor	
starting year	2023
starting value [%]	50
end year	2030
end value [%]	0
Carbon price	
starting year	2021
starting value [€]	50
end year	2030
end value [€]	100

	Carbon price (€/t CO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Carbon price (50€ in 2021 linearly increasing to 100€ to 2030)	50,00	55,56	61,11	66,67	72,22	77,78	83,33	88,89	94,44	100,00

	Crude steel production (ktonne)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
BF-BOF	91.746	91.136	90.522	89.902	89.277	88.646	88.010	87.368	86.720	86.067
EAF										
Total crude steel	91.746	91.136	90.522	89.902	89.277	88.646	88.010	87.368	86.720	86.067

Crude steel production for applicable period (ktonne)		
2021-2025	2026-2030	2021-2030
452.582,39	436.810,71	889.393,10
0,00	0,00	0,00
452.582,39	436.810,71	889.393,10

Production baseline for applicable period		
2021-2025	2026-2030	2021-2030
92.365	91.580	
92.365	91.580	

	CO2 emissions (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37
Gross indirect emissions	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Gross total emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37

CO2 emissions (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
977,47	969,91	1.947,38
0,00	0,00	0,00
977,47	969,91	1.947,38

	Preliminary free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Preliminary Free allocation	155,15	155,15	155,15	155,15	155,15	150,42	150,42	150,42	150,42	150,42
Indirect compensation										
Sum	155,15	155,15	155,15	155,15	155,15	150,42	150,42	150,42	150,42	150,42

Preliminary free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
775,73	752,12	1.527,85
0,00	0,00	0,00
775,73	752,12	1.527,85

	CBAM related reduction factor (%)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CBAM reduction factor	100,00	100,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00

	Final free allocation and Final indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Final Free allocation	155,15	155,15	124,12	124,12	124,12	120,34	120,34	120,34	120,34	120,34
Final Indirect compensation	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Sum	155,15	155,15	124,12	124,12	124,12	120,34	120,34	120,34	120,34	120,34

Final free allocation and Final indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
682,65	601,69	1.284,34
0,00	0,00	0,00
682,65	601,69	1.284,34

	Shortage in free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Free allocation shortage	40,95	40,65	71,38	71,08	70,78	74,25	73,95	73,64	73,34	73,03
Indirect compensation shortage	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total shortage (direct & indirect)	40,95	40,65	71,38	71,08	70,78	74,25	73,95	73,64	73,34	73,03

Shortage in free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
294,82	368,22	663,04
0,00	0,00	0,00
294,82	368,22	663,04

	Direct and indirect costs (MC)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	2.047,29	2.258,19	4.361,96	4.738,49	5.111,60	5.775,17	6.162,41	6.546,17	6.926,45	7.303,20
Indirect costs	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total costs	2.047,29	2.258,19	4.361,96	4.738,49	5.111,60	5.775,17	6.162,41	6.546,17	6.926,45	7.303,20

Direct and indirect costs (MC)		
2021-2025	2026-2030	2021-2030
18.517,54	32.713,41	51.230,94
0,00	0,00	0,00
18.517,54	32.713,41	51.230,94

	Direct and indirect costs per tonne of BOF steel (€/t BOF crude steel)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	22,31	24,78	48,19	52,71	57,26	65,15	70,02	74,93	79,87	84,85
Indirect costs	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total costs	22,31	24,78	48,19	52,71	57,26	65,15	70,02	74,93	79,87	84,85

Direct and indirect costs (€/t BOF crude steel)		
2021-2025	2026-2030	2021-2030
40,92	74,89	57,60
0,00	0,00	0,00
40,92	74,89	57,60

Real CO_2 emissions

Average grid factor based on EU Reference scenario 2016

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37
Gross indirect emissions (real)*										
Gross total emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
977,47	969,91	1.947,38
0,00	0,00	0,00
977,47	969,91	1.947,38

* self-sufficiency assumption

Average grid factor based on IEA data analysis

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37
Gross indirect emissions (real)*										
Gross total emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
977,47	969,91	1.947,38
0,00	0,00	0,00
977,47	969,91	1.947,38

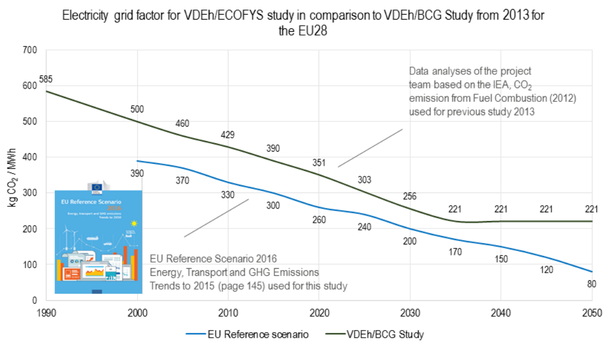
* self-sufficiency assumption

Average grid factor constant at 376 kgCO2/MWh

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37
Gross indirect emissions (real)*										
Gross total emissions	196,09	195,79	195,49	195,19	194,89	194,59	194,29	193,98	193,68	193,37

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
977,47	969,91	1.947,38
0,00	0,00	0,00
977,47	969,91	1.947,38

* self-sufficiency assumption



Benchmark flat rate update	2021-2025	2026-2030
Hot metal	-0,2%	-0,2%
Coke	-1,6%	-1,6%
Sintered ore	-0,5%	-0,5%
Fuel / Heat (fallback)	-1,6%	-1,6%
EAF steel	-1,6%	-1,6%
Basic oxygen steel (indirect compensat	-1,6%	-1,6%

CBAM Reductio Factor	
starting year	2023
starting value [%]	50
end year	2030
end value [%]	0
Carbon price	
starting year	2021
starting value [€]	50
end year	2030
end value [€]	100

	Carbon price (€/t CO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Carbon price (50€ in 2021 linearly increasing to 100€ to 2030)	50,00	55,56	61,11	66,67	72,22	77,78	83,33	88,89	94,44	100,00

	Crude steel production (ktonne)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
BF-BOF										
EAF	69.961	70.570	71.185	71.805	72.430	73.061	73.697	74.339	74.987	75.640
Total crude steel	69.961	70.570	71.185	71.805	72.430	73.061	73.697	74.339	74.987	75.640

Crude steel production for applicable period (ktonne)		
2021-2025	2026-2030	2021-2030
0,00	0,00	0,00
355.952,06	371.723,74	727.675,80
355.952,06	371.723,74	727.675,80

Production baseline for applicable period		
2021-2025	2026-2030	2021-2030
12.598	13.527	
12.598	13.527	

	CO2 emissions (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions	32,25	32,45	32,64	32,84	33,03	33,23	33,43	33,63	33,83	34,03
Gross total emissions	36,47	36,72	36,98	37,23	37,49	37,75	38,01	38,28	38,55	38,82

CO2 emissions (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
163,21	168,14	331,35
184,90	191,41	376,31

	Preliminary free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Preliminary Free allocation	3,96	3,96	3,96	3,96	3,96	3,80	3,80	3,80	3,80	3,80
Indirect compensation	10,74	10,74	10,73	10,73	10,72	10,25	10,25	10,24	10,24	10,23
Sum	14,70	14,70	14,69	14,68	14,68	14,06	14,05	14,05	14,04	14,04

Preliminary free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
19,79	19,02	38,81
53,65	51,21	104,87
73,45	70,23	143,68

	CBAM related reduction factor (%)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CBAM reduction factor	100,00	100,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00

	Final free allocation and Final indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Final Free allocation	3,96	3,96	3,17	3,17	3,17	3,04	3,04	3,04	3,04	3,04
Final Indirect compensation	10,74	10,74	8,58	8,58	8,58	8,20	8,20	8,19	8,19	8,19
Sum	14,70	14,70	11,75	11,75	11,74	11,25	11,24	11,24	11,23	11,23

Final free allocation and Final indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
17,42	15,21	32,63
47,22	40,97	88,19
64,64	56,18	120,82

	Shortage in free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Free allocation shortage	0,26	0,32	1,17	1,23	1,29	1,48	1,54	1,61	1,68	1,75
Indirect compensation shortage	21,51	21,71	24,06	24,26	24,46	25,03	25,23	25,43	25,64	25,84
Total shortage (direct & indirect)	21,77	22,03	25,23	25,49	25,75	26,50	26,77	27,04	27,31	27,59

Shortage in free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
4,27	8,06	12,33
115,99	127,17	243,16
120,26	135,22	255,48

	Direct and indirect costs (MC)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	13,03	17,70	71,48	82,01	93,30	115,06	128,65	143,08	158,37	174,56
Indirect costs	1.075,64	1.206,15	1.470,08	1.617,00	1.766,22	1.946,42	2.102,36	2.260,65	2.421,33	2.584,42
Total costs	1.088,67	1.223,85	1.541,56	1.699,01	1.859,52	2.061,48	2.231,00	2.403,73	2.579,70	2.758,97

Direct and indirect costs (MC)		
2021-2025	2026-2030	2021-2030
277,51	719,71	997,23
7.135,10	11.315,18	18.450,27
7.412,61	12.034,89	19.447,50

	Direct and indirect costs per tonne of EAF steel (€/t EAF crude steel)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	0,19	0,25	1,00	1,14	1,29	1,57	1,75	1,92	2,11	2,31
Indirect costs	15,37	17,09	20,65	22,52	24,39	26,64	28,53	30,41	32,29	34,17
Total costs	15,56	17,34	21,66	23,66	25,67	28,22	30,27	32,33	34,40	36,48

Direct and indirect costs (€/t EAF crude steel)		
2021-2025	2026-2030	2021-2030
0,78	1,94	1,37
20,05	30,44	25,36
20,82	32,38	26,73

Real CO_2 emissions

Average grid factor based on EU Reference scenario 2016

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions (real)	12,87	12,64	12,41	12,18	11,94	11,70	11,45	11,21	10,95	10,70
Gross total emissions	17,09	16,92	16,75	16,57	16,40	16,22	16,04	15,86	15,67	15,49

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
62,04	56,01	118,05
83,73	79,28	163,00

Average grid factor based on IEA data analysis

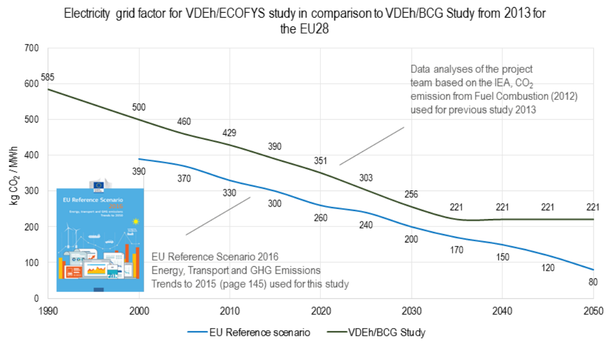
	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions (real)	17,30	16,92	16,54	16,15	15,75	15,35	14,95	14,54	14,12	13,70
Gross total emissions	21,52	21,20	20,88	20,55	20,21	19,87	19,53	19,19	18,84	18,48

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
82,67	72,65	155,32
104,36	95,92	200,28

Average grid factor constant at 376 kgCO2/MWh

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions (real)	19,05	19,17	19,28	19,40	19,52	19,64	19,75	19,87	19,99	20,12
Gross total emissions	23,27	23,44	23,62	23,80	23,98	24,16	24,34	24,53	24,71	24,90

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
96,42	99,37	195,79
118,11	122,64	240,75



Benchmark flat rate update	2021-2025	2026-2030
Hot metal	-0,2%	-0,2%
Coke	-1,6%	-1,6%
Sintered ore	-0,5%	-0,5%
Fuel / Heat (fallback)	-1,6%	-1,6%
EAF steel	-1,6%	-1,6%
Basic oxygen steel (indirect compensat	-1,6%	-1,6%

CBAM Reductio Factor	
starting year	2023
starting value [%]	50
end year	2030
end value [%]	0
Carbon price	
starting year	2021
starting value [€]	50
end year	2030
end value [€]	100

	Carbon price (€/t CO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Carbon price (50€ in 2021 linearly increasing to 100€ to 2030)	50,00	55,56	61,11	66,67	72,22	77,78	83,33	88,89	94,44	100,00

	Crude steel production (ktonne)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
BF-BOF										
EAF Carbon Steel	56.435	56.927	57.423	57.923	58.427	58.936	59.449	59.967	60.489	61.016
Total crude steel	56.435	56.927	57.423	57.923	58.427	58.936	59.449	59.967	60.489	61.016

Crude steel production for applicable period (ktonne)		
2021-2025	2026-2030	2021-2030
0,00	0,00	0,00
287.134,66	299.857,15	586.991,81
287.134,66	299.857,15	586.991,81

Production baseline for applicable period		
2021-2025	2026-2030	2021-2030
52.565	56.440	
52.565	56.440	

	CO2 emissions (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	3,10	3,14	3,18	3,23	3,27	3,32	3,37	3,41	3,46	3,51
Gross indirect emissions	25,17	25,32	25,47	25,62	25,77	25,93	26,08	26,24	26,39	26,55
Gross total emissions	28,26	28,46	28,65	28,85	29,05	29,25	29,45	29,65	29,86	30,07

CO2 emissions (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
15,92	17,08	32,99
127,35	131,19	258,54
143,26	148,27	291,53

	Preliminary free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Preliminary Free allocation	2,97	2,97	2,97	2,97	2,97	2,85	2,85	2,85	2,85	2,85
Indirect compensation	8,41	8,41	8,40	8,40	8,39	8,03	8,03	8,03	8,02	8,02
Sum	11,38	11,38	11,37	11,37	11,36	10,89	10,88	10,88	10,87	10,87

Preliminary free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
14,84	14,26	29,10
42,02	40,13	82,15
56,86	54,39	111,24

	CBAM related reduction factor (%)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CBAM reduction factor	100,00	100,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00

	Final free allocation and Final indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Final Free allocation	2,97	2,97	2,37	2,37	2,37	2,28	2,28	2,28	2,28	2,28
Final Indirect compensation	8,41	8,41	6,72	6,72	6,72	6,43	6,42	6,42	6,42	6,41
Sum	11,38	11,38	9,10	9,09	9,09	8,71	8,71	8,70	8,70	8,69

Final free allocation and Final indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
13,06	11,41	24,46
36,98	32,10	69,08
50,04	43,51	93,54

	Shortage in free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Free allocation shortage	0,13	0,17	0,81	0,85	0,90	1,04	1,08	1,13	1,18	1,23
Indirect compensation shortage	16,75	16,91	18,75	18,90	19,06	19,50	19,66	19,82	19,98	20,14
Total shortage (direct & indirect)	16,88	17,08	19,55	19,75	19,96	20,54	20,74	20,95	21,16	21,37

Shortage in free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
2,86	5,67	8,53
90,37	99,09	189,46
93,23	104,76	197,99

	Direct and indirect costs (MC)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	6,44	9,52	49,40	56,85	64,86	80,71	90,41	100,73	111,69	123,30
Indirect costs	837,75	939,42	1.145,56	1.260,07	1.376,38	1.516,60	1.638,13	1.761,51	1.886,74	2.013,85
Total costs	844,18	948,93	1.194,97	1.316,92	1.441,24	1.597,31	1.728,54	1.862,24	1.998,43	2.137,15

Direct and indirect costs (MC)		
2021-2025	2026-2030	2021-2030
187,07	506,85	693,92
5.559,18	8.816,83	14.376,00
5.746,24	9.323,67	15.069,92

	Direct and indirect costs per tonne of EAF carbon steel (€/t EAF carbon steel)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	0,11	0,17	0,86	0,98	1,11	1,37	1,52	1,68	1,85	2,02
Indirect costs	14,84	16,50	19,95	21,75	23,56	25,73	27,56	29,37	31,19	33,01
Total costs	14,96	16,67	20,81	22,74	24,67	27,10	29,08	31,05	33,04	35,03

Direct and indirect costs (€/t EAF carbon steel)		
2021-2025	2026-2030	2021-2030
0,65	1,69	1,18
19,36	29,40	24,49
20,01	31,09	25,67

Real CO_2 emissions

Average grid factor based on EU Reference scenario 2016

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	3,10	3,14	3,18	3,23	3,27	3,32	3,37	3,41	3,46	3,51
Gross indirect emissions (real)	10,04	9,87	9,69	9,50	9,32	9,13	8,94	8,74	8,55	8,35
Gross total emissions	13,14	13,00	12,87	12,73	12,59	12,45	12,30	12,16	12,01	11,86

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
15,92	17,08	32,99
48,41	43,71	92,12
64,33	60,79	125,12

Average grid factor based on IEA data analysis

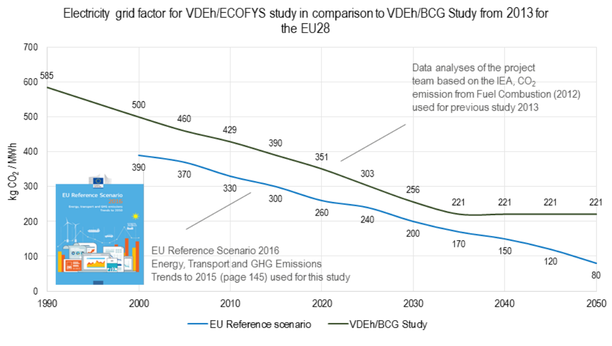
	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	3,10	3,14	3,18	3,23	3,27	3,32	3,37	3,41	3,46	3,51
Gross indirect emissions (real)	13,50	13,21	12,91	12,60	12,29	11,98	11,66	11,34	11,02	10,69
Gross total emissions	16,60	16,35	16,09	15,83	15,57	15,30	15,03	14,76	14,48	14,20

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
15,92	17,08	32,99
64,51	56,69	121,21
80,43	73,77	154,20

Average grid factor constant at 376 kgCO2/MWh

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	3,10	3,14	3,18	3,23	3,27	3,32	3,37	3,41	3,46	3,51
Gross indirect emissions (real)	14,87	14,96	15,05	15,14	15,23	15,32	15,42	15,51	15,60	15,70
Gross total emissions	17,96	18,10	18,23	18,37	18,50	18,64	18,78	18,92	19,07	19,21

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
15,92	17,08	32,99
75,24	77,55	152,79
91,16	94,63	185,79



Benchmark flat rate update	2021-2025	2026-2030
Hot metal	-0,2%	-0,2%
Coke	-1,6%	-1,6%
Sintered ore	-0,5%	-0,5%
Fuel / Heat (fallback)	-1,6%	-1,6%
EAF steel	-1,6%	-1,6%
Basic oxygen steel (indirect compensat	-1,6%	-1,6%

CBAM Reductio Factor	
starting year	2023
starting value [%]	50
end year	2030
end value [%]	0
Carbon price	
starting year	2021
starting value [€]	50
end year	2030
end value [€]	100

	Carbon price (€/t CO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Carbon price (50€ in 2021 linearly increasing to 100€ to 2030)	50,00	55,56	61,11	66,67	72,22	77,78	83,33	88,89	94,44	100,00

	Crude steel production (ktonne)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
BF-BOF										
EAF High Alloy Steel	13.526	13.644	13.762	13.882	14.003	14.125	14.248	14.372	14.497	14.624
Total crude steel	13.526	13.644	13.762	13.882	14.003	14.125	14.248	14.372	14.497	14.624

Crude steel production for applicable period (ktonne)		
2021-2025	2026-2030	2021-2030
0,00	0,00	0,00
68.817,40	71.866,59	140.683,99
68.817,40	71.866,59	140.683,99

Production baseline for applicable period		
2021-2025	2026-2030	2021-2030
12.598	13.527	
12.598	13.527	

	CO2 emissions (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	1,12	1,14	1,15	1,17	1,19	1,20	1,22	1,24	1,26	1,27
Gross indirect emissions	7,09	7,13	7,17	7,22	7,26	7,30	7,35	7,39	7,43	7,48
Gross total emissions	8,21	8,27	8,33	8,39	8,44	8,50	8,57	8,63	8,69	8,75

CO2 emissions (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
5,77	6,19	11,96
35,86	36,95	72,81
41,64	43,14	84,77

	Preliminary free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Preliminary Free allocation	0,99	0,99	0,99	0,99	0,99	0,95	0,95	0,95	0,95	0,95
Indirect compensation	2,33	2,33	2,33	2,33	2,33	2,22	2,22	2,22	2,22	2,22
Sum	3,32	3,32	3,32	3,32	3,32	3,17	3,17	3,17	3,17	3,17

Preliminary free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
4,95	4,76	9,71
11,64	11,09	22,72
16,59	15,85	32,44

	CBAM related reduction factor (%)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CBAM reduction factor	100,00	100,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00

	Final free allocation and Final indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Final Free allocation	0,99	0,99	0,79	0,79	0,79	0,76	0,76	0,76	0,76	0,76
Final Indirect compensation	2,33	2,33	1,86	1,86	1,86	1,78	1,77	1,77	1,77	1,77
Sum	3,32	3,32	2,65	2,65	2,65	2,54	2,54	2,54	2,53	2,53

Final free allocation and Final indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
4,36	3,81	8,17
10,24	8,87	19,11
14,60	12,68	27,28

	Shortage in free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Free allocation shortage	0,13	0,15	0,36	0,38	0,39	0,44	0,46	0,48	0,49	0,51
Indirect compensation shortage	4,76	4,80	5,31	5,35	5,40	5,53	5,57	5,62	5,66	5,71
Total shortage (direct & indirect)	4,89	4,95	5,67	5,73	5,79	5,97	6,03	6,09	6,15	6,22

Shortage in free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
1,41	2,38	3,80
25,62	28,08	53,70
27,03	30,46	57,49

	Direct and indirect costs (MC)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	6,59	8,18	22,08	25,16	28,44	34,35	38,24	42,34	46,68	51,25
Indirect costs	237,89	266,73	324,52	356,93	389,85	429,82	464,22	499,15	534,59	570,57
Total costs	244,48	274,92	346,60	382,09	418,28	464,17	502,46	541,49	581,27	621,82

Direct and indirect costs (MC)		
2021-2025	2026-2030	2021-2030
90,45	212,87	303,31
1.575,92	2.498,35	4.074,27
1.666,37	2.711,22	4.377,58

	Direct and indirect costs per tonne of EAF high alloy steel (€/t EAF high alloy steel)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	0,49	0,60	1,60	1,81	2,03	2,43	2,68	2,95	3,22	3,50
Indirect costs	17,59	19,55	23,58	25,71	27,84	30,43	32,58	34,73	36,88	39,02
Total costs	18,08	20,15	25,18	27,52	29,87	32,86	35,26	37,68	40,09	42,52

Direct and indirect costs (€/t BOF high alloy steel)		
2021-2025	2026-2030	2021-2030
1,31	2,96	2,16
22,90	34,76	28,96
24,21	37,73	31,12

Real CO_2 emissions

Average grid factor based on EU Reference scenario 2016

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	1,12	1,14	1,15	1,17	1,19	1,20	1,22	1,24	1,26	1,27
Gross indirect emissions (real)	2,83	2,78	2,73	2,67	2,62	2,57	2,52	2,46	2,41	2,35
Gross total emissions	3,95	3,91	3,88	3,84	3,81	3,77	3,74	3,70	3,66	3,62

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
5,77	6,19	11,96
13,62	12,30	25,92
19,40	18,49	37,89

Average grid factor based on IEA data analysis

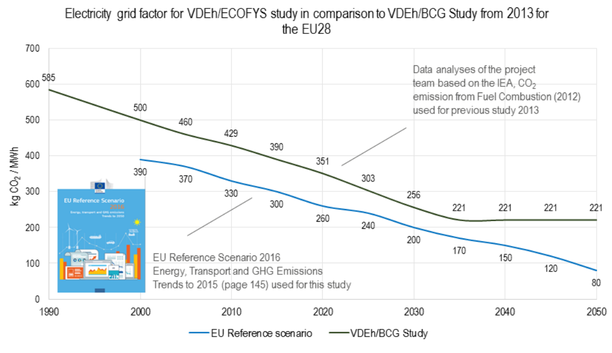
	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	1,12	1,14	1,15	1,17	1,19	1,20	1,22	1,24	1,26	1,27
Gross indirect emissions (real)	3,80	3,72	3,63	3,55	3,46	3,37	3,28	3,19	3,10	3,01
Gross total emissions	4,92	4,85	4,79	4,72	4,65	4,57	4,50	4,43	4,36	4,28

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
5,77	6,19	11,96
18,16	15,95	34,11
23,93	22,15	46,07

Average grid factor constant at 376 kgCO2/MWh

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	1,12	1,14	1,15	1,17	1,19	1,20	1,22	1,24	1,26	1,27
Gross indirect emissions (real)	4,18	4,21	4,23	4,26	4,29	4,31	4,34	4,36	4,39	4,42
Gross total emissions	5,31	5,35	5,39	5,43	5,47	5,52	5,56	5,60	5,65	5,69

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
5,77	6,19	11,96
21,17	21,82	43,00
26,95	28,01	54,96



Benchmark flat rate update	2021-2025	2026-2030
Hot metal	-0,2%	-0,2%
Coke	-1,6%	-1,6%
Sintered ore	-0,5%	-0,5%
Fuel / Heat (fallback)	-1,6%	-1,6%
EAF steel	-1,6%	-1,6%
Basic oxygen steel (indirect compensat	-1,6%	-1,6%

CBAM Reductio Factor	
starting year	2023
starting value [%]	50
end year	2030
end value [%]	0
Carbon price	
starting year	2021
starting value [€]	50
end year	2030
end value [€]	100

	Carbon price (€/t CO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Carbon price (50€ in 2021 linearly increasing to 100€ to 2030)	50,00	55,56	61,11	66,67	72,22	77,78	83,33	88,89	94,44	100,00

	Crude steel production (ktonne)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
BF-BOF										
EAF	69.961	70.570	71.185	71.805	72.430	73.061	73.697	74.339	74.987	75.640
Total crude steel	69.961	70.570	71.185	71.805	72.430	73.061	73.697	74.339	74.987	75.640

Crude steel production for applicable period (ktonne)		
2021-2025	2026-2030	2021-2030
0,00	0,00	0,00
355.952,06	371.723,74	727.675,80
355.952,06	371.723,74	727.675,80

Production baseline for applicable period		
2021-2025	2026-2030	2021-2030
65.164	69.966	
65.164	69.966	

	CO2 emissions (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions	32,25	32,45	32,64	32,84	33,03	33,23	33,43	33,63	33,83	34,03
Gross total emissions	36,47	36,72	36,98	37,23	37,49	37,75	38,01	38,28	38,55	38,82

CO2 emissions (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
163,21	168,14	331,35
184,90	191,41	376,31

	Preliminary free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Preliminary Free allocation	3,96	3,96	3,96	3,96	3,96	3,80	3,80	3,80	3,80	3,80
Indirect compensation	15,59	16,59	17,59	18,59	19,59	20,59	21,59	22,59	23,59	24,59
Sum	19,55	20,55	21,55	22,55	23,55	24,39	25,39	26,39	27,39	28,39

Preliminary free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
19,79	19,02	38,81
87,94	112,94	200,89
107,74	131,96	239,70

	CBAM related reduction factor (%)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CBAM reduction factor	100,00	100,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00	80,00

	Final free allocation and Final indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Final Free allocation	3,96	3,96	3,17	3,17	3,17	3,04	3,04	3,04	3,04	3,04
Final Indirect compensation	15,59	16,59	14,07	14,87	15,67	16,47	17,27	18,07	18,87	19,67
Sum	19,55	20,55	17,24	18,04	18,84	19,51	20,31	21,11	21,91	22,71

Final free allocation and Final indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
17,42	15,21	32,63
76,79	90,35	167,14
94,21	105,57	199,78

	Shortage in free allocation and indirect cost compensation (MtCO2 eq)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Free allocation shortage	0,26	0,32	1,17	1,23	1,29	1,48	1,54	1,61	1,68	1,75
Indirect compensation shortage	16,67	15,86	18,57	17,96	17,36	16,76	16,16	15,56	14,96	14,36
Total shortage (direct & indirect)	16,93	16,18	19,74	19,19	18,65	18,24	17,70	17,17	16,63	16,10

Shortage in free allocation and indirect cost compensation (MtCO2 eq)		
2021-2025	2026-2030	2021-2030
4,27	8,06	12,33
86,42	77,79	164,20
90,69	85,84	176,53

	Direct and indirect costs (MC)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	13,03	17,70	71,48	82,01	93,30	115,06	128,65	143,08	158,37	174,56
Indirect costs	833,30	881,02	1.134,82	1.197,64	1.253,82	1.303,39	1.346,35	1.382,74	1.412,58	1.435,87
Total costs	846,33	898,73	1.206,30	1.279,65	1.347,12	1.418,45	1.475,00	1.525,82	1.570,95	1.610,43

Direct and indirect costs (MC)		
2021-2025	2026-2030	2021-2030
277,51	719,71	997,23
5.300,61	6.880,94	12.181,55
5.578,13	7.600,65	13.178,78

	Direct and indirect costs per tonne of EAF steel (€/t EAF crude steel)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Direct costs	0,19	0,25	1,00	1,14	1,29	1,57	1,75	1,92	2,11	2,31
Indirect costs	11,91	12,48	15,94	16,68	17,31	17,84	18,27	18,60	18,84	18,98
Total costs	12,10	12,74	16,95	17,82	18,60	19,41	20,01	20,53	20,95	21,29

Direct and indirect costs (€/t EAF crude steel)		
2021-2025	2026-2030	2021-2030
0,78	1,94	1,37
14,89	18,51	16,74
15,67	20,45	18,11

Real CO_2 emissions

Average grid factor based on EU Reference scenario 2016

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions (real)	12,87	12,64	12,41	12,18	11,94	11,70	11,45	11,21	10,95	10,70
Gross total emissions	17,09	16,92	16,75	16,57	16,40	16,22	16,04	15,86	15,67	15,49

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
62,04	56,01	118,05
83,73	79,28	163,00

Average grid factor based on IEA data analysis

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions (real)	17,30	16,92	16,54	16,15	15,75	15,35	14,95	14,54	14,12	13,70
Gross total emissions	21,52	21,20	20,88	20,55	20,21	19,87	19,53	19,19	18,84	18,48

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
82,67	72,65	155,32
104,36	95,92	200,28

Average grid factor constant at 376 kgCO2/MWh

	CO2 emissions (MtCO2)									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross direct emissions	4,22	4,28	4,34	4,40	4,46	4,52	4,59	4,65	4,72	4,79
Gross indirect emissions (real)	19,05	19,17	19,28	19,40	19,52	19,64	19,75	19,87	19,99	20,12
Gross total emissions	23,27	23,44	23,62	23,80	23,98	24,16	24,34	24,53	24,71	24,90

CO2 emissions (MtCO2)		
2021-2025	2026-2030	2021-2030
21,69	23,27	44,96
96,42	99,37	195,79
118,11	122,64	240,75