

SUMMARY OF GRI INDICATORS

ABB Group Sustainability Indicators 2019

Environmental

GRI ref.	Indicator description	Data assured in 2018	2019	2018	2017	2016	2015	2014
	Hazardous materials							
	Phthalates (tons)	✓	102	99	106	191	878	258
	Brominated flame retardants (tons)	✓	0	0.0	0.0	0.0	0.0	1.9
	Lead in submarine cables (tons) ¹		-	- ¹	0.017	8,246	8,376	7,842
	Organic lead in polymers (tons)	✓	0.0	0.0	0.29	1.0	1.4	0.1
	Lead in other products (tons), e.g., backup batteries and counterweights in robots	✓	2,316	2,686	2,548	3,321	1,684	1,884
	Cadmium in batteries (tons) ²	✓	15	113.3	71.3	53.0	98.3	79.5
	Cadmium in lead alloy and other uses (tons)	✓	0.3	0.3	0.4	7.3	6.4	6.0
	Mercury in products (tons)	✓	0.001	0.001	0.001	0.002	0.007	0.071
	SF ₆ insulation gas (inflow to ABB facilities) (tons) ³	✓	1,211	1,286	1,425	1,653	1,658	1,483
	SF ₆ insulation gas (outflow to customers) (tons) ³	✓	1,204	1,279	1,417	1,644	1,648	1,466
	No. of transformers with PCB oil in ABB facilities	✓	14	6	0	0	0	0
	No. of capacitors with PCB oil in ABB facilities	✓	89	0	0	0	0	0
	Mercury in instruments in ABB facilities (tons)	✓	0.0570	0.2150	0.2150	0.2380	0.2250	0.3200
302-1	Energy consumption (gigawatt-hours – GWh)							
	Biofuels ⁴	✓	52.9	51.6	64.4	52	46	44
	Oil (11.63 MWh/ton)	✓	49.0	48.5	58.5	71	79	85
	Diesel (11.75 MWh/ton)	✓	4.4	4.8	5.8	9	8	11
	Coal (7.56 MWh/ton)	✓	0.0	0	0	0	0	0
	Gas ^{5, 6}	✓	728	658	647	658	737	708
	District heat consumption ⁵	✓	208	201	209	198	181	198
	Electricity consumption ^{5, 6}	✓	1,635	1,571	1,561	1,620	1,608	1,628
	Total energy used	✓	2,677	2,535	2,546	2,607	2,658	2,675
	Electricity sold	✓	2	2	5	2	1	2
302-3	Energy intensity (MWh/million \$ sales)⁷	✓	72	72	74	77	75	67

Environmental continued

GRI ref.	Indicator description	Data assured in 2018	2019	2018	2017	2016	2015	2014
303-1	Water withdrawal (kilotons)							
	Purchased from water companies ⁵	✓	3,896	3,721	3,678	3,800	4,000	4,200
	Groundwater extracted by ABB	✓	2,066	2,499	2,726	2,300	3,200	3,100
	Surface water extracted by ABB	✓	2,406	2,561	2,849	3,000	2,400	2,800
	Collection of rainwater	✓	9.8	<100	<100	<100	<100	<100
	Waste water from external source	✓	21.7	<100	<100	<100	<100	<100
	Water withdrawal from areas of water stress ⁸	✓	2,711	2,778	2,694	2,730	2,993	2,951
	Total water withdrawal	✓	8,401	8,827	9,280	9,100	9,700	10,100
303-3	Water recycled and reused							
	Volume of water reused and recycled (kilotons)		8,051	7,449	7,807	10,600	5,200	5,200
	As percentage of total water withdrawal (%)		96	84	84	116	54	51
	Greenhouse gas (GHG) emissions⁹ (kilotons CO₂ equivalent)							
305-1	Scope 1							
	CO ₂ from the use of energy ⁶	✓	162	148	149	155	173	170
	SF ₆ (in CO ₂ equivalents) ¹⁰	✓	159	164	180	228	244	394
	CO ₂ from transport by own fleet ¹¹		75	63	63	350	350	350
305-2	Scope 2							
	District heat consumption	✓	33	30	28	31	29	35
	Electricity consumption ⁶	✓	569	597	606	614	684	682
	Total scope 1 and 2 GHG emissions	✓	915³³	1002	1,026	1,378	1,480	1,631
305-3	Scope 3							
	Air travel ^{12,13}	✓	148	138	150	164	158	171
	Waste generated in operations ³⁴		12	-	-	-	-	-
	Energy-related activities not in scope 1/2 ³⁴		70	-	-	-	-	-
	Purchased goods and services ³⁴		4104	-	-	-	-	-
	Employee commuting ³⁴		249	-	-	-	-	-
	Up- and downstream transportation ³⁴		1150	-	-	-	-	-
	Up- and downstream leased assets ³⁴		219	-	-	-	-	-
305-4	GHG emissions intensity (tons CO₂ equivalents/million \$)¹⁴							
	Tons CO ₂ equivalents per million \$ sales, scope 1+2	✓	27	28	30	41	42	-

Environmental continued

GRI ref.	Indicator description	Data assured in 2018	2019	2018	2017	2016	2015	2014
305-7	Emissions of volatile organic compounds (tons)							
	Volatile organic compounds (VOC) ¹⁵	✓	1,128	936	987	1,105	1,223	1,291
	Chlorinated volatile organic compounds (VOC-Cl) ¹⁶	✓	2	4	3	6	13	20
	Emissions of NO_x and SO_x (tons SO₂ and NO₂)							
	SO _x from burning coal		0	0	0	0	0	0
	SO _x from burning oil and biofuels		77	72	89	82	97	97
	NO _x from burning coal		0	0	0	0	0	0
	NO _x from burning oil and biofuels		57	54	67	72	73	73
	NO _x from burning gas		156	142	140	142	159	153
306-1	Water discharge by quality and destination (kilotons)							
	Public sewer		3,591	3,649	3,039	4,200	3,100	3,000
	treated (percentage)		36%	36%	38%	21%	28%	30%
	untreated (percentage)		64%	64%	62%	79%	72%	70%
	Recipient ¹⁷		1,123	761	444	4,500	2,600	2,900
	treated (percentage)		84%	90%	81%	15%	90%	90%
	untreated (percentage)		16%	10%	19%	85%	10%	10%
	Hazardous treatment company		140	47	45	300	360	400
	treated (percentage)		81%	47%	13%	71%	90%	75%
	untreated (percentage)		19%	53%	87%	29%	10%	25%
	External use		0	1	0	0	<100	<100
	treated (percentage)		0%	100%	–	–	63%	50%
	untreated (percentage)		100%	–	–	–	37%	50%
306-2	Waste (kilotons)							
	Scrap metal recycled	✓	167	156	153	148	158	162
	Non-hazardous waste recycled ⁵	✓	61	62	61	53	53	49
	Non-hazardous waste sent for disposal ⁵	✓	41	37	36	37	44	44
	Hazardous waste recycled ¹⁸	✓	7	5	5	7	5	5
	Hazardous waste sent for disposal ¹⁸	✓	7	6	8	8	10	13
	Total waste (generated)	✓	283	266	263	254	270	273

Environmental continued

GRI ref.	Indicator description	Data assured in 2018	2019	2018	2017	2016	2015	2014
306-3	Numbers of significant spills¹⁹							
	Oil spills		9	15	19	17	11	7
	Chemical spills		4	9	10	6	1	0
	Emissions to air		6	5	3	6	11	3
	Others		7	14	12	9	0	0
	Total number of significant spills		26	43	44	38	23	10

Social

GRI ref.	Indicator description	Data assured	2019	2018	2017	2016	2015	2014						
401-1	Total number and rates of new employee hires and employee turnover													
	Total workforce by region (ABB employees)²⁰													
	Europe		68,400	68,300	63,000	61,400	61,600	63,000						
	The Americas		35,200	35,600	28,800	29,000	30,900	32,200						
	Asia, Middle East and Africa		40,800	42,700	43,000	41,900	43,300	45,200						
	Total		144,400	146,600	134,800	132,300	135,800	140,400						
	Employee turnover													
	Turnover of all employees²¹													
	Europe		9,732	14%	6,509	10%	7,105	11%	6,063	10%	5,891	9%	5,877	9%
	The Americas		5,443	16%	3,986	11%	3,148	11%	5,338	17%	5,409	17%	5,379	17%
	Asia, Middle East and Africa		6,860	17%	5,127	12%	3,749	9%	4,430	11%	4,946	12%	5,701	13%
	Total employee turnover: ABB Group		22,035	15%	15,622	11%	14,002	10%	15,831	12%	16,246	12%	16,957	12%
	Turnover of all female employees²¹													
	Europe		2,871	4%	2,053	3%	2,097	3%	1,571	2%	1,498	2%	1,370	2%
The Americas		1,553	4%	1,154	3%	940	3%	1,265	4%	1,418	5%	1,307	4%	
Asia, Middle East and Africa		1,399	3%	967	2%	855	2%	882	2%	1,093	3%	1,311	6%	
Total female employee turnover: ABB Group		5,823	4%	4,174	3%	3,892	3%	3,718	3%	4,009	3%	3,882	3%	
Employee hires														
Hires of all employees²¹														
Europe		11,560	17%	7,848	11%	6,888	11%	5,656	9%	5,672	9%	6,195	10%	
The Americas		4,221	12%	3,525	10%	3,905	13%	3,354	11%	3,573	11%	4,142	13%	
Asia, Middle East and Africa		6,121	15%	5,281	12%	4,403	11%	2,920	7%	3,777	9%	5,493	13%	
Total employee hires: ABB Group		21,902	15%	16,654	11%	15,196	11%	11,930	9%	13,022	10%	15,830	12%	
Hires of all female employees²¹														
Europe		3,898	6%	2,442	4%	2,161	3%	1,681	3%	1,520	2%	1,597	3%	
The Americas		1,357	4%	950	3%	1,030	3%	937	3%	769	2%	1,010	3%	
Asia, Middle East and Africa		1,275	3%	1,076	3%	900	2%	586	1%	761	2%	1,308	3%	
Total female employee hires: ABB Group		6,530	4%	4,468	3%	4,091	3%	3,204	2%	3,050	2%	3,915	3%	

Social continued

GRI ref.	Indicator description	Data assured	2019	2018	2017	2016	2015	2014
403-2	Occupational health and safety: Injuries, lost days, diseases and fatalities							
	Employee work-related fatalities ^{22,24}	✓	1	0	1	0	0	1
	Incident rate ²³	✓	0.01	0.00	0.00	0.00	0.00	0.00
	Employee business travel fatalities ^{22,25}	✓	0	1	1	1	0	0
	Incident rate ²³	✓	0.00	0.00	0.00	0.00	0.00	0.00
	Contractor work-related fatalities ²⁴	✓	1	3	2	5	2	2
	Contractor business travel fatalities ^{22,25}	✓	0	0	0	2	0	0
	Members of the public fatalities ²²	✓	0	0	0	0	1	0
	Employee total recordable incident number ^{24,26}	✓	744	830	1,049	1,140	1,310	1,500
	Injury rate ²³	✓	0.47	0.58	0.73	0.79	0.87	0.99
	Contractor total recordable incident number ^{24,26}	✓	149	203	205	277	343	333
	Injury rate ²³	✓	0.46	0.58	0.52	0.70	0.80	0.78
	Employee lost time incident number ²⁴	✓	372	386	472	441	531	652
	Injury rate ²³	✓	0.23	0.27	0.33	0.30	0.36	0.43
	Contractor lost time incident number ²⁴	✓	96	97	95	118	163	200
	Injury rate ²³	✓	0.29	0.28	0.24	0.30	0.38	0.47
	Employee lost days due to industrial incidents ²⁹		6,757	6,650	7,331	6,905	7,831	8,415
	Days lost rate ²³		4.26	4.63	5.11	4.78	5.26	5.52
	Employee occupational health illness ²⁴	✓	16	30	35	65	46	17
	Employee occupational health illness rate ^{23,24}	✓	0.01	0.02	0.02	0.05	0.03	0.01
	Sustainability Observation Tours (SOT) conducted ²⁸	✓	83,859	144,738	182,265	178,473	139,124	–
	SOT rate ^{28,30}	✓	5.52	1.01	1.27	1.24	0.92	–
	Hazards reported ²⁴	✓	336,747	389,733	585,627	621,849	520,942	–
	Hazards reporting rate ²⁷	✓	2.12	2.72	4.08	4.31	3.51	–
	Data by region							
	Employee work-related fatalities: ABB Group^{22,24}	✓	1	0	1	0	0	1
	Europe	✓	0	0	0	0	0	0
	The Americas	✓	1	0	1	0	0	0
	Asia, Middle East and Africa	✓	0	0	0	0	0	1
	Employee business travel fatalities: ABB Group	✓	0	1	1	1	0	0
	Europe	✓	0	0	0	0	0	0
	The Americas	✓	0	0	0	1	0	0
	Asia, Middle East and Africa	✓	0	1	1	0	0	0

Social continued

GRI ref.	Indicator description	Data assured	2019	2018	2017	2016	2015	2014
	Contractor work-related fatalities: ABB Group	✓	1	3	2	5	2	2
	Europe	✓	1	0	0	0	0	0
	The Americas	✓	0	1	1	0	0	0
	Asia, Middle East and Africa	✓	0	2	1	5	2	2
	Contractor business travel fatalities: ABB Group	✓	0	0	0	2	0	0
	Europe	✓	0	0	0	0	0	0
	The Americas	✓	0	0	0	2	0	0
	Asia, Middle East and Africa	✓	0	0	0	0	0	0
	Employee total recordable injury rate: ABB Group	✓	0.47	0.58	0.73	0.79	0.88	0.10
	Europe	✓	0.53	0.66	0.86	0.96	1.02	1.16
	The Americas	✓	0.68	0.97	1.17	1.18	1.40	1.57
	Asia, Middle East and Africa	✓	0.16	0.19	0.24	0.27	0.31	0.39
	Contractor total recordable injury rate: ABB Group	✓	0.456	0.58	0.52	0.70	0.80	0.78
	Europe	✓	1.38	1.52	1.38	1.69	1.88	1.97
	The Americas	✓	0.42	0.74	0.96	1.47	1.54	1.40
	Asia, Middle East and Africa	✓	0.20	0.26	0.24	0.35	0.37	0.35
	Employee lost time injury rate: ABB Group	✓	0.23	0.27	0.33	0.30	0.36	0.43
	Europe	✓	0.37	0.39	0.48	0.47	0.56	0.66
	The Americas	✓	0.20	0.30	0.34	0.29	0.33	0.40
	Asia, Middle East and Africa	✓	0.07	0.07	0.09	0.08	0.08	0.12
	Contractor lost time injury rate: ABB Group	✓	0.29	0.28	0.24	0.30	0.38	0.47
	Europe	✓	1.15	0.91	0.73	0.93	1.03	1.38
	The Americas	✓	0.19	0.29	0.35	0.81	0.84	0.86
	Asia, Middle East and Africa	✓	0.07	0.08	0.10	0.07	0.12	0.15
	Employee days lost rate: ABB Group		4.26	4.63	5.11	4.78	5.26	5.52
	Europe		5.95	6.19	6.95	5.98	7.32	8.25
	The Americas		4.20	6.46	6.43	7.81	6.02	8.28
	Asia, Middle East and Africa		1.71	1.05	1.49	0.99	1.74	1.72
	Employee occupational health disease rate: ABB Group	✓	0.01	0.02	0.02	0.05	0.03	0.01
	Europe	✓	0.02	0.04	0.05	0.09	0.06	0.02
	The Americas	✓	0.01	0.00	0.00	0.02	0.02	0.03
	Asia, Middle East and Africa	✓	0.00	0.01	0.00	0.05	0.00	0.00

Social continued

GRI ref.	Indicator description	Data assured	2019	2018	2017	2016	2015	2014
	SOT rate: ABB Group	✓	5.52	1.01	1.27	1.24	0.92	–
	Europe	✓	5.34	0.92	0.84	0.76	0.51	–
	The Americas	✓	6.14	1.09	1.71	1.87	1.41	–
	Asia, Middle East and Africa	✓	5.40	1.10	1.61	1.53	1.17	–
	Hazard rate: ABB Group	✓	2.12	2.72	4.08	4.31	3.51	–
	Europe	✓	2.04	2.38	3.37	3.65	2.67	–
	The Americas	✓	1.61	2.66	4.81	4.78	4.25	–
	Asia, Middle East and Africa	✓	2.82	3.28	4.64	5.03	4.19	–
406-1	Non-discrimination							
	Total number of incidents of discrimination		8	0	0	0	0	1
	Total number of incidents of harassment		19	25	9	5	8	10
415-1	Public policy							
	Financial and in-kind political contributions		\$1,260	\$11,500	\$300	\$10,400	\$12,600	\$13,000
404-1	Training and education							
	Training per year per employee (average hours)							
	China		17	16	17	25	22	26
	Finland		12	13	13	15	17	19
	Germany		18	18	18	18	18	18
	India		10	12	5	3	2	12
	Italy		16	16	12	10	12	12
	Mexico		7	134	98	15	16	23
	Poland		10	35	20	12	10	11
	Sweden		12	12	12	10	10	12
	Switzerland		12	14	14	15	14	16
	USA		16	16	24	24	27	32
404-3	Employees receiving regular performance and career development reviews³¹							
	Top and senior managers		73%	89%	94%	92%	85%	87%
	Middle and lower managers		89%	93%	96%	94%	90%	91%
	Other employees		89%	91%	91%	91%	87%	88%
	Total workforce		89%	91%	91%	92%	87%	88%

Social continued

GRI ref.	Indicator description	Data assured	2019	2018	2017	2016	2015	2014
405-1	Diversity and equal opportunity							
	Composition of governance bodies							
	Board of Directors							
	Women in Board (percentage)		18%	18%	10%	18%	13%	13%
	Age group diversity (percentage)							
	<30 years old		0%	0%	0%	0%	0%	0%
	30–50 years old		9%	18%	0%	0%	0%	0%
	>50 years old		91%	91%	100%	100%	100%	100%
	Number of nationalities		7	7	8	10	8	7
	Executive Committee							
	Women in Executive Committee (percentage)		16%	9%	9%	9%	9%	9%
	Age group diversity total (percentage)							
	<30 years old		0%	0%	0%	0%	0%	0%
	30–50 years old		8%	0%	27%	18%	27%	36%
	>50 years old		92%	100%	73%	82%	73%	64%
	Number of nationalities		8	8	8	7	8	8
	Employees in senior and middle management³²							
	Women in senior and middle management		18%	17%	16%	18%	17%	15%
	Men in senior and middle management		82%	83%	84%	82%	83%	85%
	Total workforce (ABB employees)							
	Women in total workforce		24%	23%	23%	23%	23%	22%
	Men in total workforce		76%	77%	77%	77%	77%	78%

1 Reporting on lead in submarine cables is discontinued from 2018 due to the divestment of our high-voltage cables and cable accessories businesses in Q1 2017.

2 From 2018 we report all cadmium in batteries in one category. Data from 2013–2017 on cadmium in industrial and rechargeable batteries, respectively, have been summed up and are included here.

3 Data on inflow and outflow of SF₆ insulation gas have been restated for 2017, due to an error in the reporting from one site.

4 Biofuels were reported as a separate category in 2017. Biofuel consumption, total energy used and energy intensity have been restated for 2014–2016, since the use of biofuels was previously not reported at one of our large facilities.

5 Results for these indicators are based on reported data covering 94% of employees in 2018, 93% in 2017, 97% in 2016, 95% in 2015 and 93% in 2014, plus energy use per employee for the remaining employees pro rata. See the Approach to reporting section for more details.

6 Gas and electricity consumption and the associated greenhouse gas (GHG) emissions have been restated for 2014–2017, due to the correction of earlier conversion factor errors at one of our large facilities.

7 Includes sales from Power Grids division.

8 Water withdrawal from areas of water stress have been restated for 2013–2017, due to earlier errors in reporting of water for remediation projects at two sites.

9 See Approach to reporting chapter for more details on GHG emission calculation.

10 In 2019, we updated the factor used to convert SF₆ emissions to CO₂ equivalents to 23,500 kg CO₂e/kg SF₆, as recommended by the IPCC 2013 (Fifth Assessment Report), and we have applied that factor to SF₆ data reported for all years. SF₆ emissions for 2018 were restated from 155 kilotons to 164 kilotons due to a reporting error at a large manufacturing site.

11 For 2018 we use the same data as for 2017. For 2017 data see Approach to reporting; 2014–2016 data was estimated.

12 The air travel indicator included data from ABB Bulgaria, Croatia, Greece, Kazakhstan and Romania for the first time in 2016 and from ABB China and Thomas & Betts for the first time in 2014.

13 Data for air travel is calculated using the emission factors published by the UK Department for Business, Energy & Industrial Strategy in its "2018 Government GHG Conversion Factors for Company Reporting – Methodology Paper for Emission Factors – Final Report."

14 The GHG emissions intensity includes Scope 1&2 emissions. Includes sales from Power Grids.

15 VOC emissions for 2018 were restated from 882 tons to 936 tons due to a reporting error at a large manufacturing site.

16 Emissions of Chlorinated volatile organic compounds (VOC-Cl) are included in the Volatile organic compounds (VOC) reported in the line above.

17 Cooling water quality remains unchanged by its use at ABB and is discharged without treatment. Data for 2016 exceptionally included discharge of cooling water to recipient.

18 Hazardous waste as classified in the country where it is generated.

19 An environmental incident is regarded as significant if at least one of the following criteria applies to the incident: obligation to inform local authorities or a governmental agency about the incident and/or regulatory violation; inspection by an environmental agency results in a formal complaint; environmental Notice of Violation, a Consent Order or a Potential Responsible Party (PRP) notification; imposition of a penalty or fine; significant impact on an ecosystem; costs related to the incident exceed, or may exceed, \$10,000.

20 Includes GE Industrial Solutions acquired in 2018.

21 Includes part-time employees. Turnover rate calculated as number of ABB employees (full- and part-time) leaving during the year/total number of ABB employees (full- and part-time) as at December 31, 2020. For the purpose of this calculation, employees and external workforce who leave the organization voluntarily or involuntarily whether due to dismissal, retirement, end of

fixed-term contract or death in service or any other reason, are included. However, involuntary turnover arising out of divestments is excluded from the definition.

22 Fatalities include deaths occurring within one year as a result of injuries sustained and commuting is excluded.

23 Incident rates are according to the rate per 100 employees.

24 Data covers incidents that happened at workplace (ABB facility, customer site, project site) and excludes incidents that occurred during business travel.

25 Includes incidents during business travel by road. Air and rail travels are excluded.

26 Recordable incidents include fatal, lost time incidents, serious injury incidents, medical treatment injuries, occupational diseases and restricted work day cases.

27 Rate is calculated per employee.

28 SOT conducted by manager in 2019, in previous years by employees. Sustainability Observation Tour in 2019 and Safety Observation Tour previously.

29 Days lost are calendar days and are counted from the day after the incident.

30 Rate per manager in 2019 and per employee previously.

31 Eligible employees included in ABB HR system. Data covers previous year's cycle with completion by Q1 of the reporting year.

32 This indicator focuses on senior and middle management and includes employees in hay grades 1 to 10.

33 Does not include GE Industrial Solutions acquired in 2018. Total GHG emissions including GE Industrial Solutions was 998 kilotons.

34 Calculated for the first time for 2019.