



List of errata for the report 'Trends in global CO₂ and total greenhouse gas emissions; 2019 Report'

Date: 26 May 2020

Report Appendix A

Table A.2 CO₂ emissions per capita, per country and group, 1990–2018

Report Appendix B

Table B.5 Greenhouse gas emissions per capita, per country and group, 1990–2018

The tables A.2 and B.5 in Appendix A and B of the report with numbers for CO₂ per capita and total greenhouse gas emissions per capita, per country for 1990–2018 were incorrect due to an error in the population data used per country. All figures are revised and the correct per capita tables A.2 and B.5 are included here.

Dataset with spreadsheet tables presented in Appendix A and B of the report

Similarly, in the accompanying spreadsheet file the CO₂ per capita and total greenhouse gas emissions per capita tables A.2 and B.5 were revised.

In addition, in the spreadsheet file the scale units listed in the tables B.2 to B.4 for CH₄, N₂O and F-gas emissions were revised to 10⁹ kg CO₂ eq (instead of 10¹² kg CO₂ eq). We note that the unit MtCO₂ used in tables B.2 to B.4 in the report is correct.

New table:

Table A.2 CO₂ emissions per capita, per country and group, 1990–2018¹ (unit: tonnes of CO₂ per person)

CO ₂ emissions per capita, per country/group, 1990-2018 (unit: tonnes of CO ₂ per person)																														
Country/group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Country/group
China	2.1	2.1	2.2	2.4	2.5	2.7	2.7	2.7	2.8	2.7	2.9	3.0	3.2	3.7	4.2	4.7	5.2	5.7	5.8	6.2	6.7	7.3	7.4	7.7	7.7	7.7	7.7	7.8	China	
United States	20.1	19.7	19.9	20.1	20.2	20.2	20.5	20.9	20.7	20.5	21.0	20.6	20.1	20.2	20.3	20.2	19.6	19.7	18.9	17.4	18.0	17.4	16.7	16.8	16.9	16.3	15.9	15.7	16.0	United States
European Union	9.3	9.1	8.8	8.6	8.5	8.6	8.8	8.6	8.6	8.5	8.5	8.6	8.5	8.7	8.7	8.6	8.6	8.5	8.2	7.6	7.8	7.4	7.3	7.1	6.8	6.8	6.8	6.9	6.7	European Union
<i>France</i>	6.8	7.2	7.0	6.6	6.5	6.6	6.8	6.7	7.0	6.9	6.8	6.9	6.7	6.7	6.7	6.7	6.5	6.3	6.2	5.9	6.0	5.5	5.5	5.5	4.9	5.0	5.0	5.1	5.0	<i>France</i>
<i>Germany</i>	12.9	12.5	11.8	11.6	11.4	11.3	11.6	11.2	11.1	10.7	10.7	10.9	10.7	10.7	10.5	10.3	10.5	10.1	10.3	9.5	10.1	9.8	9.9	10.1	9.6	9.6	9.6	9.5	9.0	<i>Germany</i>
<i>Italy</i>	7.6	7.5	7.5	7.4	7.2	7.7	7.6	7.7	7.9	8.0	8.1	8.1	8.2	8.4	8.6	8.5	8.4	8.3	8.0	7.1	7.2	7.0	6.6	6.0	5.7	5.9	5.8	5.8	5.6	<i>Italy</i>
<i>Netherlands</i>	10.8	11.1	10.9	11.1	11.1	11.5	12.1	11.5	11.5	11.1	11.1	11.3	11.3	11.4	11.4	11.1	10.8	10.8	10.8	10.5	11.1	10.4	10.1	10.0	9.6	10.0	10.0	9.7	9.5	<i>Netherlands</i>
<i>Poland</i>	9.8	9.7	9.4	9.4	9.2	9.3	9.6	9.4	8.7	8.4	8.1	8.0	7.9	8.2	8.3	8.3	8.6	8.6	8.5	8.1	8.6	8.5	8.3	8.2	7.9	8.0	8.3	8.6	8.8	<i>Poland</i>
<i>Spain</i>	6.0	6.1	6.3	6.0	6.2	6.5	6.2	6.7	6.9	7.4	7.7	7.6	8.0	8.0	8.3	8.5	8.1	8.3	7.5	6.6	6.2	6.2	6.1	5.6	5.9	5.7	6.1	6.0	6.0	<i>Spain</i>
<i>United Kingdom</i>	10.2	10.3	10.1	9.8	9.6	9.5	9.8	9.3	9.3	9.2	9.3	9.5	9.2	9.4	9.4	9.3	9.2	8.9	8.6	7.7	7.9	7.2	7.5	7.2	6.6	6.3	5.9	5.7	5.5	<i>United Kingdom</i>
India	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.8	1.9	India
Russian Federation	16.0	15.7	14.4	13.1	11.6	11.3	11.0	10.3	10.3	10.7	10.9	11.0	10.9	11.3	11.4	11.3	11.7	11.7	11.7	10.9	11.6	12.2	12.2	11.8	11.7	11.7	11.5	11.5	11.8	Russian Federation
Japan	9.2	9.2	9.3	9.2	9.6	9.7	9.7	9.7	9.3	9.6	9.7	9.6	9.9	9.9	9.9	10.0	9.8	10.1	9.4	8.9	9.3	9.7	10.0	10.2	9.9	9.6	9.5	9.6	9.5	Japan
Other OECD G20	6.4	6.5	6.6	6.7	6.9	7.0	7.2	7.5	7.3	7.4	7.8	7.7	7.7	7.8	7.9	7.9	8.0	8.2	8.1	7.9	8.1	8.2	8.2	8.1	8.0	8.0	8.0	8.1	8.1	Other OECD G20
<i>Australia</i>	16.4	16.3	16.3	16.3	16.4	16.8	17.2	17.5	18.4	18.5	18.6	18.8	19.0	19.0	19.5	19.4	19.4	19.5	19.3	19.2	18.6	18.2	17.9	17.4	16.7	16.8	17.1	16.7	16.6	<i>Australia</i>
<i>Canada</i>	16.5	16.1	16.3	16.1	16.5	16.8	17.1	17.5	17.5	17.7	18.2	17.7	17.8	18.2	17.8	18.0	17.6	18.4	17.5	16.3	16.6	16.7	16.5	16.8	16.7	16.4	16.2	16.2	16.0	<i>Canada</i>
<i>Mexico</i>	3.5	3.6	3.6	3.6	3.8	3.6	3.7	3.8	4.0	3.8	4.0	3.9	4.0	4.1	4.1	4.2	4.3	4.3	4.3	4.1	4.2	4.2	4.2	4.0	4.0	4.0	4.0	4.0	3.9	<i>Mexico</i>
<i>South Korea</i>	6.3	6.8	7.2	7.8	8.3	8.9	9.4	9.8	8.3	9.0	10.2	10.4	10.3	10.3	10.7	10.6	10.7	10.9	11.1	11.2	12.1	12.6	12.6	12.4	12.3	12.6	12.7	13.1	13.5	<i>South Korea</i>
<i>Turkey</i>	2.8	2.8	2.8	2.9	2.8	3.0	3.3	3.4	3.4	3.3	3.6	3.2	3.3	3.5	3.5	3.6	4.0	4.3	4.3	4.2	4.3	4.5	4.6	4.4	4.6	4.7	4.9	5.1	5.0	<i>Turkey</i>
Other G20 countries	2.4	2.4	2.4	2.4	2.5	2.6	2.7	2.8	2.9	2.9	2.9	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.4	3.6	3.6	3.7	3.8	4.0	3.9	3.8	3.8	3.8	3.8	Other G20 countries
<i>Argentina</i>	3.5	3.5	3.6	3.5	3.8	3.7	4.0	4.1	4.1	4.2	4.1	3.8	3.5	3.8	4.2	4.3	4.5	4.6	4.9	4.6	4.7	4.8	4.9	4.8	4.9	4.9	4.9	4.8	4.7	<i>Argentina</i>
<i>Brazil</i>	1.5	1.6	1.6	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.2	2.0	2.3	2.4	2.5	2.7	2.8	2.6	2.4	2.4	2.4	<i>Brazil</i>
<i>Indonesia</i>	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	<i>Indonesia</i>
<i>Saudi Arabia</i>	10.7	10.6	11.0	11.3	11.9	11.6	12.0	11.9	12.4	12.8	12.9	13.4	13.6	13.9	14.3	14.7	15.1	16.0	16.4	17.4	17.7	18.3	18.2	18.9	19.2	18.7	18.4	17.8	17.8	<i>Saudi Arabia</i>
<i>South Africa</i>	8.5	8.1	7.7	7.6	7.6	7.8	7.9	8.1	8.1	7.6	7.7	7.8	8.0	8.4	8.9	9.1	9.0	9.3	9.8	9.0	9.1	8.6	8.7	8.8	8.9	8.6	8.6	8.3	8.3	<i>South Africa</i>
Total Group of Twenty (G20)	5.0	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0	4.9	5.1	5.1	5.1	5.3	5.5	5.6	5.8	6.0	5.9	5.8	6.1	6.2	6.3	6.3	6.3	6.3	6.2	6.2	6.3	Total Group of Twenty (G20)
Other large emitting countries	3.9	3.9	3.8	3.5	3.4	3.4	3.3	3.3	3.2	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0	4.1	4.2	4.0	4.1	4.1	4.1	4.2	4.1	4.0	4.1	4.1	4.2	Other large emitting countries
<i>Egypt</i>	1.6	1.6	1.7	1.6	1.5	1.6	1.7	1.7	1.8	1.9	1.8	2.0	2.0	2.0	2.1	2.3	2.4	2.6	2.5	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.6	<i>Egypt</i>
<i>Iran</i>	3.6	3.9	4.1	4.0	4.5	4.5	4.7	4.8	4.7	5.1	5.4	5.5	5.7	5.9	6.3	6.7	7.1	7.5	7.6	7.8	7.7	7.8	7.8	8.0	8.2	7.9	8.0	8.4	8.7	<i>Iran</i>
<i>Kazakhstan</i>	15.5	16.0	16.3	14.1	12.7	11.3	10.0	8.8	9.0	8.4	8.5	8.2	8.9	9.9	10.7	11.2	12.5	13.1	15.4	13.6	14.6	15.3	15.8	16.4	15.4	14.7	14.8	15.1	16.9	<i>Kazakhstan</i>
<i>Malaysia</i>	3.2	3.7	3.8	4.1	4.3	4.5	5.0	5.2	5.1	5.4	5.8	5.9	6.2	6.4	6.8	7.1	7.3	7.8	8.1	7.2	7.7	7.6	7.6	8.0	8.4	8.3	8.0	7.8	8.1	<i>Malaysia</i>
<i>Nigeria</i>	0.8	0.8	0.9	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	<i>Nigeria</i>
<i>Taiwan</i>	6.1	6.5	6.8	7.2	7.6	7.9	8.3	8.9	9.3	9.7	10.5	10.6	10.9	11.3	11.6	11.9	12.1	12.2	11.7	11.0	11.7	11.7	11.3	11.3	11.3	11.2	11.5	11.9	11.9	<i>Taiwan</i>
<i>Thailand</i>	1.6	1.8	2.0	2.2	2.4	2.7	3.0	3.1	2.7	2.8	2.7	2.8	3.0	3.1	3.4	3.5	3.6	3.6	3.5	3.7	3.6	3.9	4.0	3.9	4.0	3.9	4.0	4.0	4.0	<i>Thailand</i>
<i>Ukraine</i>	15.2	14.4	12.6	11.0	9.2	9.1	7.8	7.6	7.3	7.3	7.4	7.5	8.0	7.7	7.6	7.6	7.6	7.8	7.5	6.3	6.7	7.1	7.0	6.8	5.9	4.8	5.0	4.4	4.4	<i>Ukraine</i>
<i>United Arab Emirates</i>	31.1	33.4	30.5	30.3	31.6	32.1	31.9	31.6	30.8	30.1	28.2	30.6	29.7	29.3	28.3	26.7	24.0	22.2	23.2	20.9	20.1	19.7	20.3	21.3	21.5	21.8	22.3	21.8	22.1	<i>United Arab Emirates</i>
<i>Viet Nam</i>	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.8	0.9	1.1	1.2	1.2	1.3	1.4	1.6	1.8	1.7	1.7	1.8	1.9	2.2	2.4	2.4	2.7	<i>Viet Nam</i>
<i>Zambia</i>	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	<i>Zambia</i>
Remaining countries (186)	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.5	1.5	Remaining countries (186)
International transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	International transport
Total	4.3	4.2	4.2	4.1	4.1	4.1	4.2	4.2	4.1	4.1	4.2	4.2	4.2	4.4	4.5	4.6	4.7	4.8	4.8	4.7	4.9	5.0	5.0	5.0	5.0	5.0	4.9	4.9	5.0	Total

¹ Available for all countries on <http://edgar.irc.ec.europa.eu/overview.php?v=CO2ts1990-2018>. Totals and sub-totals may differ due to independent rounding. The number of digits does not indicate the accuracy of the figures, See uncertainty information in the Appendix.

Old table:

Table B.5 Greenhouse gas emissions per capita, per country and group, 1990–2018² (unit: tonnes of CO₂ eq per person)

Total greenhouse gas emissions per capita, per country/group, 1990–2018 (unit: kg CO ₂ eq per person)																															
Country/group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Country/group	
China	3.3	3.4	3.4	3.6	3.7	4.0	4.0	3.9	4.0	3.9	4.1	4.2	4.4	4.9	5.6	6.2	6.7	7.2	7.3	7.7	8.2	8.9	9.0	9.3	9.4	9.3	9.3	9.4	China		
United States	24.0	23.6	23.7	23.9	24.1	24.0	24.3	24.8	24.5	24.3	24.7	24.4	23.6	23.8	23.9	23.7	23.3	23.5	22.8	21.2	22.0	21.3	20.7	20.9	21.1	20.5	20.1	19.9	20.3	United States	
European Union	12.0	11.8	11.4	11.2	11.1	11.1	11.4	11.2	11.0	10.8	10.8	10.8	10.7	10.8	10.8	10.7	10.7	10.6	10.3	9.6	9.9	9.5	9.4	9.2	8.8	8.9	8.8	8.9	8.7	European Union	
France	9.6	9.9	9.7	9.3	9.1	9.2	9.4	9.2	9.4	9.2	9.1	9.1	8.9	8.9	8.9	8.8	8.6	8.5	8.3	8.0	8.2	7.6	7.6	7.6	7.0	7.1	7.0	7.1	7.0	France	
Germany	15.7	15.3	14.4	14.1	13.9	13.8	14.1	13.6	13.2	12.7	12.7	12.8	12.6	12.6	12.5	12.2	12.4	12.1	12.2	11.3	12.1	11.7	11.8	12.0	11.4	11.5	11.4	11.3	10.8	Germany	
Italy	9.0	9.0	8.9	8.8	8.7	9.1	9.1	9.2	9.5	9.6	9.7	9.6	9.7	10.0	10.0	10.0	9.8	9.6	9.3	8.4	8.6	8.3	8.0	7.4	7.0	7.2	7.1	7.1	6.9	Italy	
Netherlands	14.7	14.9	14.7	14.8	14.7	15.0	15.7	15.3	15.0	14.5	14.3	14.2	13.9	14.0	14.0	13.8	13.6	13.6	13.2	12.8	13.4	12.6	12.6	12.4	11.9	12.3	12.3	11.9	11.7	Netherlands	
Poland	13.5	13.3	12.8	12.7	12.4	12.4	12.8	12.5	11.5	11.3	10.8	10.6	10.4	10.7	10.7	10.8	11.1	11.1	10.9	10.5	11.0	11.0	10.8	10.7	10.4	10.5	10.8	11.0	11.2	Poland	
Spain	7.6	7.8	8.0	7.6	7.8	8.2	8.0	8.5	8.7	9.2	9.5	9.4	9.8	9.8	10.0	10.2	9.9	10.0	9.2	8.3	7.9	7.9	7.8	7.2	7.2	7.5	7.4	7.7	7.6	Spain	
United Kingdom	14.1	14.3	14.0	13.6	13.6	13.4	13.8	13.3	13.2	12.7	12.6	12.7	12.3	12.4	12.2	12.0	12.0	11.7	11.1	10.0	10.2	9.5	9.7	9.4	8.8	8.5	8.1	7.9	7.7	United Kingdom	
India	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.6	2.6	2.6	2.7	India	
Russian Federation	20.3	19.9	17.9	16.4	14.6	14.2	13.7	13.3	12.5	13.5	13.6	13.8	13.9	13.5	14.9	14.6	15.2	15.3	15.0	14.2	14.9	15.8	15.8	15.7	15.6	15.5	15.5	15.7	16.5	Russian Federation	
Japan	10.4	10.4	10.5	10.4	10.8	11.1	11.1	11.0	10.6	10.8	10.9	10.7	11.0	11.0	11.0	10.9	11.3	10.6	10.1	10.6	11.0	11.4	11.6	11.4	11.1	11.0	11.1	11.0	11.1	Japan	
Other OECD G20	6.7	6.7	6.8	6.9	7.1	7.2	8.0	8.3	7.8	6.9	6.9	6.8	6.9	9.2	8.0	9.6	8.3	8.8	9.7	9.1	10.2	7.3	7.4	9.0	9.0	9.0	9.3	9.2	Other OECD G20		
Australia	4.7	4.7	4.7	4.7	4.8	4.9	6.1	6.5	6.0	4.1	3.7	3.8	4.0	9.8	5.7	11.1	5.9	6.8	10.4	8.7	14.2	4.0	4.0	10.1	7.0	6.8	6.6	6.9	6.8	Australia	
Canada	21.3	20.9	21.3	21.2	21.9	21.8	22.6	23.0	20.2	22.2	23.5	23.1	21.6	22.9	22.2	23.2	22.8	23.4	22.6	21.4	21.2	21.8	21.7	20.8	21.1	21.8	21.5	21.7	21.7	Canada	
Mexico	5.4	5.5	5.5	5.6	5.8	5.7	5.9	6.1	6.2	6.1	6.3	6.2	6.2	6.4	6.5	6.5	6.7	6.7	6.6	6.7	6.6	6.5	6.7	6.5	6.4	6.3	6.3	6.4	6.2	Mexico	
South Korea	7.5	8.0	8.4	9.0	9.5	10.2	10.8	11.2	9.7	10.5	11.7	11.8	11.6	11.5	11.9	11.8	11.9	12.1	12.2	12.3	13.2	13.7	13.7	13.5	13.4	13.7	13.8	14.2	14.6	South Korea	
Turkey	4.1	4.1	4.2	4.2	4.1	4.3	4.6	4.7	4.7	4.7	5.0	4.6	4.7	4.8	4.8	4.9	5.4	5.7	5.7	5.6	5.8	6.1	6.5	6.4	6.8	7.0	7.5	7.9	8.0	Turkey	
Other G20 countries	4.6	4.6	4.6	4.7	4.8	4.8	4.9	5.0	4.8	4.9	4.9	4.9	5.0	5.2	5.4	5.4	5.6	5.5	5.8	5.7	5.7	6.0	6.0	6.2	6.3	6.2	6.1	6.2	6.2	Other G20 countries	
Argentina	7.6	7.4	7.4	7.5	7.8	7.4	7.7	7.4	7.2	7.2	6.4	5.5	6.5	6.8	8.2	8.3	8.7	9.0	8.9	8.3	8.6	8.5	8.7	8.5	8.3	8.5	8.5	8.5	8.4	Argentina	
Brazil	4.1	4.1	4.2	4.3	4.4	4.5	4.5	4.6	4.4	4.5	4.8	4.8	4.7	5.0	5.1	5.0	5.2	4.8	5.3	5.3	5.1	5.6	5.4	5.9	5.8	5.7	5.5	5.6	5.6	Brazil	
Indonesia	2.3	2.4	2.5	2.6	2.5	2.6	2.7	2.8	2.7	2.7	2.7	2.7	2.8	2.9	2.9	2.9	3.0	3.1	3.0	3.1	3.2	3.2	3.4	3.4	3.5	3.5	3.5	3.6	3.7	Indonesia	
Saudi Arabia	15.0	14.7	14.7	14.4	15.9	15.2	15.7	15.5	15.8	15.5	15.9	16.0	16.4	16.8	17.1	17.6	18.0	18.3	19.2	19.4	20.5	20.8	21.6	21.4	22.0	22.4	21.9	21.5	21.0	Saudi Arabia	
South Africa	9.5	9.1	8.8	8.7	8.7	8.9	9.0	9.3	9.1	8.8	8.8	8.8	8.9	9.6	10.3	9.9	10.3	10.5	10.8	10.1	10.0	9.6	9.9	10.0	10.1	9.7	9.6	9.4	9.3	South Africa	
Total Group of Twenty (G20)	6.7	6.6	6.5	6.5	6.5	6.6	6.7	6.6	6.5	6.4	6.5	6.5	6.5	6.9	7.1	7.3	7.4	7.6	7.6	7.5	7.8	7.8	7.8	8.1	8.1	8.0	7.9	8.0	8.1	Total Group of Twenty (G20)	
Other large emitting countries	5.8	5.8	5.6	5.3	5.1	5.1	5.0	4.9	4.6	4.7	4.8	4.8	4.8	5.0	5.1	5.2	5.4	5.5	5.6	5.4	5.5	5.6	5.6	5.7	5.5	5.4	5.4	5.5	5.6	Other large emitting countries	
Egypt	2.6	2.7	2.7	2.7	2.6	2.7	2.8	2.8	2.8	2.9	2.8	3.0	3.0	3.0	3.2	3.4	3.6	3.7	3.7	3.7	3.6	3.7	3.7	3.6	3.5	3.5	3.5	3.5	3.5	Egypt	
Iran	6.5	6.8	7.0	6.6	7.4	7.2	7.3	7.3	6.9	7.3	7.5	7.6	7.7	8.2	8.7	9.2	9.7	10.1	10.0	10.2	10.2	10.2	10.2	10.3	10.5	10.4	10.6	10.9	11.2	Iran	
Kazakhstan	21.5	21.8	16.4	14.4	12.8	11.3	10.2	8.5	8.5	9.0	9.3	9.0	6.1	9.7	9.1	9.7	10.1	14.1	14.0	14.9	12.4	17.5	18.1	21.1	16.8	15.9	15.8	16.4	17.8	Kazakhstan	
Malaysia	5.3	5.9	5.9	6.5	6.6	6.9	7.4	7.6	7.5	7.7	8.0	8.0	8.4	8.6	9.0	9.4	9.5	10.0	10.4	9.4	9.8	9.7	9.7	10.3	10.6	10.5	10.2	10.2	10.4	Malaysia	
Nigeria	3.2	3.3	3.3	3.3	3.1	3.2	3.4	3.0	2.6	2.4	2.4	2.4	2.1	2.3	2.2	2.1	2.0	1.9	1.9	1.7	1.8	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.6	Nigeria	
Taiwan	6.9	7.3	7.7	8.1	8.4	8.8	9.2	9.8	10.2	10.6	11.5	11.6	12.0	12.4	12.7	12.9	13.2	13.3	12.8	12.0	12.7	12.6	12.2	12.2	12.2	12.2	12.4	12.8	12.8	Taiwan	
Thailand	3.6	3.8	4.0	4.2	4.4	4.6	4.9	4.9	4.4	4.5	4.4	4.6	4.7	4.8	5.1	5.2	5.3	5.4	5.5	5.4	5.7	5.7	5.9	6.0	5.8	5.7	5.6	5.8	5.8	Thailand	
Ukraine	18.4	17.4	15.6	13.9	11.8	11.5	10.1	9.7	9.3	9.3	9.3	9.3	9.5	10.1	9.7	9.6	9.6	9.8	9.6	8.2	8.7	9.2	9.1	8.9	7.9	6.6	6.9	6.2	6.3	Ukraine	
United Arab Emirates	43.6	47.3	43.8	43.7	44.2	44.2	43.8	42.4	40.6	39.2	37.0	39.4	37.8	37.4	35.8	33.7	30.4	27.8	28.2	25.3	24.4	24.0	24.7	25.8	26.0	26.6	27.1	26.5	26.9	United Arab Emirates	
Viet Nam	1.5	1.5	1.5	1.5	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.0	2.2	2.2	2.5	2.6	2.6	2.8	2.9	3.1	3.2	3.2	3.1	3.2	3.3	3.6	3.8	3.8	4.1	Viet Nam	
Zambia	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.9	0.8	0.8	0.8	0.9	0.8	0.8	0.9	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.1	Zambia	
Remaining countries (186)	2.8	2.7	2.7	2.6	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.9	2.9	2.9	2.8	2.8	2.8	2.9	Remaining countries (186)
International transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	International transport	
Total	5.7	5.7	5.6	5.5	5.5	5.6	5.6	5.6	5.4	5.4	5.5	5.4	5.5	5.7	5.8	6.0	6.1	6.2	6.2	6.1	6.3	6.4	6.4	6.6	6.6	6.5	6.4	6.4	6.5	Total	

² The number of digits does not indicate the accuracy of the figures, See uncertainty information in the Appendix. Calculated using the Global Warming Potentials (GWPs) for 100 year from the IPCC's Fourth Assessment Report (AR4).

New table:

Table B.5 Greenhouse gas emissions per capita, per country and group, 1990–2018³ (unit: tonnes of CO₂ eq per person)

CO ₂ emissions per capita, per country/group, 1990–2018 (unit: tonnes of CO ₂ eq per person)																														
Country/group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Country/group
China	2.1	2.1	2.2	2.4	2.5	2.7	2.7	2.7	2.8	2.7	2.9	3.0	3.2	3.7	4.2	4.7	5.2	5.7	5.8	6.2	6.7	7.3	7.4	7.7	7.7	7.7	7.7	7.7	7.8	China
United States	20.1	19.7	19.9	20.1	20.2	20.2	20.5	20.9	20.7	20.5	21.0	20.6	20.1	20.2	20.3	20.2	19.6	19.7	18.9	17.4	18.0	17.4	16.7	16.8	16.9	16.3	15.9	15.7	16.0	United States
European Union	9.3	9.1	8.8	8.6	8.5	8.6	8.8	8.6	8.6	8.5	8.6	8.5	8.5	8.7	8.7	8.6	8.6	8.5	8.2	7.6	7.8	7.4	7.3	7.1	6.8	6.8	6.8	6.9	6.7	European Union
<i>France</i>	6.8	7.2	7.0	6.6	6.5	6.6	6.8	6.7	7.0	6.9	6.8	6.9	6.7	6.7	6.7	6.7	6.5	6.3	6.2	5.9	6.0	5.5	5.5	5.5	4.9	5.0	5.0	5.1	5.0	<i>France</i>
<i>Germany</i>	12.9	12.5	11.8	11.6	11.4	11.3	11.6	11.2	11.1	10.7	10.7	10.9	10.7	10.7	10.5	10.3	10.5	10.1	10.3	9.5	10.1	9.8	9.9	10.1	9.6	9.6	9.6	9.5	9.0	<i>Germany</i>
<i>Italy</i>	7.6	7.5	7.5	7.4	7.2	7.7	7.6	7.7	7.9	8.0	8.1	8.1	8.2	8.4	8.6	8.5	8.4	8.3	8.0	7.1	7.2	7.0	6.6	6.0	5.7	5.9	5.8	5.8	5.6	<i>Italy</i>
<i>Netherlands</i>	10.8	11.1	10.9	11.1	11.1	11.5	12.1	11.5	11.5	11.1	11.1	11.3	11.3	11.4	11.4	11.1	10.8	10.8	10.8	10.5	11.1	10.4	10.1	10.0	9.6	10.0	10.0	9.7	9.5	<i>Netherlands</i>
<i>Poland</i>	9.8	9.7	9.4	9.4	9.2	9.3	9.6	9.4	8.7	8.4	8.1	8.0	7.9	8.2	8.3	8.3	8.6	8.6	8.5	8.1	8.6	8.5	8.3	8.2	7.9	8.0	8.3	8.6	8.8	<i>Poland</i>
<i>Spain</i>	6.0	6.1	6.3	6.0	6.2	6.5	6.2	6.7	6.9	7.4	7.7	7.6	8.0	8.0	8.3	8.5	8.1	8.3	7.5	6.6	6.2	6.2	6.1	5.6	5.6	5.9	5.7	6.1	6.0	<i>Spain</i>
<i>United Kingdom</i>	10.2	10.3	10.1	9.8	9.6	9.5	9.8	9.3	9.3	9.2	9.3	9.5	9.2	9.4	9.4	9.3	9.2	8.9	8.6	7.7	7.9	7.2	7.5	7.2	6.6	6.3	5.9	5.7	5.5	<i>United Kingdom</i>
India	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.8	1.9	India
Russian Federation	16.0	15.7	14.4	13.1	11.6	11.3	11.0	10.3	10.3	10.7	10.9	11.0	10.9	11.3	11.4	11.3	11.7	11.7	11.7	10.9	11.6	12.2	12.2	11.8	11.7	11.7	11.5	11.5	11.8	Russian Federation
Japan	9.2	9.2	9.3	9.2	9.6	9.7	9.7	9.7	9.3	9.6	9.7	9.6	9.9	9.9	9.9	10.0	9.8	10.1	9.4	8.9	9.3	9.7	10.0	10.2	9.9	9.6	9.5	9.6	9.5	Japan
Other OECD G20	6.4	6.5	6.6	6.7	6.9	7.0	7.2	7.5	7.3	7.4	7.8	7.7	7.7	7.7	7.8	7.9	7.9	8.0	8.2	8.1	7.9	8.1	8.2	8.2	8.1	8.0	8.0	8.1	8.1	Other OECD G20
<i>Australia</i>	16.4	16.3	16.3	16.3	16.4	16.8	17.2	17.5	18.4	18.5	18.6	18.8	19.0	19.0	19.5	19.4	19.4	19.5	19.3	19.2	18.6	18.2	17.9	17.4	16.7	16.8	17.1	16.7	16.6	<i>Australia</i>
<i>Canada</i>	16.5	16.1	16.3	16.1	16.5	16.8	17.1	17.5	17.5	17.7	18.2	17.7	17.8	18.2	17.8	18.0	17.6	18.4	17.5	16.3	16.6	16.7	16.5	16.8	16.7	16.4	16.2	16.2	16.0	<i>Canada</i>
<i>Mexico</i>	3.5	3.6	3.6	3.6	3.8	3.6	3.7	3.8	4.0	3.8	4.0	3.9	4.0	4.1	4.1	4.2	4.3	4.3	4.3	4.1	4.2	4.2	4.3	4.1	4.0	4.0	4.0	4.0	3.9	<i>Mexico</i>
<i>South Korea</i>	6.3	6.8	7.2	7.8	8.3	8.9	9.4	9.8	8.3	9.0	10.2	10.4	10.3	10.3	10.7	10.6	10.7	10.9	11.1	11.2	12.1	12.6	12.4	12.3	12.6	12.7	13.1	12.7	13.1	<i>South Korea</i>
<i>Turkey</i>	2.8	2.8	2.8	2.9	2.8	3.0	3.3	3.4	3.4	3.3	3.6	3.2	3.3	3.5	3.5	3.6	4.0	4.3	4.3	4.2	4.3	4.5	4.6	4.4	4.6	4.7	4.9	5.1	5.0	<i>Turkey</i>
Other G20 countries	2.4	2.4	2.4	2.4	2.5	2.6	2.7	2.8	2.9	2.9	2.9	2.9	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.4	3.6	3.6	3.7	3.8	4.0	3.9	3.8	3.8	3.8	Other G20 countries
<i>Argentina</i>	3.5	3.5	3.6	3.5	3.8	3.7	4.0	4.1	4.1	4.2	4.1	3.8	3.5	3.8	4.2	4.3	4.5	4.6	4.9	4.6	4.7	4.8	4.9	4.8	4.9	4.9	4.9	4.8	4.7	<i>Argentina</i>
<i>Brazil</i>	1.5	1.6	1.6	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.2	2.0	2.3	2.4	2.5	2.7	2.8	2.6	2.4	2.4	2.4	<i>Brazil</i>
<i>Indonesia</i>	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	<i>Indonesia</i>
<i>Saudi Arabia</i>	10.7	10.6	11.0	11.3	11.9	11.6	12.0	11.9	12.4	12.4	12.8	12.9	13.4	13.6	13.9	14.3	14.7	15.1	16.0	16.4	17.4	17.7	18.3	18.2	18.9	19.2	18.7	18.4	17.8	<i>Saudi Arabia</i>
<i>South Africa</i>	8.5	8.1	7.7	7.6	7.6	7.8	7.9	8.1	8.1	7.6	7.7	7.8	8.0	8.4	8.9	9.1	9.0	9.3	9.8	9.0	9.1	8.6	8.7	8.8	8.9	8.6	8.6	8.3	8.3	<i>South Africa</i>
Total Group of Twenty (G20)	5.0	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0	4.9	5.1	5.1	5.1	5.3	5.5	5.6	5.8	6.0	5.9	5.8	6.1	6.2	6.3	6.3	6.3	6.3	6.2	6.2	6.3	Total Group of Twenty (G20)
Other large emitting countries	3.9	3.9	3.8	3.5	3.4	3.4	3.3	3.3	3.2	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0	4.1	4.2	4.0	4.1	4.1	4.1	4.2	4.1	4.0	4.1	4.1	4.2	Other large emitting countries
<i>Egypt</i>	1.6	1.6	1.7	1.6	1.5	1.6	1.7	1.7	1.8	1.9	1.8	2.0	2.0	2.0	2.1	2.3	2.4	2.6	2.5	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.6	<i>Egypt</i>
<i>Iran</i>	3.6	3.9	4.1	4.0	4.5	4.5	4.7	4.8	4.7	5.1	5.4	5.5	5.7	5.9	6.3	6.7	7.1	7.5	7.6	7.8	7.7	7.8	8.0	8.2	7.9	8.0	8.4	8.7	8.7	<i>Iran</i>
<i>Kazakhstan</i>	15.5	16.0	16.3	14.1	12.7	11.3	10.0	8.8	9.0	8.4	8.5	8.2	8.9	9.9	10.7	11.2	12.5	13.1	15.4	13.6	14.6	15.3	15.8	16.4	15.4	14.7	14.8	15.1	16.9	<i>Kazakhstan</i>
<i>Malaysia</i>	3.2	3.7	3.8	4.1	4.3	4.5	5.0	5.2	5.1	5.4	5.8	5.9	6.2	6.4	6.8	7.1	7.3	7.8	8.1	7.2	7.7	7.6	7.6	8.0	8.4	8.3	8.0	7.8	8.1	<i>Malaysia</i>
<i>Nigeria</i>	0.8	0.8	0.9	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	<i>Nigeria</i>
<i>Taiwan</i>	6.1	6.5	6.8	7.2	7.6	7.9	8.3	8.9	9.3	9.7	10.5	10.6	10.9	11.3	11.6	11.9	12.1	12.2	11.7	11.0	11.7	11.7	11.3	11.3	11.2	11.5	11.9	11.9	11.9	<i>Taiwan</i>
<i>Thailand</i>	1.6	1.8	2.0	2.2	2.4	2.7	3.0	3.1	2.7	2.8	2.7	2.8	3.0	3.1	3.4	3.5	3.5	3.6	3.6	3.5	3.7	3.6	3.9	4.0	3.9	4.0	3.9	4.0	4.0	<i>Thailand</i>
<i>Ukraine</i>	15.2	14.4	12.6	11.0	9.2	9.1	7.8	7.6	7.3	7.3	7.3	7.4	7.5	8.0	7.7	7.6	7.6	7.8	7.5	6.3	6.7	7.1	7.0	6.8	5.9	4.8	5.0	4.4	4.4	<i>Ukraine</i>
<i>United Arab Emirates</i>	31.1	33.4	30.5	30.3	31.6	32.1	31.9	31.6	30.8	30.1	28.2	30.6	29.7	29.3	28.3	26.7	24.0	22.2	23.2	20.9	20.1	19.7	20.3	21.3	21.5	21.8	22.3	21.8	22.1	<i>United Arab Emirates</i>
<i>Viet Nam</i>	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.9	0.9	1.1	1.2	1.3	1.4	1.6	1.8	1.7	1.7	1.8	1.9	2.2	2.4	2.4	2.7	2.7	<i>Viet Nam</i>
<i>Zambia</i>	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	<i>Zambia</i>
Remaining countries (186)	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.5	1.5	Remaining countries (186)
International transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	International transport
Total	4.3	4.2	4.2	4.1	4.1	4.1	4.2	4.2	4.1	4.1	4.2	4.2	4.2	4.4	4.5	4.6	4.7	4.8	4.8	4.7	4.9	5.0	5.0	5.0	5.0	5.0	4.9	4.9	5.0	Total

³ The number of digits does not indicate the accuracy of the figures, See uncertainty information in the Appendix. Calculated using the Global Warming Potentials (GWPs) for 100 year from the IPCC's Fourth Assessment Report (AR4).

Revisions in the accompanying dataset:

Dataset with spreadsheet tables presented in Appendix A and B of the report

Table type:	variable:		years:	table in report:	
Top-30 landen/ <i>countries</i>	CO2 emissions		1970-2018	Table A.1	
Top-30 landen/ <i>countries</i>	CO2 emissions/capita corrected		1970-2018	Table A.2	updated
Top-30 landen/ <i>countries</i>	CO2 emissions/US\$ of GDP		1990-2018	Table A.3	
Top-30 landen/ <i>countries</i>	GHG emissions		1970-2018	Table B.1	
Top-30 landen/ <i>countries</i>	GHG emissions/capita corrected		1970-2018	Table B.5	updated
Top-30 landen/ <i>countries</i>	GHG emissions/US\$ of GDP		1990-2018	Table B.6	
Top-30 landen/ <i>countries</i>	CH4 emissions		1970-2018	Table B.2	unit revised
Top-30 landen/ <i>countries</i>	N2O emissions		1970-2018	Table B.3	unit revised
Top-30 landen/ <i>countries</i>	F-gas emissions		1970-2018	Table B.4	unit revised

The revised per capita tables A.2 and B.5 are included.

In addition, in this spreadsheet file the scale units listed in the tables B.2 to B.4 for CH₄, N₂O and F-gas emissions were revised to 10⁹ kg CO₂ eq (instead of 10¹² kg CO₂ eq).

We note that the unit MtCO₂ used in tables B.2 to B.4 in the report is correct.