

reference values selected scenariotype: RM-3 lin	target year 2030		target year 2050		emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Afghanistan		541%	193%	-100%	-100%	11.00	0.29
Albania		-52%	-31%	-100%	-100%	5.66	1.96
Algeria		27%	-26%	-100%	-100%	180.57	4.19
Angola		81%	-14%	-100%	-100%	25.82	0.81
Anguilla		131%	-41%	-100%	-100%	0.02	1.58
Antigua and Barbuda		5%	-34%	-100%	-100%	0.51	5.25
Argentina		-13%	-51%	-100%	-100%	199.41	4.45
Armenia		-84%	-26%	-100%	-100%	5.92	2.00
Aruba		17%	-30%	-100%	-100%	0.78	7.37
Australia		-35%	-56%	-100%	-100%	433.38	17.20
Austria		-49%	-58%	-100%	-100%	72.36	8.08
Azerbaijan		-68%	-29%	-100%	-100%	35.98	3.58
Bahamas		-27%	-37%	-100%	-100%	2.45	6.29
Bahrain		23%	-49%	-100%	-100%	35.44	21.59
Bangladesh		569%	62%	-100%	-100%	110.16	0.68
Barbados		109%	-30%	-100%	-100%	3.83	13.33
Belarus		-73%	-56%	-100%	-100%	66.34	7.02
Belgium		-61%	-61%	-100%	-100%	104.41	9.05
Belize		46%	8%	-100%	-100%	0.37	0.95
Benin		1593%	38%	-100%	-100%	8.15	0.69
Bermuda		-52%	-55%	-100%	-100%	0.35	5.60
Bhutan		426%	-17%	-100%	-100%	2.12	2.78
Bolivia		107%	-9%	-100%	-100%	24.51	2.13
Bosnia and Herzegovina		-41%	-35%	-100%	-100%	33.50	10.15
Botswana		26%	2%	-100%	-100%	7.04	3.06
Brazil		14%	-42%	-100%	-100%	478.15	2.27
British Virgin Islands		121%	-18%	-100%	-100%	0.12	4.05
Brunei		-12%	-60%	-100%	-100%	7.02	16.20
Bulgaria		-76%	-60%	-100%	-100%	43.31	6.19
Burkina Faso		1992%	324%	-100%	-100%	3.64	0.18
Burundi		1716%	1582%	-100%	-100%	0.34	0.03
Cabo Verde		1099%	76%	-100%	-100%	1.02	1.86
Cambodia		2816%	137%	-100%	-100%	16.49	1.00
Cameroon		156%	60%	-100%	-100%	10.10	0.39
Canada		-46%	-57%	-100%	-100%	584.85	15.63
Cayman Islands		23%	-36%	-100%	-100%	0.40	6.20
Central African Republic		979%	387%	-100%	-100%	0.49	0.10
Chad		1929%	1206%	-100%	-100%	0.89	0.06
Chile		28%	-42%	-100%	-100%	89.89	4.74
China		111%	-45%	-100%	-100%	11,535.20	8.05
Colombia		-3%	-24%	-100%	-100%	86.55	1.72
Comoros		626%	165%	-100%	-100%	0.21	0.25
Congo		68%	-24%	-100%	-100%	5.80	1.08
Cook Islands		-46%	-60%	-100%	-100%	0.04	2.50
Costa Rica		78%	-28%	-100%	-100%	8.98	1.78
Côte d'Ivoire		350%	80%	-100%	-100%	13.56	0.53
Croatia		-64%	-58%	-100%	-100%	19.12	4.63
Cuba		-58%	-53%	-100%	-100%	31.04	2.74
Curaçao		-56%	-61%	-100%	-100%	5.91	36.19
Cyprus		-26%	-58%	-100%	-100%	7.41	6.19
Czechia		-72%	-62%	-100%	-100%	105.69	9.89
Democratic Republic of the Congo		739%	846%	-100%	-100%	2.98	0.03
Denmark		-73%	-71%	-100%	-100%	31.12	5.39
Djibouti		-34%	-35%	-100%	-100%	1.05	1.08
Dominica		98%	-21%	-100%	-100%	0.10	1.44
Dominican Republic		79%	-33%	-100%	-100%	27.28	2.54
Ecuador		24%	-42%	-100%	-100%	40.70	2.34
Egypt		48%	-37%	-100%	-100%	255.37	2.54
El Salvador		86%	-27%	-100%	-100%	7.15	1.11
Equatorial Guinea		1774%	-58%	-100%	-100%	3.47	2.56
Eritrea		562%	200%	-100%	-100%	0.75	0.21

reference values selected scenariotype: RM-3 lin	target year 2030		target year 2050		emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Estonia		-80%	-65%	-100%	-100%	18.50	13.96
Eswatini		37%	-60%	-100%	-100%	1.14	1.00
Ethiopia		1694%	523%	-100%	-100%	18.25	0.16
Falkland Islands		6%	-41%	-100%	-100%	0.03	9.40
Faroese		993%	765%	-100%	-100%	0.00	0.04
Fiji		-19%	-31%	-100%	-100%	1.36	1.53
Finland		-67%	-71%	-100%	-100%	43.41	7.85
France and Monaco		-62%	-61%	-100%	-100%	314.74	4.83
French Guiana		-9%	-36%	-100%	-100%	0.61	2.10
French Polynesia		-61%	-63%	-100%	-100%	0.60	2.15
Gabon		-66%	-65%	-100%	-100%	3.48	1.60
Georgia		-81%	7%	-100%	-100%	13.47	3.37
Germany		-70%	-62%	-100%	-100%	702.60	8.41
Ghana		415%	44%	-100%	-100%	16.84	0.55
Gibraltar		101%	-39%	-100%	-100%	0.69	20.58
Greece		-63%	-67%	-100%	-100%	65.57	6.26
Greenland		7509%	-65%	-100%	-100%	0.54	9.47
Grenada		71%	-11%	-100%	-100%	0.23	2.04
Guadeloupe		0%	-26%	-100%	-100%	1.87	4.68
Guatemala		260%	20%	-100%	-100%	21.20	1.21
Guinea		388%	277%	-100%	-100%	2.92	0.23
Guinea-Bissau		302%	95%	-100%	-100%	0.44	0.23
Guyana		155%	9%	-100%	-100%	1.52	1.94
Haiti		338%	113%	-100%	-100%	3.58	0.32
Honduras		206%	-10%	-100%	-100%	10.36	1.06
Hong Kong		-41%	-53%	-100%	-100%	44.02	5.92
Hungary		-66%	-53%	-100%	-100%	53.18	5.49
Iceland		-28%	-55%	-100%	-100%	3.93	11.58
India		146%	-16%	-100%	-100%	2,597.36	1.90
Indonesia		106%	-20%	-100%	-100%	625.66	2.31
Iran		50%	-46%	-100%	-100%	701.99	8.47
Iraq		32%	-27%	-100%	-100%	197.61	5.03
Ireland		-51%	-61%	-100%	-100%	36.55	7.49
Israel and Palestine, State of		-10%	-56%	-100%	-100%	68.33	5.06
Italy, San Marino and the Holy See		-65%	-64%	-100%	-100%	331.56	5.47
Jamaica		-48%	-47%	-100%	-100%	7.44	2.52
Japan		-56%	-58%	-100%	-100%	1,153.72	9.09
Jordan		43%	-29%	-100%	-100%	28.34	2.81
Kazakhstan		-53%	-52%	-100%	-100%	277.36	14.95
Kenya		282%	87%	-100%	-100%	19.81	0.38
Kiribati		153%	-1%	-100%	-100%	0.03	0.29
Kuwait		26%	-52%	-100%	-100%	98.95	23.52
Kyrgyzstan		-71%	4%	-100%	-100%	11.92	1.86
Laos		2231%	191%	-100%	-100%	6.78	0.95
Latvia		-80%	-57%	-100%	-100%	8.38	4.39
Lebanon		121%	-36%	-100%	-100%	27.44	4.00
Lesotho		878%	83%	-100%	-100%	0.75	0.35
Liberia		395%	259%	-100%	-100%	1.21	0.24
Libya		-38%	-63%	-100%	-100%	52.05	7.68
Lithuania		-82%	-54%	-100%	-100%	13.77	4.99
Luxembourg		-65%	-64%	-100%	-100%	9.74	15.82
Macao		-27%	-40%	-100%	-100%	1.27	1.99
Madagascar		1368%	367%	-100%	-100%	4.20	0.16
Malawi		1340%	348%	-100%	-100%	1.62	0.09
Malaysia		91%	-49%	-100%	-100%	248.83	7.79
Maldives		714%	-39%	-100%	-100%	0.91	1.72
Mali		1635%	1052%	-100%	-100%	1.03	0.05
Malta		-76%	-79%	-100%	-100%	1.04	2.37
Martinique		-4%	-33%	-100%	-100%	1.95	5.20
Mauritania		560%	120%	-100%	-100%	7.66	1.69
Mauritius		80%	-42%	-100%	-100%	4.33	3.41

reference values selected scenariotype: RM-3 lin	target year 2030		target year 2050		emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Mexico		-19%	-51%	-100%	-100%	485.00	3.80
Moldova		-84%	-40%	-100%	-100%	9.23	2.28
Mongolia		17%	7%	-100%	-100%	35.93	11.14
Morocco		84%	-21%	-100%	-100%	73.91	2.03
Mozambique		1033%	264%	-100%	-100%	9.26	0.30
Myanmar/Burma		719%	327%	-100%	-100%	48.31	0.89
Namibia		66%	-17%	-100%	-100%	4.40	1.76
Nepal		1280%	215%	-100%	-100%	15.02	0.52
Netherlands		-58%	-63%	-100%	-100%	156.41	9.15
New Caledonia		292%	29%	-100%	-100%	15.66	55.37
New Zealand		-29%	-50%	-100%	-100%	38.67	8.08
Nicaragua		125%	-5%	-100%	-100%	5.86	0.90
Niger		823%	485%	-100%	-100%	2.36	0.10
Nigeria		39%	15%	-100%	-100%	100.22	0.50
North Korea		-81%	-53%	-100%	-100%	42.17	1.64
North Macedonia		-62%	-54%	-100%	-100%	8.92	4.28
Norway		-44%	-55%	-100%	-100%	47.99	8.92
Oman		149%	-26%	-100%	-100%	92.78	18.65
Pakistan		143%	4%	-100%	-100%	223.63	1.03
Palau		-75%	-74%	-100%	-100%	1.33	73.84
Panama		120%	-36%	-100%	-100%	11.63	2.74
Papua New Guinea		92%	44%	-100%	-100%	4.07	0.46
Paraguay		149%	9%	-100%	-100%	8.47	1.20
Peru		58%	-27%	-100%	-100%	56.29	1.73
Philippines		116%	9%	-100%	-100%	150.64	1.39
Poland		-62%	-57%	-100%	-100%	317.65	8.38
Portugal		-48%	-58%	-100%	-100%	48.47	4.74
Puerto Rico		21%	8%	-100%	-100%	3.91	1.33
Qatar		156%	-38%	-100%	-100%	106.53	37.61
Réunion		48%	-50%	-100%	-100%	3.02	3.40
Romania		-80%	-54%	-100%	-100%	78.63	4.06
Russia		-68%	-56%	-100%	-100%	1,792.02	12.28
Rwanda		755%	467%	-100%	-100%	1.15	0.09
Saint Helena, Ascension and Tristan da		-13%	-28%	-100%	-100%	0.02	2.61
Saint Kitts and Nevis		174%	-34%	-100%	-100%	0.19	3.67
Saint Lucia		134%	-17%	-100%	-100%	0.30	1.63
Saint Pierre and Miquelon		-82%	-25%	-100%	-100%	0.06	10.64
Saint Vincent and the Grenadines		146%	-13%	-100%	-100%	0.15	1.32
Samoa		-8%	0%	-100%	-100%	0.14	0.71
São Tomé and Príncipe		183%	-1%	-100%	-100%	0.16	0.74
Saudi Arabia		49%	-46%	-100%	-100%	614.61	17.94
Senegal		280%	29%	-100%	-100%	9.81	0.60
Serbia and Montenegro		-53%	-48%	-100%	-100%	70.69	7.52
Seychelles		57%	-51%	-100%	-100%	1.05	10.75
Sierra Leone		312%	316%	-100%	-100%	1.40	0.18
Singapore		-26%	-54%	-100%	-100%	53.37	9.19
Slovakia		-73%	-60%	-100%	-100%	35.99	6.59
Slovenia		-59%	-62%	-100%	-100%	15.37	7.39
Solomon Islands		102%	46%	-100%	-100%	0.14	0.21
Somalia		665%	542%	-100%	-100%	0.97	0.06
South Africa		-31%	-53%	-100%	-100%	494.86	8.45
South Korea		3%	-54%	-100%	-100%	651.87	12.73
Spain and Andorra		-48%	-59%	-100%	-100%	259.31	5.54
Sri Lanka		320%	29%	-100%	-100%	27.57	1.29
Sudan and South Sudan		369%	57%	-100%	-100%	22.57	0.42
Suriname		11%	-41%	-100%	-100%	2.06	3.54
Sweden		-64%	-60%	-100%	-100%	44.75	4.46
Switzerland and Liechtenstein		-59%	-60%	-100%	-100%	39.37	4.56
Syria		-48%	-73%	-100%	-100%	29.16	1.71
Taiwan		-5%	-56%	-100%	-100%	276.78	11.64
Tajikistan		-47%	109%	-100%	-100%	8.92	0.96

reference values selected scenario type: RM-3 lin	target year 2030		target year 2050		emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Tanzania		1030%	232%	-100%	-100%	13.34	0.23
Thailand		42%	-46%	-100%	-100%	275.06	3.95
The Gambia		563%	109%	-100%	-100%	0.59	0.25
Timor-Leste		335%	124%	-100%	-100%	0.38	0.30
Togo		386%	47%	-100%	-100%	2.85	0.35
Tonga		31%	-52%	-100%	-100%	0.13	1.22
Trinidad and Tobago		7%	-65%	-100%	-100%	32.74	23.47
Tunisia		13%	-41%	-100%	-100%	32.07	2.74
Turkey		29%	-37%	-100%	-100%	415.78	4.98
Turkmenistan		-16%	-38%	-100%	-100%	90.52	15.23
Turks and Caicos Islands		848%	-38%	-100%	-100%	0.13	3.53
Uganda		2423%	331%	-100%	-100%	5.34	0.12
Ukraine		-88%	-70%	-100%	-100%	196.40	4.46
United Arab Emirates		62%	-46%	-100%	-100%	222.61	22.78
United Kingdom		-71%	-67%	-100%	-100%	364.91	5.40
United States		-58%	-61%	-100%	-100%	5,107.26	15.52
Uruguay		-4%	-42%	-100%	-100%	6.56	1.90
Uzbekistan		-61%	-55%	-100%	-100%	94.99	2.88
Vanuatu		0%	8%	-100%	-100%	0.09	0.29
Venezuela		-48%	-72%	-100%	-100%	110.06	3.86
Vietnam		648%	-1%	-100%	-100%	305.25	3.16
Western Sahara		112%	15%	-100%	-100%	0.30	0.51
Yemen		98%	-48%	-100%	-100%	10.89	0.37
Zambia		192%	280%	-100%	-100%	7.50	0.42
Zimbabwe		-47%	-10%	-100%	-100%	10.86	0.74
EU27		-65%	-61%	-100%	-100%	2,939.07	6.60
EU28		-66%	-62%	-100%	-100%	3,303.97	6.45
sub sum						42,901.88	
EU27						-2,939.07	
EU28						-3,303.97	
sum						36,658.83	
global 2019*						36,658.83	
difference						0.00	

\* excl. LUC and ISA

reference values scenario: RM-3 lin sorted by 'emissions 2019' vs. reference year	target year 2030		target year 2050		emissions 2019 in Mill. t	per capita emissions 2019 in t	share in the global emissions in 2019	share cumulative emissions without EU
	1990	2010	1990	2010				
China	111%	-45%	-100%	-100%	11,535	8.0	31.5%	31%
United States	-58%	-61%	-100%	-100%	5,107	15.5	13.9%	45%
EU28	-66%	-62%	-100%	-100%	3,304	6.4	9.0%	45%
EU27	-65%	-61%	-100%	-100%	2,939	6.6	8.0%	45%
India	146%	-16%	-100%	-100%	2,597	1.9	7.1%	52%
Russia	-68%	-56%	-100%	-100%	1,792	12.3	4.9%	57%
Japan	-56%	-58%	-100%	-100%	1,154	9.1	3.1%	61%
Germany	-70%	-62%	-100%	-100%	703	8.4	1.9%	62%
Iran	50%	-46%	-100%	-100%	702	8.5	1.9%	64%
South Korea	3%	-54%	-100%	-100%	652	12.7	1.8%	66%
Indonesia	106%	-20%	-100%	-100%	626	2.3	1.7%	68%
Saudi Arabia	49%	-46%	-100%	-100%	615	17.9	1.7%	70%
Canada	-46%	-57%	-100%	-100%	585	15.6	1.6%	71%
South Africa	-31%	-53%	-100%	-100%	495	8.5	1.3%	72%
Mexico	-19%	-51%	-100%	-100%	485	3.8	1.3%	74%
Brazil	14%	-42%	-100%	-100%	478	2.3	1.3%	75%
Australia	-35%	-56%	-100%	-100%	433	17.2	1.2%	76%
Turkey	29%	-37%	-100%	-100%	416	5.0	1.1%	77%
United Kingdom	-71%	-67%	-100%	-100%	365	5.4	1.0%	78%
Italy, San Marino and the Holy S	-65%	-64%	-100%	-100%	332	5.5	0.9%	79%
Poland	-62%	-57%	-100%	-100%	318	8.4	0.9%	80%

sum emissions 2020 - 2100 - national budgets -	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6	average	scope	
	const	exp	lin	quadr	rad	abs	budget	average	
in Mill. t							RM 2 - 6	budget	
Afghanistan	597.33	288.28	356.14	323.46	410.35	385.56	352.8	32	
Albania	82.58	68.01	71.30	69.67	73.81	72.64	71.1	13	
Algeria	1,976.91	1,934.77	1,947.22	1,939.53	1,953.18	1,949.44	1,944.8	11	
Angola	628.30	400.16	450.57	426.13	490.45	472.11	447.9	17	
Anguilla	0.38	0.30	0.32	0.31	0.33	0.32	0.3	13	
Antigua and Barbuda	5.25	5.35	5.34	5.34	5.32	5.32	5.3	10	
Argentina	2,145.98	2,123.37	2,131.88	2,125.90	2,134.26	2,132.05	2,129.5	11	
Armenia	85.65	70.89	74.23	72.57	76.77	75.58	74.0	12	
Aruba	7.50	8.01	7.91	7.95	7.82	7.86	7.9	10	
Australia	3,692.75	4,267.63	4,149.49	4,202.10	4,045.04	4,090.26	4,150.9	10	
Austria	680.51	735.43	724.69	729.16	714.47	718.73	724.5	10	
Azerbaijan	413.72	392.62	397.88	395.02	401.30	399.54	397.3	11	
Bahamas	24.20	25.31	25.11	25.18	24.89	24.98	25.1	10	
Bahrain	296.31	346.95	336.50	341.18	327.32	331.31	336.7	9	
Bangladesh	3,047.79	1,838.54	2,105.27	1,976.18	2,316.83	2,219.69	2,091.3	19	
Barbados	33.48	38.00	37.08	37.48	36.25	36.61	37.1	10	
Belarus	640.56	680.15	672.66	675.63	665.18	668.22	672.4	10	
Belgium	963.31	1,054.52	1,036.41	1,044.11	1,019.56	1,026.66	1,036.3	10	
Belize	8.13	5.43	6.03	5.73	6.50	6.28	6.0	16	
Benin	221.98	134.79	154.02	144.71	169.28	162.27	153.0	19	
Bermuda	3.55	3.65	3.63	3.64	3.61	3.62	3.6	10	
Bhutan	26.71	23.99	24.63	24.30	25.09	24.87	24.6	12	
Bolivia	344.69	289.91	302.34	296.15	311.77	307.33	301.5	12	
Bosnia and Herzegovina	303.63	336.35	329.79	332.62	323.77	326.33	329.8	10	
Botswana	85.49	78.43	80.10	79.24	81.29	80.71	80.0	11	
Brazil	6,541.51	5,590.20	5,807.02	5,698.41	5,970.33	5,893.14	5,791.8	12	
British Virgin Islands	1.34	1.31	1.32	1.31	1.32	1.32	1.3	11	
Brunei	60.16	69.25	67.39	68.22	65.73	66.45	67.4	10	
Bulgaria	429.41	448.09	444.77	445.96	441.15	442.56	444.5	10	
Burkina Faso	301.81	132.64	169.74	151.90	199.43	185.87	167.9	46	
Burundi	157.87	58.72	80.43	70.00	97.85	89.90	79.4	235	
Cabo Verde	15.32	12.44	13.09	12.76	13.59	13.35	13.0	13	
Cambodia	349.57	237.08	262.00	249.88	281.63	272.58	260.6	16	
Cameroon	426.59	221.16	266.32	244.55	302.33	285.84	264.0	26	
Canada	5,029.15	5,775.54	5,622.54	5,690.45	5,486.76	5,545.43	5,624.1	10	
Cayman Islands	3.99	4.17	4.14	4.15	4.10	4.12	4.1	10	
Central African Republic	67.71	27.56	36.36	32.13	43.41	40.19	35.9	73	
Chad	221.63	85.28	115.15	100.80	139.10	128.17	113.7	127	
Chile	950.72	951.21	952.70	951.13	951.90	951.76	951.7	11	
China	108,562.47	117,262.27	115,563.18	116,269.65	113,942.90	114,617.39	115,531.1	10	
Colombia	1,347.51	1,070.29	1,132.53	1,101.83	1,180.54	1,158.15	1,128.7	13	
Comoros	13.11	6.14	7.67	6.93	8.89	8.33	7.6	36	
Congo	117.35	81.42	89.39	85.51	95.65	92.76	88.9	15	
Cook Islands	0.58	0.50	0.52	0.51	0.53	0.53	0.5	12	
Costa Rica	137.44	110.20	116.32	113.30	121.04	118.83	115.9	13	
Côte d'Ivoire	451.15	253.43	296.96	275.94	331.59	315.72	294.7	22	
Croatia	203.55	202.80	203.30	202.88	203.28	203.19	203.1	11	
Cuba	392.81	351.54	361.13	356.23	368.13	364.77	360.4	12	
Curaçao	47.96	57.37	55.41	56.30	53.71	54.46	55.4	9	
Cyprus	73.50	76.69	76.13	76.33	75.51	75.75	76.1	10	
Czechia	961.76	1,062.66	1,042.45	1,051.15	1,023.88	1,031.76	1,042.4	10	
Democratic Republic of the Congo	1,191.69	446.17	609.46	531.04	740.40	680.64	601.5	202	
Denmark	318.51	325.50	324.52	324.70	323.05	323.55	324.3	10	
Djibouti	21.23	14.72	16.16	15.46	17.30	16.78	16.1	15	
Dominica	1.77	1.33	1.43	1.38	1.51	1.47	1.4	14	
Dominican Republic	355.65	312.64	322.54	317.53	329.88	326.38	321.8	12	
Ecuador	548.86	472.99	490.33	481.62	503.33	497.17	489.1	12	
Egypt	3,327.68	2,926.29	3,018.73	2,971.93	3,087.21	3,054.53	3,011.7	12	
El Salvador	142.19	99.43	108.92	104.29	116.37	112.93	108.4	15	
Equatorial Guinea	45.14	39.77	41.01	40.38	41.92	41.49	40.9	12	
Eritrea	52.87	23.97	30.31	27.26	35.38	33.06	30.0	40	

sum emissions 2020 - 2100 - national budgets -	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6	average	scope
	const	exp	lin	quadr	rad	abs	budget	average
in Mill. t							RM 2 - 6	budget
Estonia	161.02	183.41	178.84	180.85	174.76	176.51	178.9	10
Eswatini	24.30	16.46	18.20	17.35	19.57	18.94	18.1	16
Ethiopia	1,650.34	713.93	919.28	820.53	1,083.64	1,008.55	909.2	50
Falkland Islands	0.29	0.32	0.31	0.32	0.31	0.31	0.3	10
Faroes	0.67	0.25	0.34	0.30	0.42	0.38	0.3	176
Fiji	22.51	17.30	18.47	17.89	19.37	18.95	18.4	14
Finland	410.42	441.99	435.85	438.39	429.96	432.41	435.7	10
France and Monaco	3,312.84	3,324.82	3,327.81	3,323.39	3,323.19	3,323.53	3,324.5	11
French Guiana	8.64	7.24	7.56	7.40	7.80	7.68	7.5	12
French Polynesia	8.40	7.08	7.38	7.23	7.61	7.50	7.4	12
Gabon	56.22	43.80	46.58	45.21	48.73	47.73	46.4	13
Georgia	158.07	148.14	150.56	149.27	152.19	151.37	150.3	11
Germany	6,561.11	7,124.00	7,013.29	7,059.79	6,908.80	6,952.53	7,011.7	10
Ghana	539.85	307.46	358.64	333.91	399.33	380.67	356.0	21
Gibraltar	5.82	6.80	6.60	6.69	6.42	6.50	6.6	10
Greece	648.38	677.72	672.47	674.37	666.79	669.01	672.1	10
Greenland	4.92	5.41	5.31	5.35	5.22	5.26	5.3	10
Grenada	3.28	2.73	2.85	2.79	2.95	2.90	2.8	12
Guadeloupe	19.88	19.85	19.89	19.85	19.88	19.87	19.9	11
Guatemala	400.74	287.39	312.59	300.29	332.33	323.20	311.2	15
Guinea	194.56	89.40	112.48	101.37	130.93	122.49	111.3	38
Guinea-Bissau	29.25	13.43	16.90	15.23	19.67	18.41	16.7	38
Guyana	22.32	18.33	19.23	18.79	19.92	19.60	19.2	13
Haiti	179.33	88.42	108.39	98.76	124.33	117.03	107.4	30
Honduras	211.36	145.98	160.48	153.42	171.89	166.63	159.7	15
Hong Kong	440.71	456.91	454.15	455.05	450.95	452.16	453.8	10
Hungary	541.92	555.43	553.42	553.88	550.62	551.60	553.0	10
Iceland	34.94	39.19	38.33	38.70	37.55	37.88	38.3	10
India	38,496.19	31,425.18	33,019.73	32,229.66	34,241.23	33,669.36	32,917.0	13
Indonesia	8,485.13	7,288.23	7,561.46	7,424.37	7,766.74	7,669.57	7,542.1	12
Iran	6,548.23	7,115.23	7,003.60	7,050.54	6,898.40	6,942.46	7,002.0	10
Iraq	2,058.38	2,079.81	2,078.64	2,077.33	2,073.30	2,074.63	2,076.7	11
Ireland	348.54	373.17	368.43	370.36	363.81	365.71	368.3	10
Israel and Palestine, State of	710.50	718.70	718.12	717.75	716.14	716.66	717.5	11
Italy, San Marino and the Holy See	3,381.32	3,463.75	3,451.62	3,454.31	3,434.49	3,440.45	3,448.9	10
Jamaica	97.28	85.38	88.12	86.74	90.15	89.18	87.9	12
Japan	10,635.36	11,648.63	11,447.35	11,533.06	11,260.15	11,339.08	11,445.7	10
Jordan	355.31	319.75	328.04	323.79	334.06	331.16	327.4	12
Kazakhstan	2,395.98	2,742.96	2,671.93	2,703.40	2,608.77	2,636.03	2,672.6	10
Kenya	861.20	442.54	534.56	490.19	607.95	574.35	529.9	27
Kiribati	1.84	0.89	1.10	1.00	1.27	1.19	1.1	32
Kuwait	822.32	966.97	937.07	950.49	910.87	922.26	937.5	9
Kyrgyzstan	178.63	144.93	152.52	148.76	158.35	155.62	152.0	13
Laos	149.02	99.40	110.38	105.05	119.05	115.06	109.8	16
Latvia	90.51	89.34	89.75	89.48	89.89	89.78	89.6	11
Lebanon	304.61	295.49	297.98	296.53	299.36	298.58	297.6	11
Lesotho	34.45	17.44	21.18	19.38	24.16	22.80	21.0	28
Liberia	75.82	35.31	44.20	39.92	51.31	48.06	43.8	36
Libya	493.98	530.57	523.48	526.39	516.64	519.47	523.3	10
Lithuania	143.72	145.04	145.00	144.89	144.66	144.74	144.9	11
Luxembourg	83.66	96.15	93.59	94.72	91.31	92.30	93.6	10
Macao	18.46	15.25	15.97	15.61	16.53	16.27	15.9	13
Madagascar	395.62	169.94	219.43	195.63	259.04	240.95	217.0	52
Malawi	263.34	105.10	139.77	123.11	167.56	154.87	138.1	85
Malaysia	2,355.61	2,534.45	2,499.73	2,514.04	2,466.33	2,480.17	2,498.9	10
Maldives	14.21	11.29	11.94	11.62	12.45	12.21	11.9	13
Mali	272.67	104.46	141.31	123.61	170.85	157.36	139.5	135
Malta	14.00	12.10	12.54	12.32	12.86	12.71	12.5	12
Martinique	20.18	20.50	20.46	20.46	20.39	20.41	20.4	10
Mauritania	120.20	95.06	100.70	97.92	105.06	103.03	100.4	13
Mauritius	50.61	47.55	48.30	47.90	48.80	48.55	48.2	11

sum emissions 2020 - 2100 - national budgets -	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6	average	scope	
	const	exp	lin	quadr	rad	abs	budget	average	
in Mill. t							RM 2 - 6	budget	
Mexico	5,470.62	5,254.14	5,310.19	5,278.70	5,344.36	5,326.05	5,302.7	11	
Moldova	125.85	107.76	111.88	109.81	114.99	113.52	111.6	12	
Mongolia	321.44	359.28	351.63	354.96	344.70	347.66	351.6	10	
Morocco	1,063.01	882.67	923.47	903.18	954.56	939.96	920.8	12	
Mozambique	480.52	234.70	288.69	262.69	331.80	312.08	286.0	31	
Myanmar/Burma	1,101.52	722.27	806.17	765.43	872.41	841.92	801.6	17	
Namibia	67.64	54.10	57.14	55.64	59.49	58.39	57.0	13	
Nepal	501.42	281.35	329.81	306.40	368.35	350.68	327.3	22	
Netherlands	1,440.51	1,578.77	1,551.29	1,563.00	1,525.75	1,536.52	1,551.1	10	
New Caledonia	124.96	151.16	145.70	148.17	140.97	143.04	145.8	9	
New Zealand	363.61	392.98	387.24	389.63	381.77	384.05	387.1	10	
Nicaragua	133.47	87.55	97.71	92.78	105.73	102.04	97.2	17	
Niger	332.13	134.74	178.00	157.21	212.66	196.83	175.9	75	
Nigeria	3,481.41	1,925.88	2,268.26	2,102.94	2,540.73	2,415.85	2,250.7	22	
North Korea	671.91	526.99	559.47	543.48	584.60	572.90	557.5	13	
North Macedonia	97.10	95.40	95.93	95.60	96.16	96.01	95.8	11	
Norway	443.77	485.03	476.85	480.33	469.22	472.44	476.8	10	
Oman	784.91	911.62	885.53	897.18	862.53	872.50	885.9	10	
Pakistan	4,646.35	3,181.61	3,506.31	3,348.31	3,761.84	3,644.00	3,488.4	16	
Palau	10.53	12.81	12.33	12.55	11.92	12.10	12.3	9	
Panama	147.20	131.74	135.33	133.49	137.95	136.69	135.0	12	
Papua New Guinea	149.70	81.21	96.28	89.01	108.28	102.78	95.5	23	
Paraguay	160.36	114.90	125.00	120.07	132.92	129.26	124.4	15	
Peru	873.27	694.95	735.00	715.24	765.88	751.47	732.5	13	
Philippines	2,621.38	1,961.48	2,108.66	2,036.58	2,223.38	2,170.20	2,100.1	14	
Poland	2,968.09	3,221.47	3,171.66	3,192.56	3,124.61	3,144.29	3,170.9	10	
Portugal	512.76	512.96	513.78	512.93	513.36	513.28	513.3	11	
Puerto Rico	69.75	51.52	55.58	53.60	58.75	57.29	55.3	14	
Qatar	862.42	1,032.83	997.42	1,013.41	966.63	980.08	998.1	9	
Réunion	35.35	33.19	33.72	33.44	34.07	33.89	33.7	11	
Romania	869.17	845.48	852.07	848.17	855.61	853.55	851.0	11	
Russia	15,830.37	17,847.04	17,437.45	17,617.12	17,068.89	17,226.98	17,439.5	10	
Rwanda	178.94	71.79	95.27	83.99	114.09	105.50	94.1	82	
Saint Helena, Ascension and Tristan da Cunha	0.20	0.18	0.19	0.18	0.19	0.19	0.2	12	
Saint Kitts and Nevis	2.21	2.11	2.13	2.12	2.15	2.14	2.1	11	
Saint Lucia	4.76	3.72	3.95	3.84	4.13	4.05	3.9	13	
Saint Pierre and Miquelon	0.56	0.62	0.61	0.61	0.60	0.60	0.6	10	
Saint Vincent and the Grenadines	2.62	1.93	2.08	2.01	2.20	2.15	2.1	14	
Samoa	3.73	2.28	2.60	2.44	2.85	2.74	2.6	19	
São Tomé and Príncipe	4.13	2.56	2.90	2.74	3.18	3.05	2.9	18	
Saudi Arabia	5,217.12	6,045.16	5,874.82	5,950.77	5,724.45	5,789.61	5,877.0	10	
Senegal	295.33	172.26	199.38	186.27	220.92	211.04	198.0	20	
Serbia and Montenegro	673.54	721.54	712.29	716.06	703.29	707.00	712.0	10	
Seychelles	9.44	10.52	10.30	10.40	10.11	10.19	10.3	10	
Sierra Leone	116.04	50.99	65.26	58.40	76.68	71.46	64.6	46	
Singapore	491.08	538.50	529.07	533.10	520.32	524.01	529.0	10	
Slovakia	351.92	370.55	367.11	368.42	363.55	364.97	366.9	10	
Slovenia	146.88	157.01	155.07	155.85	153.16	153.95	155.0	10	
Solomon Islands	10.10	4.56	5.77	5.19	6.74	6.30	5.7	41	
Somalia	215.43	83.57	112.46	98.58	135.62	125.05	111.1	115	
South Africa	4,617.61	5,016.37	4,937.89	4,970.88	4,863.89	4,894.88	4,936.8	10	
South Korea	5,733.77	6,483.26	6,330.79	6,397.82	6,193.93	6,252.71	6,331.7	10	
Spain and Andorra	2,636.82	2,706.21	2,695.65	2,698.26	2,681.39	2,686.44	2,693.6	10	
Sri Lanka	500.42	366.35	396.19	381.60	419.53	408.73	394.5	14	
Sudan and South Sudan	900.07	475.20	568.63	523.56	643.09	608.99	563.9	25	
Suriname	23.76	22.49	22.81	22.64	23.01	22.91	22.8	11	
Sweden	481.39	476.43	478.31	476.98	478.83	478.34	477.8	11	
Switzerland and Liechtenstein	420.84	418.20	419.48	418.50	419.63	419.34	419.0	11	
Syria	455.48	361.13	382.31	371.87	398.65	391.03	381.0	13	
Taiwan	2,461.81	2,762.54	2,701.63	2,728.25	2,646.59	2,670.15	2,701.8	10	
Tajikistan	194.51	130.18	144.42	137.50	155.66	150.48	143.6	16	



<b>sum emissions 2020 - 2100 - national budgets -</b>	RM-1 const	RM-2 exp	RM-3 lin	RM-4 quadr	RM-5 rad	RM-6 abs	average budget RM 2 - 6	scope average budget
in Mill. t								
Tanzania	884.27	406.77	511.56	461.13	595.34	557.04	506.4	38
Thailand	3,065.88	2,966.71	2,993.33	2,977.95	3,008.56	3,000.07	2,989.3	11
The Gambia	36.20	16.96	21.19	19.15	24.56	23.02	21.0	35
Timor-Leste	20.39	9.90	12.20	11.09	14.04	13.20	12.1	31
Togo	130.92	66.20	80.42	73.57	91.77	86.58	79.7	28
Tonga	2.40	1.73	1.88	1.80	1.99	1.94	1.9	15
Trinidad and Tobago	272.15	319.99	310.10	314.54	301.43	305.20	310.3	9
Tunisia	405.63	363.12	373.00	367.95	380.21	376.74	372.2	12
Turkey	4,340.60	4,379.46	4,378.36	4,374.95	4,368.22	4,370.52	4,374.3	11
Turkmenistan	780.46	894.68	871.28	881.66	850.50	859.47	871.5	10
Turks and Caicos Islands	1.56	1.47	1.50	1.48	1.51	1.50	1.5	11
Uganda	637.39	264.10	345.93	306.60	411.46	381.54	341.9	64
Ukraine	2,112.07	2,090.76	2,098.93	2,093.15	2,101.11	2,099.01	2,096.6	11
United Arab Emirates	1,854.09	2,176.86	2,110.16	2,140.07	2,051.68	2,077.11	2,111.2	9
United Kingdom	3,732.84	3,816.19	3,804.45	3,806.63	3,786.90	3,792.86	3,801.4	10
United States	43,949.71	50,447.20	49,115.65	49,706.53	47,933.50	48,444.17	49,129.4	10
Uruguay	97.41	79.47	83.51	81.51	86.61	85.16	83.3	13
Uzbekistan	1,179.11	1,067.54	1,093.66	1,080.22	1,112.51	1,103.37	1,091.5	11
Vanuatu	4.71	2.27	2.80	2.55	3.23	3.04	2.8	32
Venezuela	1,235.56	1,190.19	1,202.08	1,195.33	1,209.18	1,205.32	1,200.4	11
Vietnam	3,660.79	3,384.63	3,450.54	3,416.01	3,496.62	3,473.89	3,444.3	11
Western Sahara	10.14	5.65	6.64	6.16	7.42	7.06	6.6	22
Yemen	476.91	244.50	295.58	270.95	336.32	317.67	293.0	27
Zambia	298.55	157.72	188.69	173.75	213.37	202.07	187.1	25
Zimbabwe	281.24	174.39	197.98	186.55	216.66	208.08	196.7	18
EU27	28,733.52	30,260.76	29,978.79	30,086.33	29,687.07	29,803.67	29,963.3	10
EU28	32,466.36	34,076.95	33,783.24	33,892.96	33,473.97	33,596.53	33,764.7	10
sub sum 2020 - 2100	448,701	452,181	452,185	451,777	451,231	451,425	451,760	
EU27	-28,734	-30,261	-29,979	-30,086	-29,687	-29,804	-29,963	
EU28	-32,466	-34,077	-33,783	-33,893	-33,474	-33,597	-29,963	
<b>sum</b>	<b>387,501</b>	<b>387,844</b>	<b>388,422</b>	<b>387,798</b>	<b>388,070</b>	<b>388,025</b>	<b>391,833</b>	
base data: budget 2020 - 2100*	388,000	388,000	388,000	388,000	388,000	388,000	388,000	
rounding differences	-499	-156	422	-202	70	25	3,833	
difference in %	-0.13%	-0.04%	0.11%	-0.05%	0.02%	0.01%	0.99%	
scenario type	RM-1 const	RM-2 exp	RM-3 lin	RM-4 quadr	RM-5 rad	RM-6 abs	average RM 2 - 6	
implicit population weighting vs. emissions**	<b>26.8%</b>	<b>9.6%</b>	<b>13.3%</b>	<b>11.5%</b>	<b>16.4%</b>	<b>15.0%</b>	<b>13.1%</b>	
global (start) change rate 2020	-8.5%	-1.5%	-1.5%	-1.5%	-1.5%	-4.5%		
global change rate 2030 vs. 2010	-59%	-41%	-50%	-44%	-53%	-46%		
global overshoot in Gt	0	0	0	0	0	0		
base data: global CO2 budget 2020 - 2100 incl. LUC and ISA in Gt:							<b>400</b>	

\* excl. LUC and ISA

\*\* these figures are only current if their determination was updated before this document was created

national budgets 2020 - 2100 sorted by 'average budget'	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6	average	scope	share in the
	const	exp	lin	quadr	rad	abs	budget	average	
in Mill. t							RM 2 - 6	budget	global
China	108,562	117,262	115,563	116,270	113,943	114,617	115,531	10	29.5%
United States	43,950	50,447	49,116	49,707	47,933	48,444	49,129	10	12.5%
EU28	32,466	34,077	33,783	33,893	33,474	33,597	33,765	10	8.6%
India	38,496	31,425	33,020	32,230	34,241	33,669	32,917	13	8.4%
EU27	28,734	30,261	29,979	30,086	29,687	29,804	29,963	10	7.6%
Russia	15,830	17,847	17,437	17,617	17,069	17,227	17,439	10	4.5%
Japan	10,635	11,649	11,447	11,533	11,260	11,339	11,446	10	2.9%
Indonesia	8,485	7,288	7,561	7,424	7,767	7,670	7,542	12	1.9%
Germany	6,561	7,124	7,013	7,060	6,909	6,953	7,012	10	1.8%
Iran	6,548	7,115	7,004	7,051	6,898	6,942	7,002	10	1.8%
South Korea	5,734	6,483	6,331	6,398	6,194	6,253	6,332	10	1.6%
Saudi Arabia	5,217	6,045	5,875	5,951	5,724	5,790	5,877	10	1.5%
Brazil	6,542	5,590	5,807	5,698	5,970	5,893	5,792	12	1.5%
Canada	5,029	5,776	5,623	5,690	5,487	5,545	5,624	10	1.4%
Mexico	5,471	5,254	5,310	5,279	5,344	5,326	5,303	11	1.4%
South Africa	4,618	5,016	4,938	4,971	4,864	4,895	4,937	10	1.3%
Turkey	4,341	4,379	4,378	4,375	4,368	4,371	4,374	11	1.1%
Australia	3,693	4,268	4,149	4,202	4,045	4,090	4,151	10	1.1%
United Kingdom	3,733	3,816	3,804	3,807	3,787	3,793	3,801	10	1.0%
Pakistan	4,646	3,182	3,506	3,348	3,762	3,644	3,488	16	0.9%
Italy, San Marino and the Holy See	3,381	3,464	3,452	3,454	3,434	3,440	3,449	10	0.9%

<b>central premises</b>	
global CO2 budget 2020 - 2100	400 Gt
LUC / ISA budgets from 2020 on	-12 Gt
budget 2020 - 2100 to distribute in this tool	388 Gt
minimum annual global emissions	0 Gt
convergence level	0.5 t / capita

<b>gobal path properties</b>	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6
	const	exp	lin	quadr	rad	abs
implicit population weighting vs. emissions**	27%	10%	13%	12%	16%	15%
global (start) change rate 2020	-8.5%	-1.5%	-1.5%	-1.5%	-1.5%	-4.5%
global change rate 2030 vs. 2010	-59%	-41%	-50%	-44%	-53%	-46%
global overshoot in Gt	0	0	0	0	0	0

\*\* these figures are only current if their determination was updated before this document was created

<b>the Regensburg Model means:</b>
<ul style="list-style-type: none"> <li>▶ monotonic national paths that are compatible with a given global budget</li> <li>▶ converging emissions per capita</li> <li>▶ implicit population weighting to emissions well below 50% depending on choosen global path (concrete values can be found above under properties)</li> </ul>

[Download tool for the Regensburg Model: www.save-the-climate.info](http://www.save-the-climate.info)

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