

reference values selected scenariotype: RM-5 rad	target year 2030		target year 2050		projection emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Afghanistan		312%	86%	144%	10%	10.76	0.28
Albania		-60%	-42%	-93%	-90%	4.86	1.69
Algeria		25%	-27%	-90%	-94%	169.83	3.94
Angola		59%	-25%	-54%	-78%	28.85	0.91
Anguilla		153%	-36%	-60%	-90%	0.03	1.94
Antigua and Barbuda		40%	-12%	-93%	-96%	0.65	6.66
Argentina		-9%	-46%	-93%	-96%	208.42	4.65
Armenia		-85%	-29%	-98%	-89%	5.94	2.01
Aruba		60%	-5%	-94%	-97%	0.99	9.36
Australia		-30%	-53%	-99%	-99%	415.29	16.48
Austria		-45%	-54%	-98%	-98%	72.43	8.09
Azerbaijan		-69%	-28%	-97%	-93%	35.56	3.54
Bahamas		-2%	-15%	-96%	-96%	3.11	7.98
Bahrain		34%	-44%	-98%	-99%	34.17	20.82
Bangladesh		388%	16%	92%	-54%	95.41	0.59
Barbados		106%	-31%	-94%	-98%	3.38	11.78
Belarus		-71%	-52%	-99%	-98%	66.01	6.98
Belgium		-56%	-56%	-98%	-98%	107.07	9.28
Belize		42%	6%	-66%	-75%	0.45	1.16
Benin		1173%	4%	365%	-62%	7.74	0.66
Bermuda		-36%	-40%	-97%	-97%	0.44	7.10
Bhutan		305%	-36%	-40%	-91%	1.59	2.08
Bolivia		91%	-16%	-71%	-87%	23.42	2.03
Bosnia and Herzegovina		-46%	-41%	-98%	-98%	27.44	8.31
Botswana		37%	10%	-87%	-89%	7.62	3.31
Brazil		15%	-41%	-85%	-92%	502.65	2.38
British Virgin Islands		187%	6%	-81%	-93%	0.15	5.13
Brunei		-3%	-55%	-98%	-99%	7.04	16.24
Bulgaria		-74%	-56%	-99%	-98%	44.53	6.36
Burkina Faso		1141%	151%	775%	77%	3.81	0.19
Burundi		770%	706%	798%	731%	0.33	0.03
Cambodia		1752%	50%	562%	-46%	11.14	0.68
Cameroon		118%	-3%	-12%	-61%	14.56	0.56
Canada		-38%	-50%	-99%	-99%	597.67	15.98
Cape Verde		1069%	72%	84%	-73%	1.06	1.93
Cayman Islands		65%	-14%	-93%	-96%	0.51	7.87
Central African Republic		472%	158%	389%	121%	0.47	0.10
Chad		881%	530%	872%	524%	0.68	0.04
Chile		38%	-37%	-91%	-96%	92.16	4.86
China		128%	-40%	-90%	-97%	11,403.32	7.95
Colombia		-6%	-26%	-84%	-88%	90.92	1.81
Comoros		353%	65%	183%	3%	0.21	0.25
Congo		72%	-24%	-63%	-84%	7.25	1.35
Cook Islands		-48%	-62%	-93%	-95%	0.04	2.46
Costa Rica		68%	-32%	-72%	-89%	9.01	1.79
Côte d'Ivoire		244%	37%	39%	-45%	14.40	0.56
Croatia		-61%	-55%	-97%	-97%	19.72	4.77
Cuba		-61%	-57%	-95%	-95%	27.82	2.45
Curaçao		-28%	-36%	-100%	-100%	8.49	51.96
Cyprus		-19%	-54%	-96%	-98%	7.64	6.37
Czechia		-67%	-56%	-99%	-99%	111.64	10.44
Democratic Republic of the Congo		304%	356%	312%	365%	2.84	0.03
Denmark		-71%	-68%	-98%	-98%	32.04	5.55
Djibouti		-42%	-43%	-86%	-86%	1.07	1.10
Dominica		116%	-14%	-64%	-86%	0.13	1.81
Dominican Republic		65%	-38%	-78%	-92%	25.34	2.36
Ecuador		33%	-38%	-84%	-92%	44.95	2.59
Egypt		45%	-38%	-82%	-92%	254.04	2.53
El Salvador		76%	-31%	-60%	-84%	8.00	1.24
Equatorial Guinea		1674%	-60%	128%	-95%	3.32	2.45
Eritrea		328%	94%	168%	21%	0.88	0.25

reference values selected scenariotype: RM-5 rad	target year 2030		target year 2050		projection emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Estonia		-70%	-47%	-99%	-99%	24.99	18.85
Eswatini		24%	-64%	-69%	-91%	1.26	1.09
Ethiopia		914%	254%	666%	167%	17.26	0.15
Falkland Islands		47%	-18%	-96%	-98%	0.04	12.00
Faroese		434%	322%	434%	322%	0.00	0.04
Fiji		-27%	-37%	-86%	-88%	1.35	1.52
Finland		-59%	-65%	-98%	-99%	48.87	8.83
France and Monaco		-59%	-58%	-97%	-97%	322.88	4.95
French Guiana		9%	-24%	-87%	-91%	0.78	2.69
French Polynesia		-63%	-65%	-95%	-95%	0.59	2.11
Gabon		-46%	-45%	-94%	-94%	6.57	3.03
Georgia		-83%	-8%	-98%	-90%	11.19	2.80
Germany		-66%	-57%	-99%	-98%	730.08	8.74
Ghana		336%	20%	56%	-57%	20.63	0.68
Gibraltar		123%	-33%	-96%	-99%	0.68	20.27
Greece		-55%	-60%	-98%	-98%	74.37	7.10
Greenland		8153%	-62%	202%	-99%	0.53	9.36
Grenada		101%	5%	-75%	-87%	0.29	2.59
Guadeloupe		32%	-3%	-93%	-94%	2.37	5.94
Guatemala		217%	5%	-26%	-75%	21.07	1.20
Guinea		205%	135%	94%	50%	3.08	0.24
Guinea-Bissau		150%	21%	60%	-22%	0.45	0.24
Guyana		202%	30%	-62%	-84%	1.96	2.51
Haiti		191%	42%	61%	-22%	3.69	0.33
Honduras		165%	-22%	-33%	-80%	10.53	1.08
Hong Kong		-36%	-49%	-96%	-97%	45.12	6.07
Hungary		-64%	-50%	-98%	-97%	53.56	5.53
Iceland		-16%	-46%	-98%	-98%	4.19	12.36
India		142%	-18%	-62%	-87%	2,693.19	1.97
Indonesia		87%	-27%	-73%	-89%	572.68	2.12
Iran		75%	-37%	-93%	-98%	747.59	9.02
Iraq		37%	-25%	-91%	-95%	193.21	4.92
Ireland		-47%	-58%	-98%	-98%	36.43	7.46
Israel and Palestine, State of		-6%	-54%	-94%	-97%	67.44	5.00
Italy, San Marino and the Holy See		-61%	-61%	-98%	-98%	341.32	5.63
Jamaica		-45%	-45%	-94%	-94%	8.02	2.72
Japan		-51%	-53%	-98%	-98%	1,188.26	9.37
Jordan		32%	-35%	-84%	-92%	26.00	2.57
Kazakhstan		-41%	-37%	-99%	-99%	317.66	17.12
Kenya		172%	33%	33%	-35%	21.53	0.41
Kiribati		61%	-37%	-4%	-63%	0.03	0.28
Kuwait		47%	-45%	-98%	-99%	102.36	24.33
Kyrgyzstan		-76%	-13%	-96%	-84%	10.38	1.62
Laos		1183%	60%	446%	-32%	3.71	0.52
Latvia		-81%	-57%	-98%	-97%	7.77	4.07
Lebanon		114%	-38%	-81%	-95%	25.60	3.73
Lesotho		542%	20%	247%	-35%	0.73	0.34
Liberia		215%	128%	94%	41%	1.28	0.26
Libya		-25%	-55%	-97%	-98%	58.02	8.56
Lithuania		-80%	-48%	-99%	-97%	14.81	5.37
Luxembourg		-59%	-57%	-99%	-99%	10.22	16.61
Macao		-28%	-41%	-89%	-91%	1.32	2.07
Madagascar		759%	173%	530%	100%	4.55	0.17
Malawi		665%	138%	566%	107%	1.71	0.09
Malaysia		119%	-42%	-91%	-98%	263.84	8.26
Maldives		647%	-44%	32%	-90%	0.90	1.69
Mali		777%	482%	734%	454%	1.13	0.06
Malta		-68%	-71%	-97%	-97%	1.51	3.43
Martinique		27%	-11%	-93%	-95%	2.48	6.60
Mauritania		221%	7%	8%	-64%	3.33	0.74
Mauritius		90%	-39%	-83%	-94%	4.50	3.55

reference values selected scenario type: RM-5 rad	target year 2030		target year 2050		projection emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Mexico		-15%	-48%	-93%	-96%	495.57	3.88
Moldova		-85%	-44%	-98%	-92%	8.85	2.19
Mongolia		-26%	-32%	-96%	-96%	20.07	6.22
Morocco		68%	-28%	-73%	-89%	70.17	1.92
Mozambique		669%	147%	320%	35%	10.15	0.33
Myanmar/Burma		380%	174%	82%	4%	33.54	0.62
Namibia		60%	-20%	-74%	-87%	4.57	1.83
Nepal		748%	88%	339%	-3%	10.59	0.37
Netherlands		-53%	-59%	-98%	-98%	158.42	9.27
New Caledonia		117%	-29%	-97%	-99%	7.54	26.65
New Zealand		-25%	-48%	-97%	-98%	37.07	7.75
Nicaragua		99%	-17%	-45%	-77%	6.31	0.96
Niger		410%	212%	336%	166%	2.33	0.10
Nigeria		9%	-10%	-56%	-64%	113.69	0.57
North Korea		-86%	-65%	-97%	-92%	32.45	1.26
North Macedonia		-63%	-55%	-97%	-96%	8.25	3.96
Norway		-34%	-47%	-98%	-98%	51.84	9.64
Oman		164%	-22%	-95%	-98%	87.53	17.59
Pakistan		94%	-17%	-45%	-76%	201.51	0.93
Palau		-72%	-71%	-100%	-100%	1.31	72.59
Panama		125%	-35%	-75%	-93%	12.03	2.83
Papua New Guinea		35%	1%	-38%	-53%	3.99	0.45
Paraguay		102%	-12%	-49%	-78%	7.70	1.09
Peru		48%	-31%	-75%	-88%	57.19	1.76
Philippines		96%	-2%	-60%	-80%	151.87	1.40
Poland		-56%	-50%	-98%	-98%	342.61	9.04
Portugal		-40%	-51%	-96%	-97%	53.18	5.20
Puerto Rico		-6%	5%	-77%	-74%	3.26	1.11
Qatar		186%	-30%	-97%	-99%	104.60	36.93
Réunion		53%	-48%	-86%	-95%	3.06	3.44
Romania		-78%	-51%	-98%	-96%	81.37	4.20
Russia		-64%	-49%	-99%	-99%	1,779.97	12.20
Rwanda		349%	198%	293%	161%	1.14	0.09
Saint Helena, Ascension and Tristan da		-2%	-19%	-90%	-91%	0.02	3.01
Saint Kitts and Nevis		252%	-15%	-75%	-94%	0.25	4.66
Saint Lucia		164%	-6%	-61%	-86%	0.38	2.06
Saint Pierre and Miquelon		-74%	8%	-99%	-97%	0.08	13.88
Saint Vincent and the Grenadines		166%	-6%	-53%	-83%	0.19	1.67
Samoa		-29%	-23%	-75%	-73%	0.14	0.69
São Tomé and Príncipe		117%	-24%	-25%	-74%	0.15	0.71
Saudi Arabia		71%	-38%	-97%	-99%	628.82	18.35
Senegal		210%	6%	11%	-62%	10.99	0.67
Serbia and Montenegro		-57%	-52%	-98%	-97%	59.25	6.30
Seychelles		67%	-48%	-94%	-98%	1.01	10.30
Sierra Leone		146%	148%	72%	74%	1.49	0.19
Singapore		-13%	-46%	-97%	-98%	57.43	9.89
Slovakia		-69%	-52%	-99%	-98%	39.12	7.17
Slovenia		-55%	-58%	-98%	-98%	15.63	7.52
Solomon Islands		20%	-13%	-18%	-41%	0.14	0.20
Somalia		287%	225%	263%	205%	0.97	0.06
South Africa		-27%	-51%	-97%	-98%	474.51	8.10
South Korea		25%	-44%	-97%	-99%	714.26	13.94
Spain and Andorra		-41%	-53%	-97%	-97%	282.82	6.04
Sri Lanka		240%	4%	-17%	-75%	24.14	1.13
Sudan and South Sudan		222%	7%	59%	-47%	21.67	0.40
Suriname		26%	-33%	-90%	-94%	2.30	3.95
Sweden		-62%	-59%	-97%	-97%	44.41	4.42
Switzerland and Liechtenstein		-55%	-57%	-97%	-97%	40.74	4.72
Syria		-52%	-74%	-92%	-96%	29.10	1.70
Taiwan		11%	-49%	-97%	-99%	290.21	12.21
Tajikistan		-66%	33%	-88%	-51%	6.09	0.65

reference values selected scenariotype: RM-5 rad	target year 2030		target year 2050		projection emissions 2019 in Mill. t	per capita emissions 2019 in t	
	vs. reference year	1990	2010	1990			2010
Tanzania		606%	107%	352%	33%	13.80	0.24
Thailand		53%	-42%	-88%	-95%	285.68	4.10
The Gambia		320%	32%	158%	-19%	0.62	0.26
Timor-Leste		148%	28%	62%	-16%	0.29	0.23
Togo		236%	1%	73%	-48%	3.02	0.37
Tonga		14%	-58%	-74%	-90%	0.13	1.20
Trinidad and Tobago		33%	-57%	-98%	-99%	35.95	25.77
Tunisia		17%	-38%	-87%	-93%	33.82	2.89
Turkey		40%	-32%	-91%	-96%	428.38	5.13
Turkmenistan		-11%	-34%	-98%	-98%	86.43	14.55
Turks and Caicos Islands		1111%	-20%	-11%	-94%	0.17	4.49
Uganda		1302%	139%	1023%	92%	5.64	0.13
Ukraine		-88%	-70%	-99%	-98%	188.97	4.30
United Arab Emirates		78%	-41%	-97%	-99%	216.65	22.17
United Kingdom		-70%	-65%	-98%	-98%	363.06	5.38
United States		-50%	-55%	-99%	-99%	5,334.43	16.21
Uruguay		-3%	-41%	-85%	-91%	7.08	2.05
Uzbekistan		-58%	-52%	-96%	-95%	102.01	3.09
Vanuatu		-37%	-31%	-62%	-59%	0.08	0.28
Venezuela		-44%	-70%	-95%	-98%	115.40	4.05
Vietnam		607%	-8%	-22%	-90%	278.85	2.89
Western Sahara		52%	-17%	-34%	-64%	0.29	0.50
Yemen		42%	-64%	-31%	-82%	11.95	0.41
Zambia		71%	125%	-1%	30%	5.31	0.30
Zimbabwe		-52%	-17%	-86%	-76%	13.40	0.91
EU28		-63%	-58%	-98%	-98%	3,388.14	6.61
EU27		-62%	-57%	-98%	-98%	3,023.61	6.79
sub sum						43,476.37	
EU27						-3,023.61	
EU28						-3,388.14	
sum						37,064.62	
base data: projection global 2019*						37,064.62	
difference						0.00	

* excl. FOLU resp. npLUC and international shipping and aviation (ISA)

reference values scenario: RM-5 rad sorted by 'emissions 2019' vs. reference year	target year 2030		target year 2050		projection 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	128%	-40%	-90%	-97%	11,403	8.0	30.8%	31%
United States	-50%	-55%	-99%	-99%	5,334	16.2	14.4%	45%
EU28	-63%	-58%	-98%	-98%	3,388	6.6	9.1%	45%
EU27	-62%	-57%	-98%	-98%	3,024	6.8	8.2%	45%
India	142%	-18%	-62%	-87%	2,693	2.0	7.3%	52%
Russia	-64%	-49%	-99%	-99%	1,780	12.2	4.8%	57%
Japan	-51%	-53%	-98%	-98%	1,188	9.4	3.2%	60%
Iran	75%	-37%	-93%	-98%	748	9.0	2.0%	62%
Germany	-66%	-57%	-99%	-98%	730	8.7	2.0%	64%
South Korea	25%	-44%	-97%	-99%	714	13.9	1.9%	66%
Saudi Arabia	71%	-38%	-97%	-99%	629	18.3	1.7%	68%
Canada	-38%	-50%	-99%	-99%	598	16.0	1.6%	70%
Indonesia	87%	-27%	-73%	-89%	573	2.1	1.5%	71%
Brazil	15%	-41%	-85%	-92%	503	2.4	1.4%	73%
Mexico	-15%	-48%	-93%	-96%	496	3.9	1.3%	74%
South Africa	-27%	-51%	-97%	-98%	475	8.1	1.3%	75%
Turkey	40%	-32%	-91%	-96%	428	5.1	1.2%	76%
Australia	-30%	-53%	-99%	-99%	415	16.5	1.1%	77%
United Kingdom	-70%	-65%	-98%	-98%	363	5.4	1.0%	78%
Poland	-56%	-50%	-98%	-98%	343	9.0	0.9%	79%
Italy, San Marino and the Holy S	-61%	-61%	-98%	-98%	341	5.6	0.9%	80%

sum emissions 2020 - 2100 - national budgets - in Mill. t	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6	average	scope
	const	exp	lin	quadr	rad	abs	budget	average
							RM 2 - 6	budget
Afghanistan	355.87	221.11	252.59	191.50	280.13	268.03	242.7	23
Albania	50.90	43.94	45.57	42.39	46.96	46.35	45.0	9
Algeria	1,335.54	1,309.51	1,315.93	1,303.14	1,319.79	1,318.15	1,313.3	8
Angola	415.14	318.33	340.99	296.97	360.59	351.98	333.8	12
Anguilla	0.28	0.25	0.26	0.24	0.27	0.26	0.3	9
Antigua and Barbuda	4.57	4.73	4.69	4.76	4.66	4.67	4.7	7
Argentina	1,577.15	1,575.57	1,576.36	1,574.42	1,574.88	1,575.59	1,575.4	8
Armenia	57.89	51.52	53.02	50.09	54.27	53.72	52.5	9
Aruba	6.70	7.10	7.01	7.18	6.92	6.96	7.0	7
Australia	2,650.78	2,888.97	2,834.20	2,939.63	2,781.77	2,804.94	2,849.9	7
Austria	497.32	521.67	516.13	526.73	510.51	513.00	517.6	7
Azerbaijan	287.56	278.22	280.47	276.03	282.08	281.38	279.6	8
Bahamas	21.38	22.40	22.17	22.62	21.93	22.04	22.2	7
Bahrain	214.77	236.00	231.11	240.53	226.47	228.52	232.5	7
Bangladesh	1,817.00	1,279.00	1,404.78	1,160.56	1,514.26	1,466.19	1,365.0	14
Barbados	22.21	23.84	23.47	24.18	23.10	23.26	23.6	7
Belarus	463.17	480.50	476.59	484.05	472.47	474.30	477.6	7
Belgium	722.16	764.56	754.88	773.45	745.26	749.52	757.5	7
Belize	5.68	4.57	4.83	4.33	5.06	4.96	4.7	10
Benin	136.45	98.18	107.13	89.75	114.91	111.50	104.3	13
Bermuda	3.11	3.23	3.20	3.25	3.17	3.18	3.2	7
Bhutan	15.26	13.66	14.04	13.30	14.35	14.21	13.9	9
Bolivia	226.98	202.37	208.17	196.88	213.01	210.89	206.3	9
Bosnia and Herzegovina	187.71	197.28	195.10	199.27	192.90	193.88	195.7	7
Botswana	62.81	60.24	60.85	59.65	61.31	61.12	60.6	8
Brazil	4,595.26	4,203.05	4,295.62	4,115.03	4,371.68	4,338.42	4,264.8	8
British Virgin Islands	1.14	1.15	1.15	1.16	1.15	1.15	1.2	7
Brunei	44.97	48.99	48.06	49.84	47.18	47.57	48.3	7
Bulgaria	317.26	326.60	324.51	328.48	322.21	323.23	325.0	7
Burkina Faso	178.65	105.11	122.28	88.96	137.33	130.72	116.9	31
Burundi	90.53	47.34	57.42	37.86	66.28	62.39	54.3	164
Cambodia	192.56	139.36	151.80	127.64	162.61	157.86	147.9	13
Cameroon	284.95	199.10	219.17	180.21	236.65	228.97	212.8	15
Canada	3,823.65	4,162.13	4,084.32	4,234.10	4,009.74	4,042.69	4,106.6	7
Cape Verde	10.52	9.30	9.58	9.02	9.82	9.72	9.5	9
Cayman Islands	3.52	3.69	3.65	3.72	3.61	3.63	3.7	7
Central African Republic	39.25	21.74	25.83	17.90	29.41	27.84	24.5	52
Chad	126.53	66.97	80.87	53.89	93.08	87.72	76.5	112
Chile	690.84	693.34	692.94	693.53	691.63	692.24	692.7	8
China	78,484.36	82,228.73	81,377.56	83,006.30	80,511.07	80,895.40	81,603.8	7
Colombia	924.65	807.86	835.31	781.88	858.47	848.32	826.4	9
Comoros	7.80	4.77	5.48	4.10	6.10	5.83	5.3	25
Congo	84.25	69.79	73.18	66.59	76.09	74.81	72.1	10
Cook Islands	0.39	0.36	0.37	0.35	0.37	0.37	0.4	8
Costa Rica	92.10	80.30	83.07	77.68	85.41	84.39	82.2	9
Côte d'Ivoire	282.76	197.38	217.34	178.59	234.72	227.09	211.0	15
Croatia	148.40	148.65	148.63	148.63	148.41	148.51	148.6	8
Cuba	251.64	231.24	236.05	226.65	240.00	238.27	234.4	8
Curaçao	51.50	57.70	56.27	59.03	54.92	55.52	56.7	7
Cyprus	54.39	56.00	55.64	56.32	55.24	55.42	55.7	7
Czechia	742.67	791.94	780.67	802.33	769.59	774.49	783.8	7
Democratic Republic of the Congo	683.47	358.62	434.46	287.32	501.04	471.78	410.6	145
Denmark	233.90	237.85	236.99	238.59	235.91	236.39	237.1	7
Djibouti	13.83	11.03	11.68	10.41	12.25	12.00	11.5	11
Dominica	1.32	1.15	1.19	1.12	1.23	1.21	1.2	9
Dominican Republic	232.45	212.31	217.06	207.79	220.97	219.26	215.5	9
Ecuador	399.40	369.97	376.93	363.34	382.57	380.11	374.6	8
Egypt	2,274.23	2,099.67	2,140.93	2,060.37	2,174.52	2,159.84	2,127.1	8
El Salvador	96.89	78.98	83.18	75.02	86.78	85.20	81.8	10
Equatorial Guinea	30.04	27.59	28.16	27.03	28.64	28.43	28.0	8
Eritrea	32.07	19.60	22.51	16.85	25.06	23.94	21.6	25

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	158.03	173.08	169.61	176.28	166.31	167.77	170.6	7	
Eswatini	16.25	12.93	13.71	12.20	14.38	14.09	13.5	11	
Ethiopia	963.06	554.47	649.89	464.74	733.51	696.78	619.9	36	
Falkland Islands	0.27	0.29	0.28	0.29	0.28	0.28	0.3	7	
Faroes	0.39	0.20	0.25	0.16	0.28	0.27	0.2	121	
Fiji	14.83	12.56	13.09	12.06	13.55	13.35	12.9	10	
Finland	331.68	350.04	345.85	353.88	341.66	343.52	347.0	7	
France and Monaco	2,411.01	2,424.41	2,421.93	2,426.10	2,416.39	2,418.92	2,421.6	7	
French Guiana	6.87	6.40	6.51	6.29	6.60	6.56	6.5	8	
French Polynesia	5.63	5.05	5.19	4.92	5.30	5.25	5.1	9	
Gabon	55.58	52.67	53.36	52.00	53.90	53.67	53.1	8	
Georgia	96.89	90.80	92.24	89.42	93.39	92.89	91.7	8	
Germany	4,961.22	5,232.14	5,170.37	5,288.77	5,108.49	5,135.91	5,187.1	7	
Ghana	355.73	257.63	280.57	236.02	300.51	291.75	273.3	13	
Gibraltar	4.30	4.72	4.62	4.81	4.53	4.57	4.7	7	
Greece	520.50	540.69	536.12	544.83	531.34	533.46	537.3	7	
Greenland	3.57	3.78	3.74	3.83	3.69	3.71	3.7	7	
Grenada	2.58	2.39	2.43	2.34	2.47	2.45	2.4	8	
Guadeloupe	17.12	17.52	17.43	17.60	17.33	17.38	17.5	7	
Guatemala	259.69	210.32	221.89	199.41	231.83	227.47	218.2	10	
Guinea	116.35	70.69	81.36	60.66	90.69	86.59	78.0	25	
Guinea-Bissau	17.44	10.57	12.17	9.06	13.58	12.96	11.7	26	
Guyana	17.63	16.25	16.58	15.94	16.84	16.72	16.5	8	
Haiti	108.35	68.86	78.09	60.18	86.15	82.61	75.2	20	
Honduras	137.19	108.90	115.53	102.66	121.23	118.73	113.4	11	
Hong Kong	324.06	332.23	330.41	333.84	328.34	329.27	330.8	7	
Hungary	391.31	397.78	396.38	398.99	394.58	395.39	396.6	7	
Iceland	27.39	29.47	28.99	29.91	28.53	28.74	29.1	7	
India	26,431.24	23,441.68	24,144.96	22,775.18	24,734.61	24,476.40	23,914.6	9	
Indonesia	5,467.27	4,906.69	5,038.70	4,781.45	5,148.68	5,100.54	4,995.2	9	
Iran	5,060.23	5,347.49	5,281.93	5,407.63	5,216.56	5,245.52	5,299.8	7	
Iraq	1,445.14	1,451.98	1,450.77	1,452.73	1,447.69	1,449.11	1,450.5	8	
Ireland	253.03	263.85	261.39	266.08	258.86	259.99	262.0	7	
Israel and Palestine, State of	502.71	505.93	505.31	506.37	504.07	504.64	505.3	7	
Italy, San Marino and the Holy See	2,484.87	2,530.35	2,520.42	2,539.01	2,508.14	2,513.64	2,522.3	7	
Jamaica	70.11	65.43	66.54	64.37	67.43	67.04	66.2	8	
Japan	8,005.11	8,480.25	8,371.72	8,579.92	8,264.01	8,311.71	8,401.5	7	
Jordan	231.45	214.23	218.31	210.36	221.61	220.17	216.9	8	
Kazakhstan	2,022.03	2,206.95	2,164.42	2,246.30	2,123.75	2,141.72	2,176.6	7	
Kenya	531.23	350.34	392.61	310.56	429.51	413.30	379.3	18	
Kiribati	1.10	0.68	0.78	0.59	0.86	0.83	0.7	23	
Kuwait	637.94	704.20	688.94	718.35	674.47	680.86	693.4	7	
Kyrgyzstan	110.69	94.84	98.56	91.32	101.72	100.33	97.4	9	
Laos	77.03	52.98	58.60	47.69	63.50	61.35	56.8	15	
Latvia	60.59	59.64	59.88	59.40	60.01	59.95	59.8	8	
Lebanon	204.15	198.86	200.14	197.59	201.01	200.64	199.6	8	
Lesotho	20.62	13.19	14.93	11.56	16.44	15.78	14.4	20	
Liberia	45.49	27.91	32.01	24.04	35.61	34.03	30.7	24	
Libya	395.34	416.35	411.56	420.73	406.75	408.88	412.9	7	
Lithuania	108.81	110.29	109.97	110.55	109.54	109.73	110.0	7	
Luxembourg	65.23	71.11	69.76	72.36	68.46	69.03	70.1	7	
Macao	12.76	11.40	11.72	11.10	11.99	11.87	11.6	9	
Madagascar	234.10	136.10	158.98	114.57	179.04	170.23	151.8	33	
Malawi	153.24	84.41	100.48	69.29	114.58	108.38	95.4	56	
Malaysia	1,806.52	1,897.76	1,876.99	1,916.77	1,856.00	1,865.31	1,882.6	7	
Maldives	9.39	8.11	8.41	7.82	8.66	8.55	8.3	9	
Mali	157.68	84.50	101.58	68.43	116.58	109.99	96.2	85	
Malta	12.33	11.88	11.99	11.78	12.07	12.03	11.9	8	
Martinique	17.55	18.12	17.99	18.24	17.85	17.92	18.0	7	
Mauritania	54.45	40.06	43.43	36.89	46.35	45.07	42.4	13	
Mauritius	36.40	35.22	35.51	34.95	35.71	35.62	35.4	8	

sum emissions 2020 - 2100 - national budgets - in Mill. t	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6	average	scope
	const	exp	lin	quadr	rad	abs	budget	average
							RM 2 - 6	budget
Mexico	3,912.16	3,828.89	3,849.33	3,808.70	3,862.11	3,856.65	3,841.1	8
Moldova	83.45	75.31	77.23	73.49	78.82	78.12	76.6	9
Mongolia	143.49	147.44	146.56	148.22	145.57	146.01	146.8	7
Morocco	695.31	614.14	633.23	596.05	649.26	642.24	627.0	9
Mozambique	293.33	187.02	211.86	163.65	233.57	224.03	204.0	20
Myanmar/Burma	613.62	436.82	478.16	397.89	514.12	498.33	465.1	14
Namibia	46.17	40.43	41.78	39.16	42.92	42.42	41.3	9
Nepal	282.42	183.08	206.29	161.24	226.57	217.66	199.0	19
Netherlands	1,068.67	1,131.32	1,117.01	1,144.46	1,102.80	1,109.09	1,120.9	7
New Caledonia	46.76	51.74	50.60	52.81	49.51	49.99	50.9	7
New Zealand	256.05	267.76	265.10	270.18	262.38	263.58	265.8	7
Nicaragua	87.59	67.98	72.57	63.65	76.53	74.79	71.1	11
Niger	192.84	106.84	126.92	87.96	144.53	136.80	120.6	52
Nigeria	2,216.44	1,550.19	1,705.94	1,403.54	1,841.56	1,782.01	1,656.7	15
North Korea	389.15	318.45	335.02	302.81	349.23	343.00	329.7	10
North Macedonia	64.83	63.60	63.90	63.30	64.09	64.01	63.8	8
Norway	348.02	369.34	364.47	373.81	359.65	361.78	365.8	7
Oman	556.09	607.55	595.72	618.51	584.40	589.40	599.1	7
Pakistan	2,855.88	2,201.28	2,354.50	2,056.85	2,486.97	2,428.83	2,305.7	11
Palau	7.87	8.85	8.63	9.06	8.41	8.51	8.7	7
Panama	103.78	97.42	98.93	95.98	100.13	99.60	98.4	8
Papua New Guinea	91.00	61.12	68.11	54.55	74.20	71.52	65.9	17
Paraguay	99.66	79.29	84.06	74.79	88.17	86.37	82.5	11
Peru	588.11	511.45	529.46	494.41	544.68	538.01	523.6	9
Philippines	1,729.12	1,443.46	1,510.44	1,380.18	1,567.70	1,542.59	1,488.9	10
Poland	2,318.16	2,450.22	2,420.08	2,477.88	2,390.04	2,403.35	2,428.3	7
Portugal	393.21	397.34	396.48	398.04	395.18	395.77	396.6	7
Puerto Rico	41.83	33.40	35.37	31.53	37.07	36.33	34.7	11
Qatar	640.65	713.89	697.00	729.56	681.08	688.11	701.9	7
Réunion	24.94	24.05	24.26	23.84	24.42	24.35	24.2	8
Romania	630.20	622.49	624.45	620.48	625.33	624.97	623.5	8
Russia	11,652.19	12,530.39	12,328.96	12,716.22	12,133.48	12,219.93	12,385.8	7
Rwanda	103.73	57.05	67.95	46.80	77.51	73.31	64.5	57
Saint Helena, Ascension and Tristan da Cunha	0.15	0.15	0.15	0.14	0.15	0.15	0.1	8
Saint Kitts and Nevis	1.86	1.86	1.86	1.86	1.86	1.86	1.9	8
Saint Lucia	3.63	3.25	3.34	3.16	3.41	3.38	3.3	9
Saint Pierre and Miquelon	0.52	0.57	0.56	0.57	0.55	0.55	0.6	7
Saint Vincent and the Grenadines	1.95	1.68	1.74	1.62	1.79	1.77	1.7	9
Samoa	2.32	1.69	1.84	1.55	1.97	1.91	1.8	13
São Tomé and Príncipe	2.55	1.86	2.02	1.71	2.16	2.10	2.0	13
Saudi Arabia	3,983.83	4,359.15	4,272.80	4,439.08	4,190.40	4,226.80	4,297.6	7
Senegal	190.21	137.61	149.91	126.02	160.60	155.91	146.0	13
Serbia and Montenegro	422.75	434.85	432.14	437.27	429.15	430.48	432.8	7
Seychelles	6.71	7.15	7.05	7.24	6.95	6.99	7.1	7
Sierra Leone	68.82	40.56	47.16	34.36	52.94	50.40	45.1	30
Singapore	384.39	408.59	403.06	413.68	397.60	400.02	404.6	7
Slovakia	273.40	284.22	281.77	286.44	279.22	280.35	282.4	7
Slovenia	108.47	113.18	112.11	114.15	111.01	111.50	112.4	7
Solomon Islands	5.95	3.54	4.10	3.01	4.60	4.38	3.9	29
Somalia	124.36	66.93	80.34	54.33	92.11	86.94	76.1	79
South Africa	3,257.38	3,417.35	3,380.96	3,450.62	3,344.05	3,360.42	3,390.7	7
South Korea	4,619.58	4,999.53	4,912.27	5,080.14	4,828.18	4,865.35	4,937.1	7
Spain and Andorra	2,032.97	2,083.41	2,072.20	2,093.39	2,059.41	2,065.12	2,074.7	7
Sri Lanka	306.61	245.61	259.90	232.12	272.20	266.80	255.3	11
Sudan and South Sudan	542.04	356.36	399.75	315.53	437.63	421.00	386.1	18
Suriname	18.06	17.71	17.80	17.63	17.85	17.83	17.8	8
Sweden	339.86	337.66	338.26	337.00	338.33	338.31	337.9	8
Switzerland and Liechtenstein	307.36	307.52	307.56	307.39	307.18	307.36	307.4	8
Syria	303.28	262.29	271.92	253.18	280.07	276.50	268.8	9
Taiwan	1,899.71	2,042.93	2,010.08	2,073.23	1,978.20	1,992.30	2,019.3	7
Tajikistan	107.62	77.37	84.44	70.71	90.59	87.89	82.2	14

sum emissions 2020 - 2100 - national budgets -	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	527.20	319.64	368.12	274.03	410.56	391.92	352.9	26
Thailand	2,225.14	2,191.91	2,200.24	2,183.51	2,204.58	2,202.76	2,196.6	8
The Gambia	21.67	13.32	15.27	11.48	16.98	16.23	14.7	24
Timor-Leste	11.67	7.03	8.11	6.01	9.06	8.64	7.8	27
Togo	79.96	51.92	58.47	45.75	64.19	61.68	56.4	19
Tonga	1.55	1.25	1.32	1.19	1.38	1.36	1.3	10
Trinidad and Tobago	223.45	247.03	241.60	252.07	236.45	238.72	243.2	7
Tunisia	289.95	273.00	277.03	269.15	280.21	278.82	275.6	8
Turkey	3,175.52	3,204.74	3,198.78	3,209.50	3,189.08	3,193.48	3,199.1	7
Turkmenistan	557.02	603.97	593.18	613.93	582.81	587.39	596.3	7
Turks and Caicos Islands	1.31	1.30	1.30	1.30	1.30	1.30	1.3	8
Uganda	373.44	211.11	249.01	175.46	282.25	267.65	237.1	42
Ukraine	1,456.00	1,441.79	1,445.48	1,437.93	1,446.76	1,446.26	1,443.6	8
United Arab Emirates	1,356.94	1,493.93	1,462.39	1,523.16	1,432.43	1,445.66	1,471.5	7
United Kingdom	2,666.90	2,703.64	2,695.80	2,710.30	2,685.12	2,689.92	2,697.0	7
United States	34,090.20	37,129.53	36,430.75	37,775.88	35,761.38	36,057.18	36,630.9	7
Uruguay	68.50	61.13	62.87	59.49	64.32	63.68	62.3	9
Uzbekistan	856.91	814.44	824.56	804.72	832.38	828.98	821.0	8
Vanuatu	2.80	1.74	1.99	1.51	2.21	2.11	1.9	23
Venezuela	901.85	886.96	890.67	883.24	892.72	891.86	889.1	8
Vietnam	2,390.89	2,251.03	2,284.24	2,219.25	2,310.50	2,299.05	2,272.8	8
Western Sahara	6.20	4.24	4.70	3.81	5.10	4.92	4.6	16
Yemen	294.72	194.39	217.84	172.33	238.31	229.32	210.4	18
Zambia	168.60	105.54	120.27	91.68	133.15	127.49	115.6	22
Zimbabwe	191.78	147.33	157.73	137.52	166.73	162.78	154.4	12
EU28	23,983.73	24,770.17	24,593.39	24,929.64	24,402.80	24,487.61	24,636.7	7
EU27	21,308.15	22,056.67	21,888.01	22,209.23	21,708.35	21,788.25	21,930.1	7
sub sum 2020 - 2100	323,836	326,039	325,612	326,354	324,784	325,161	325,590	
EU27	-21,308	-22,057	-21,888	-22,209	-21,708	-21,788	-21,930	
EU28	-23,984	-24,770	-24,593	-24,930	-24,403	-24,488	-24,637	
sum	278,545	279,212	279,130	279,215	278,673	278,886	279,023	
base data: budget 2020 - 2100*	279,000	279,000	279,000	279,000	279,000	279,000	279,000	
rounding differences	-455	212	130	215	-327	-114	23	
difference in %	-0.16%	0.08%	0.05%	0.08%	-0.12%	-0.04%	0.01%	
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**	21.3%	10.8%	13.2%	8.5%	15.4%	14.5%	12.5%	
global (start) change rate 2020	-7.8%	-1.5%	-1.5%	-1.5%	-1.5%	-3.5%		
global change rate 2030 vs. 2010	-55%	-24%	-38%	-25%	-46%	-33%		
global overshoot in Gt	138	227	189	222	162	225		
base data: global CO2 budget 2018 - 2100 incl. FOLU and ISA in Gt:							420	

* excl. FOLU resp. npLUC and international shipping and aviation (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	78,484	82,229	81,378	83,006	80,511	80,895	81,604	7	29.2%
United States	34,090	37,130	36,431	37,776	35,761	36,057	36,631	7	13.1%
EU28	23,984	24,770	24,593	24,930	24,403	24,488	24,637	7	8.8%
India	26,431	23,442	24,145	22,775	24,735	24,476	23,915	9	8.6%
EU27	21,308	22,057	21,888	22,209	21,708	21,788	21,930	7	7.9%
Russia	11,652	12,530	12,329	12,716	12,133	12,220	12,386	7	4.4%
Japan	8,005	8,480	8,372	8,580	8,264	8,312	8,402	7	3.0%
Iran	5,060	5,347	5,282	5,408	5,217	5,246	5,300	7	1.9%
Germany	4,961	5,232	5,170	5,289	5,108	5,136	5,187	7	1.9%
Indonesia	5,467	4,907	5,039	4,781	5,149	5,101	4,995	9	1.8%
South Korea	4,620	5,000	4,912	5,080	4,828	4,865	4,937	7	1.8%
Saudi Arabia	3,984	4,359	4,273	4,439	4,190	4,227	4,298	7	1.5%
Brazil	4,595	4,203	4,296	4,115	4,372	4,338	4,265	8	1.5%
Canada	3,824	4,162	4,084	4,234	4,010	4,043	4,107	7	1.5%
Mexico	3,912	3,829	3,849	3,809	3,862	3,857	3,841	8	1.4%
South Africa	3,257	3,417	3,381	3,451	3,344	3,360	3,391	7	1.2%
Turkey	3,176	3,205	3,199	3,209	3,189	3,193	3,199	7	1.1%
Australia	2,651	2,889	2,834	2,940	2,782	2,805	2,850	7	1.0%
United Kingdom	2,667	2,704	2,696	2,710	2,685	2,690	2,697	7	1.0%
Italy, San Marino and the Holy See	2,485	2,530	2,520	2,539	2,508	2,514	2,522	7	0.9%
Poland	2,318	2,450	2,420	2,478	2,390	2,403	2,428	7	0.9%

central premises	
global CO2 budget 2018 - 2100	420 Gt
emissions in 2018 and 2019, FOLU resp. npLUC and ISA	-141 Gt
budget 2020 - 2100 to distribute in this tool	279 Gt
minimum annual global emissions	-4.35 Gt
convergence level	0.25 t / capita

gobal path properties	RM-1	RM-2	RM-3	RM-4	RM-5	RM-6
	const	exp	lin	quadr	rad	abs
implicit population weighting vs. emissions**	21%	11%	13%	9%	15%	14%
global (start) change rate 2020	-7.8%	-1.5%	-1.5%	-1.5%	-1.5%	-3.5%
global change rate 2030 vs. 2010	-55%	-24%	-38%	-25%	-46%	-33%
global overshoot in Gt	138	227	189	222	162	225

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

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

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

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