

reference values selected scenariorotype: 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		497%	173%	262%	66%	11.00	0.29
Albania		-40%	-13%	-89%	-85%	5.66	1.96
Algeria		71%	0%	-84%	-91%	180.57	4.19
Angola		101%	-5%	-31%	-67%	25.82	0.81
Anguilla		183%	-28%	-40%	-85%	0.02	1.58
Antigua and Barbuda		44%	-9%	-89%	-93%	0.51	5.25
Argentina		18%	-33%	-90%	-94%	199.41	4.45
Armenia		-80%	-6%	-96%	-84%	5.92	2.00
Aruba		63%	-3%	-91%	-95%	0.78	7.37
Australia		-6%	-37%	-98%	-98%	433.38	17.20
Austria		-29%	-41%	-96%	-97%	72.36	8.08
Azerbaijan		-57%	-5%	-95%	-90%	35.98	3.58
Bahamas		0%	-12%	-94%	-95%	2.45	6.29
Bahrain		77%	-26%	-97%	-99%	35.44	21.59
Bangladesh		617%	73%	179%	-33%	110.16	0.68
Barbados		198%	-1%	-91%	-97%	3.83	13.33
Belarus		-62%	-39%	-98%	-97%	66.34	7.02
Belgium		-45%	-45%	-98%	-98%	104.41	9.05
Belize		65%	23%	-49%	-62%	0.37	0.95
Benin		1723%	48%	599%	-43%	8.15	0.69
Bermuda		-34%	-38%	-95%	-96%	0.35	5.60
Bhutan		586%	8%	-10%	-86%	2.12	2.78
Bolivia		162%	15%	-57%	-81%	24.51	2.13
Bosnia and Herzegovina		-17%	-8%	-97%	-96%	33.50	10.15
Botswana		66%	34%	-80%	-84%	7.04	3.06
Brazil		45%	-26%	-77%	-88%	478.15	2.27
British Virgin Islands		198%	10%	-72%	-90%	0.12	4.05
Brunei		27%	-42%	-97%	-99%	7.02	16.20
Bulgaria		-67%	-44%	-98%	-96%	43.31	6.19
Burkina Faso		1725%	270%	1217%	167%	3.64	0.18
Burundi		1287%	1185%	1251%	1151%	0.34	0.03
Cabo Verde		1397%	120%	177%	-59%	1.02	1.86
Cambodia		3235%	171%	896%	-19%	16.49	1.00
Cameroon		150%	57%	32%	-17%	10.10	0.39
Canada		-22%	-38%	-98%	-98%	584.85	15.63
Cayman Islands		70%	-11%	-89%	-94%	0.40	6.20
Central African Republic		787%	300%	636%	232%	0.49	0.10
Chad		1495%	927%	1362%	841%	0.89	0.06
Chile		74%	-20%	-86%	-94%	89.89	4.74
China		196%	-22%	-85%	-96%	11,535.20	8.05
Colombia		20%	-6%	-76%	-81%	86.55	1.72
Comoros		563%	142%	326%	56%	0.21	0.25
Congo		95%	-12%	-45%	-75%	5.80	1.08
Cook Islands		-30%	-49%	-90%	-93%	0.04	2.50
Costa Rica		121%	-11%	-58%	-83%	8.98	1.78
Côte d'Ivoire		363%	85%	109%	-16%	13.56	0.53
Croatia		-51%	-43%	-96%	-95%	19.12	4.63
Cuba		-46%	-38%	-93%	-92%	31.04	2.74
Curaçao		-36%	-43%	-99%	-99%	5.91	36.19
Cyprus		2%	-42%	-94%	-96%	7.41	6.19
Czechia		-60%	-46%	-98%	-98%	105.69	9.89
Democratic Republic of the Congo		545%	627%	520%	599%	2.98	0.03
Denmark		-63%	-60%	-97%	-97%	31.12	5.39
Djibouti		-23%	-25%	-78%	-79%	1.05	1.08
Dominica		138%	-5%	-46%	-78%	0.10	1.44
Dominican Republic		131%	-13%	-67%	-88%	27.28	2.54
Ecuador		59%	-26%	-76%	-89%	40.70	2.34
Egypt		91%	-18%	-73%	-88%	255.37	2.54
El Salvador		117%	-15%	-40%	-76%	7.15	1.11
Equatorial Guinea		2324%	-46%	242%	-92%	3.47	2.56
Eritrea		491%	168%	303%	82%	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		-71%	-49%	-99%	-99%	18.50	13.96
Eswatini		57%	-54%	-53%	-86%	1.14	1.00
Ethiopia		1447%	437%	1049%	299%	18.25	0.16
Falkland Islands		49%	-17%	-94%	-96%	0.03	9.40
Faroese		745%	568%	703%	535%	0.00	0.04
Fiji		-2%	-16%	-79%	-82%	1.36	1.53
Finland		-53%	-59%	-98%	-98%	43.41	7.85
France and Monaco		-48%	-47%	-96%	-96%	314.74	4.83
French Guiana		15%	-19%	-81%	-86%	0.61	2.10
French Polynesia		-50%	-53%	-92%	-92%	0.60	2.15
Gabon		-59%	-57%	-91%	-91%	3.48	1.60
Georgia		-74%	42%	-97%	-84%	13.47	3.37
Germany		-58%	-47%	-98%	-97%	702.60	8.41
Ghana		434%	49%	134%	-34%	16.84	0.55
Gibraltar		189%	-12%	-94%	-98%	0.69	20.58
Greece		-48%	-54%	-97%	-97%	65.57	6.26
Greenland		10629%	-51%	355%	-98%	0.54	9.47
Grenada		115%	13%	-63%	-81%	0.23	2.04
Guadeloupe		37%	1%	-89%	-92%	1.87	4.68
Guatemala		324%	41%	10%	-63%	21.20	1.21
Guinea		340%	239%	193%	126%	2.92	0.23
Guinea-Bissau		262%	75%	141%	17%	0.44	0.23
Guyana		220%	37%	-43%	-75%	1.52	1.94
Haiti		315%	102%	142%	17%	3.58	0.32
Honduras		253%	4%	1%	-70%	10.36	1.06
Hong Kong		-19%	-35%	-95%	-96%	44.02	5.92
Hungary		-53%	-35%	-97%	-95%	53.18	5.49
Iceland		2%	-36%	-96%	-98%	3.93	11.58
India		208%	5%	-44%	-81%	2,597.36	1.90
Indonesia		163%	3%	-59%	-84%	625.66	2.31
Iran		111%	-24%	-90%	-96%	701.99	8.47
Iraq		81%	0%	-86%	-92%	197.61	5.03
Ireland		-31%	-45%	-96%	-97%	36.55	7.49
Israel and Palestine, State of		23%	-40%	-91%	-95%	68.33	5.06
Italy, San Marino and the Holy See		-51%	-51%	-97%	-97%	331.56	5.47
Jamaica		-33%	-32%	-90%	-90%	7.44	2.52
Japan		-38%	-41%	-97%	-97%	1,153.72	9.09
Jordan		86%	-8%	-76%	-88%	28.34	2.81
Kazakhstan		-33%	-31%	-98%	-98%	277.36	14.95
Kenya		271%	82%	100%	-2%	19.81	0.38
Kiribati		136%	-8%	44%	-44%	0.03	0.29
Kuwait		81%	-31%	-97%	-99%	98.95	23.52
Kyrgyzstan		-64%	30%	-93%	-76%	11.92	1.86
Laos		2543%	230%	721%	3%	6.78	0.95
Latvia		-73%	-41%	-98%	-95%	8.38	4.39
Lebanon		197%	-14%	-72%	-92%	27.44	4.00
Lesotho		841%	77%	422%	-2%	0.75	0.35
Liberia		351%	226%	192%	112%	1.21	0.24
Libya		-13%	-48%	-96%	-97%	52.05	7.68
Lithuania		-75%	-37%	-98%	-95%	13.77	4.99
Luxembourg		-50%	-48%	-99%	-99%	9.74	15.82
Macao		-9%	-24%	-84%	-87%	1.27	1.99
Madagascar		1159%	300%	847%	201%	4.20	0.16
Malawi		1066%	263%	902%	212%	1.62	0.09
Malaysia		168%	-29%	-86%	-96%	248.83	7.79
Maldives		906%	-25%	99%	-85%	0.91	1.72
Mali		1259%	802%	1155%	734%	1.03	0.05
Malta		-70%	-73%	-95%	-96%	1.04	2.37
Martinique		31%	-8%	-90%	-93%	1.95	5.20
Mauritania		714%	171%	63%	-46%	7.66	1.69
Mauritius		139%	-23%	-74%	-92%	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		8%	-34%	-89%	-93%	485.00	3.80
Moldova		-80%	-24%	-97%	-88%	9.23	2.28
Mongolia		66%	52%	-94%	-94%	35.93	11.14
Morocco		132%	0%	-60%	-83%	73.91	2.03
Mozambique		965%	242%	532%	103%	9.26	0.30
Myanmar/Burma		820%	380%	198%	55%	48.31	0.89
Namibia		106%	3%	-60%	-80%	4.40	1.76
Nepal		1318%	224%	541%	46%	15.02	0.52
Netherlands		-40%	-48%	-97%	-98%	156.41	9.15
New Caledonia		471%	87%	-96%	-99%	15.66	55.37
New Zealand		0%	-30%	-95%	-97%	38.67	8.08
Nicaragua		153%	7%	-18%	-66%	5.86	0.90
Niger		657%	380%	531%	301%	2.36	0.10
Nigeria		42%	17%	-34%	-45%	100.22	0.50
North Korea		-77%	-42%	-95%	-88%	42.17	1.64
North Macedonia		-49%	-37%	-95%	-94%	8.92	4.28
Norway		-21%	-37%	-96%	-97%	47.99	8.92
Oman		258%	6%	-92%	-98%	92.78	18.65
Pakistan		179%	19%	-18%	-65%	223.63	1.03
Palau		-64%	-63%	-100%	-100%	1.33	73.84
Panama		187%	-17%	-62%	-89%	11.63	2.74
Papua New Guinea		93%	45%	-6%	-30%	4.07	0.46
Paraguay		193%	28%	-23%	-67%	8.47	1.20
Peru		95%	-10%	-62%	-82%	56.29	1.73
Philippines		160%	30%	-39%	-70%	150.64	1.39
Poland		-47%	-40%	-97%	-97%	317.65	8.38
Portugal		-29%	-42%	-94%	-95%	48.47	4.74
Puerto Rico		45%	29%	-65%	-69%	3.91	1.33
Qatar		272%	-9%	-96%	-99%	106.53	37.61
Réunion		96%	-33%	-78%	-93%	3.02	3.40
Romania		-73%	-39%	-97%	-94%	78.63	4.06
Russia		-55%	-37%	-99%	-98%	1,792.02	12.28
Rwanda		595%	361%	492%	292%	1.15	0.09
Saint Helena, Ascension and Tristan da		13%	-6%	-84%	-87%	0.02	2.61
Saint Kitts and Nevis		266%	-12%	-62%	-91%	0.19	3.67
Saint Lucia		187%	2%	-41%	-79%	0.30	1.63
Saint Pierre and Miquelon		-74%	7%	-99%	-96%	0.06	10.64
Saint Vincent and the Grenadines		193%	4%	-29%	-75%	0.15	1.32
Samoa		-1%	8%	-62%	-59%	0.14	0.71
São Tomé and Príncipe		209%	8%	13%	-60%	0.16	0.74
Saudi Arabia		113%	-23%	-95%	-98%	614.61	17.94
Senegal		300%	36%	67%	-43%	9.81	0.60
Serbia and Montenegro		-34%	-27%	-97%	-96%	70.69	7.52
Seychelles		123%	-31%	-92%	-97%	1.05	10.75
Sierra Leone		259%	262%	159%	162%	1.40	0.18
Singapore		4%	-36%	-95%	-97%	53.37	9.19
Slovakia		-63%	-44%	-98%	-97%	35.99	6.59
Slovenia		-43%	-47%	-97%	-97%	15.37	7.39
Solomon Islands		80%	30%	24%	-11%	0.14	0.21
Somalia		505%	408%	447%	359%	0.97	0.06
South Africa		-3%	-34%	-95%	-97%	494.86	8.45
South Korea		46%	-34%	-95%	-98%	651.87	12.73
Spain and Andorra		-29%	-43%	-95%	-96%	259.31	5.54
Sri Lanka		400%	54%	23%	-62%	27.57	1.29
Sudan and South Sudan		364%	55%	137%	-21%	22.57	0.42
Suriname		48%	-22%	-84%	-92%	2.06	3.54
Sweden		-51%	-46%	-96%	-95%	44.75	4.46
Switzerland and Liechtenstein		-44%	-46%	-95%	-95%	39.37	4.56
Syria		-36%	-66%	-87%	-93%	29.16	1.71
Taiwan		35%	-38%	-95%	-98%	276.78	11.64
Tajikistan		-39%	137%	-81%	-27%	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		919%	199%	576%	98%	13.34	0.23
Thailand		91%	-28%	-82%	-93%	275.06	3.95
The Gambia		506%	91%	288%	22%	0.59	0.25
Timor-Leste		307%	110%	144%	26%	0.38	0.30
Togo		368%	41%	160%	-22%	2.85	0.35
Tonga		55%	-43%	-60%	-85%	0.13	1.22
Trinidad and Tobago		55%	-49%	-97%	-99%	32.74	23.47
Tunisia		47%	-23%	-80%	-90%	32.07	2.74
Turkey		76%	-15%	-86%	-93%	415.78	4.98
Turkmenistan		20%	-11%	-97%	-98%	90.52	15.23
Turks and Caicos Islands		1164%	-17%	34%	-91%	0.13	3.53
Uganda		2004%	259%	1590%	189%	5.34	0.12
Ukraine		-84%	-59%	-99%	-96%	196.40	4.46
United Arab Emirates		134%	-23%	-96%	-99%	222.61	22.78
United Kingdom		-61%	-54%	-97%	-97%	364.91	5.40
United States		-39%	-45%	-98%	-99%	5,107.26	15.52
Uruguay		20%	-27%	-78%	-87%	6.56	1.90
Uzbekistan		-48%	-41%	-93%	-92%	94.99	2.88
Vanuatu		-7%	1%	-43%	-39%	0.09	0.29
Venezuela		-30%	-62%	-93%	-96%	110.06	3.86
Vietnam		887%	30%	16%	-85%	305.25	3.16
Western Sahara		117%	17%	-1%	-46%	0.30	0.51
Yemen		93%	-49%	4%	-73%	10.89	0.37
Zambia		189%	276%	47%	92%	7.50	0.42
Zimbabwe		-43%	-2%	-79%	-64%	10.86	0.74
EU27		-52%	-46%	-97%	-97%	2,939.07	6.60
EU28		-53%	-47%	-97%	-97%	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	196%	-22%	-85%	-96%	11,535	8.0	31.5%	31%
United States	-39%	-45%	-98%	-99%	5,107	15.5	13.9%	45%
EU28	-53%	-47%	-97%	-97%	3,304	6.4	9.0%	45%
EU27	-52%	-46%	-97%	-97%	2,939	6.6	8.0%	45%
India	208%	5%	-44%	-81%	2,597	1.9	7.1%	52%
Russia	-55%	-37%	-99%	-98%	1,792	12.3	4.9%	57%
Japan	-38%	-41%	-97%	-97%	1,154	9.1	3.1%	61%
Germany	-58%	-47%	-98%	-97%	703	8.4	1.9%	62%
Iran	111%	-24%	-90%	-96%	702	8.5	1.9%	64%
South Korea	46%	-34%	-95%	-98%	652	12.7	1.8%	66%
Indonesia	163%	3%	-59%	-84%	626	2.3	1.7%	68%
Saudi Arabia	113%	-23%	-95%	-98%	615	17.9	1.7%	70%
Canada	-22%	-38%	-98%	-98%	585	15.6	1.6%	71%
South Africa	-3%	-34%	-95%	-97%	495	8.5	1.3%	72%
Mexico	8%	-34%	-89%	-93%	485	3.8	1.3%	74%
Brazil	45%	-26%	-77%	-88%	478	2.3	1.3%	75%
Australia	-6%	-37%	-98%	-98%	433	17.2	1.2%	76%
Turkey	76%	-15%	-86%	-93%	416	5.0	1.1%	77%
United Kingdom	-61%	-54%	-97%	-97%	365	5.4	1.0%	78%
Italy, San Marino and the Holy S	-51%	-51%	-97%	-97%	332	5.5	0.9%	79%
Poland	-47%	-40%	-97%	-97%	318	8.4	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	814.77	425.19	528.99	428.21	590.85	511.22	496.9	45
Albania	113.39	94.95	99.93	95.05	102.80	99.04	98.4	17
Algeria	2,722.64	2,666.94	2,684.11	2,666.12	2,690.87	2,680.10	2,677.6	15
Angola	859.59	571.75	648.68	573.86	694.17	635.40	624.8	24
Anguilla	0.52	0.42	0.44	0.42	0.46	0.44	0.4	19
Antigua and Barbuda	7.24	7.35	7.33	7.35	7.30	7.33	7.3	14
Argentina	2,956.10	2,924.75	2,935.68	2,923.59	2,938.35	2,932.62	2,931.0	15
Armenia	117.61	98.93	103.98	99.04	106.88	103.08	102.4	17
Aruba	10.34	10.98	10.82	10.97	10.71	10.84	10.9	14
Australia	5,103.11	5,821.29	5,635.81	5,812.53	5,516.51	5,664.84	5,690.2	13
Austria	939.06	1,007.22	990.02	1,006.17	978.33	992.52	994.9	14
Azerbaijan	569.46	542.36	550.03	542.32	553.93	548.51	547.4	15
Bahamas	33.37	34.73	34.40	34.70	34.15	34.44	34.5	14
Bahrain	409.60	472.91	456.52	472.15	446.04	459.10	461.3	13
Bangladesh	4,167.04	2,641.70	3,049.01	2,653.05	3,290.40	2,978.88	2,922.6	27
Barbados	46.25	51.89	50.44	51.82	49.50	50.66	50.9	13
Belarus	883.61	932.54	920.38	931.68	911.82	922.06	923.7	14
Belgium	1,329.67	1,443.09	1,414.26	1,441.45	1,395.00	1,418.55	1,422.5	14
Belize	11.13	7.72	8.63	7.74	9.17	8.47	8.3	22
Benin	303.52	193.53	222.91	194.35	240.31	217.85	213.8	26
Bermuda	4.89	5.01	4.99	5.01	4.96	4.99	5.0	14
Bhutan	36.73	33.28	34.22	33.29	34.75	34.05	33.9	16
Bolivia	473.45	404.08	422.86	404.46	433.61	419.51	416.9	17
Bosnia and Herzegovina	419.21	459.96	449.55	459.40	442.68	451.12	452.5	14
Botswana	117.60	108.61	111.09	108.63	112.44	110.62	110.3	16
Brazil	8,987.50	7,781.91	8,108.92	7,788.13	8,295.15	8,050.28	8,004.9	17
British Virgin Islands	1.85	1.80	1.82	1.80	1.82	1.81	1.8	15
Brunei	83.13	94.49	91.55	94.35	89.67	92.01	92.4	13
Bulgaria	592.13	615.05	609.51	614.56	605.36	610.20	610.9	14
Burkina Faso	411.33	198.11	254.89	199.78	288.77	245.19	237.3	65
Burundi	214.87	89.93	123.18	90.92	143.05	117.51	112.9	334
Cabo Verde	21.03	17.38	18.37	17.40	18.94	18.19	18.1	18
Cambodia	478.63	336.65	374.65	337.67	397.04	368.07	362.8	22
Cameroon	582.28	323.29	392.33	325.27	433.42	380.50	371.0	37
Canada	6,948.93	7,881.06	7,640.61	7,869.54	7,485.52	7,678.11	7,711.0	13
Cayman Islands	5.50	5.72	5.67	5.72	5.63	5.67	5.7	14
Central African Republic	92.23	41.62	55.09	42.02	63.14	52.79	50.9	103
Chad	301.74	129.91	175.64	131.27	202.97	167.84	161.5	181
Chile	1,309.91	1,309.22	1,310.57	1,308.60	1,309.63	1,309.80	1,309.6	15
China	149,807.17	160,604.20	157,880.83	160,437.24	156,028.97	158,276.11	158,645.5	14
Colombia	1,849.20	1,498.64	1,593.05	1,500.82	1,647.81	1,576.43	1,563.3	18
Comoros	17.88	9.09	11.43	9.16	12.83	11.03	10.7	50
Congo	160.73	115.36	127.51	115.68	134.66	125.40	123.7	21
Cook Islands	0.79	0.70	0.73	0.70	0.74	0.72	0.7	16
Costa Rica	188.64	154.18	163.47	154.39	168.84	161.83	160.5	18
Côte d'Ivoire	616.33	366.99	433.52	368.88	473.03	422.09	412.9	30
Croatia	280.43	279.21	279.78	279.08	279.75	279.57	279.5	15
Cuba	540.11	487.67	502.02	487.86	510.01	499.39	497.4	16
Curaçao	66.33	78.10	75.04	77.96	73.10	75.53	75.9	13
Cyprus	101.35	105.27	104.32	105.19	103.62	104.44	104.6	14
Czechia	1,327.78	1,453.40	1,421.35	1,451.66	1,400.13	1,426.18	1,430.5	14
Democratic Republic of the Congo	1,622.07	682.60	932.63	690.05	1,082.05	889.97	855.5	287
Denmark	439.02	447.39	445.56	447.10	443.87	445.69	445.9	14
Djibouti	29.07	20.86	23.06	20.92	24.35	22.68	22.4	21
Dominica	2.42	1.88	2.02	1.88	2.11	2.00	2.0	19
Dominican Republic	488.87	434.27	449.16	434.52	457.52	446.45	444.4	16
Ecuador	754.19	658.01	684.13	658.49	698.96	679.43	675.8	17
Egypt	4,574.16	4,064.70	4,203.58	4,066.96	4,281.66	4,178.36	4,159.1	16
El Salvador	194.77	140.78	155.24	141.16	163.75	152.73	150.7	21
Equatorial Guinea	62.05	55.23	57.09	55.26	58.14	56.75	56.5	16
Eritrea	72.07	35.65	45.35	35.93	51.14	43.69	42.4	57

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	222.45	250.39	243.19	250.04	238.53	244.31	245.3	13
Eswatini	33.28	23.38	26.03	23.45	27.59	25.57	25.2	22
Ethiopia	2,248.91	1,068.69	1,382.98	1,077.94	1,570.52	1,329.27	1,285.9	70
Falkland Islands	0.40	0.44	0.43	0.44	0.42	0.43	0.4	14
Faroes	0.91	0.39	0.53	0.39	0.61	0.50	0.5	251
Fiji	30.88	24.29	26.06	24.34	27.09	25.75	25.5	19
Finland	566.32	605.47	595.62	604.85	588.88	597.04	598.4	14
France and Monaco	4,564.70	4,575.28	4,576.55	4,572.98	4,571.20	4,574.44	4,574.1	15
French Guiana	11.87	10.09	10.57	10.10	10.85	10.49	10.4	17
French Polynesia	11.54	9.87	10.32	9.87	10.58	10.24	10.2	17
Gabon	77.13	61.42	65.65	61.52	68.11	64.91	64.3	18
Georgia	217.53	204.82	208.37	204.83	210.24	207.69	207.2	15
Germany	9,054.77	9,753.99	9,577.04	9,743.49	9,457.63	9,603.01	9,627.0	14
Ghana	737.62	444.54	522.74	446.75	569.17	509.31	498.5	30
Gibraltar	8.04	9.27	8.95	9.25	8.75	9.00	9.0	13
Greece	894.11	930.14	921.40	929.40	914.91	922.50	923.7	14
Greenland	6.79	7.40	7.24	7.39	7.14	7.27	7.3	14
Grenada	4.50	3.80	3.99	3.81	4.10	3.96	3.9	17
Guadeloupe	27.39	27.32	27.36	27.31	27.35	27.34	27.3	15
Guatemala	549.12	405.99	444.35	406.97	466.87	437.68	432.4	20
Guinea	265.27	132.71	168.02	133.74	189.08	161.98	157.1	54
Guinea-Bissau	39.88	19.93	25.25	20.09	28.41	24.34	23.6	54
Guyana	30.65	25.60	26.96	25.63	27.75	26.72	26.5	17
Haiti	244.66	130.05	160.59	130.93	178.78	155.36	151.1	42
Honduras	289.48	206.94	229.04	207.52	242.05	225.21	222.2	21
Hong Kong	607.64	627.41	622.72	626.95	619.06	623.26	623.9	14
Hungary	747.00	763.26	759.63	762.76	756.42	759.93	760.4	14
Iceland	48.25	53.55	52.19	53.48	51.30	52.40	52.6	13
India	52,851.46	43,904.12	46,318.65	43,956.96	47,711.87	45,891.27	45,556.6	18
Indonesia	11,658.87	10,141.69	10,553.52	10,149.35	10,787.61	10,479.53	10,422.3	17
Iran	9,037.14	9,741.53	9,563.20	9,730.99	9,442.98	9,589.41	9,613.6	14
Iraq	2,836.57	2,860.74	2,856.87	2,859.16	2,850.73	2,856.35	2,856.8	14
Ireland	480.87	511.38	503.73	510.88	498.45	504.82	505.9	14
Israel and Palestine, State of	979.13	988.49	986.89	987.93	984.60	986.75	986.9	14
Italy, San Marino and the Holy See	4,660.93	4,760.04	4,737.97	4,756.92	4,718.35	4,739.75	4,742.6	14
Jamaica	133.71	118.62	122.73	118.68	125.05	121.98	121.4	16
Japan	14,680.19	15,940.45	15,620.07	15,922.32	15,406.16	15,667.79	15,711.4	14
Jordan	488.59	443.38	455.78	443.54	462.64	453.49	451.8	16
Kazakhstan	3,310.38	3,743.62	3,631.93	3,738.22	3,559.78	3,649.32	3,664.6	13
Kenya	1,175.41	647.58	788.29	651.63	872.03	764.17	744.7	38
Kiribati	2.51	1.31	1.63	1.32	1.82	1.58	1.5	46
Kuwait	1,136.83	1,317.68	1,270.84	1,315.55	1,240.92	1,278.24	1,284.6	13
Kyrgyzstan	245.22	202.58	214.08	202.84	220.73	212.05	210.5	18
Laos	204.00	141.37	158.13	141.82	168.01	155.23	152.9	23
Latvia	124.67	123.08	123.62	123.04	123.77	123.47	123.4	15
Lebanon	419.45	407.56	411.08	407.46	412.65	410.32	409.8	15
Lesotho	47.02	25.57	31.29	25.74	34.69	30.31	29.5	39
Liberia	103.39	52.32	65.93	52.72	74.04	63.60	61.7	51
Libya	681.57	726.93	715.53	726.20	707.71	717.16	718.7	14
Lithuania	198.05	199.52	199.31	199.41	198.91	199.26	199.3	14
Luxembourg	115.59	131.19	127.17	131.00	124.57	127.80	128.3	13
Macao	25.35	21.28	22.38	21.30	23.01	22.18	22.0	17
Madagascar	539.08	254.64	330.39	256.88	375.59	317.44	307.0	73
Malawi	358.61	159.20	212.28	160.77	243.99	203.22	195.9	121
Malaysia	3,250.28	3,472.06	3,416.28	3,468.55	3,378.10	3,424.30	3,431.9	14
Maldives	19.50	15.81	16.80	15.83	17.38	16.63	16.5	18
Mali	371.21	159.23	215.65	160.91	249.36	206.02	198.2	192
Malta	19.24	16.83	17.49	16.85	17.86	17.37	17.3	17
Martinique	27.81	28.19	28.11	28.17	28.03	28.11	28.1	14
Mauritania	164.95	133.15	141.71	133.35	146.68	140.21	139.0	18
Mauritius	69.65	65.74	66.83	65.74	67.41	66.62	66.5	15

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	7,531.59	7,251.85	7,332.58	7,250.66	7,371.44	7,315.90	7,304.5	15	
Moldova	172.92	149.98	156.20	150.10	159.75	155.09	154.2	17	
Mongolia	443.88	491.04	478.96	490.42	471.04	480.81	482.5	13	
Morocco	1,459.80	1,231.49	1,293.21	1,232.79	1,328.67	1,282.24	1,273.7	17	
Mozambique	655.51	345.63	428.21	348.03	477.40	414.07	402.7	43	
Myanmar/Burma	1,507.57	1,028.99	1,156.96	1,032.45	1,232.54	1,134.85	1,117.2	23	
Namibia	92.83	75.71	80.32	75.81	82.99	79.51	78.9	18	
Nepal	685.00	407.48	481.52	409.58	525.50	468.80	458.6	31	
Netherlands	1,988.40	2,160.37	2,116.63	2,157.90	2,087.46	2,123.15	2,129.1	14	
New Caledonia	172.86	205.65	197.13	205.28	191.73	198.49	199.7	13	
New Zealand	501.76	538.21	529.01	537.65	522.77	530.35	531.6	14	
Nicaragua	182.67	124.72	140.22	125.14	149.37	137.54	135.4	23	
Niger	452.35	203.59	269.82	205.55	309.37	258.51	249.4	106	
Nigeria	4,755.27	2,793.73	3,316.98	2,808.62	3,627.88	3,227.14	3,154.9	31	
North Korea	921.90	738.68	787.98	739.84	816.64	779.32	772.5	18	
North Macedonia	133.74	131.47	132.19	131.43	132.45	132.02	131.9	15	
Norway	612.51	663.83	650.79	663.08	642.07	652.73	654.5	14	
Oman	1,084.80	1,243.14	1,202.21	1,241.23	1,175.94	1,208.64	1,214.2	13	
Pakistan	6,362.72	4,513.81	5,008.70	4,526.94	5,300.24	4,922.96	4,854.5	22	
Palau	14.57	17.42	16.68	17.39	16.21	16.80	16.9	13	
Panama	202.39	182.75	188.13	182.82	191.12	187.14	186.4	16	
Papua New Guinea	204.43	118.08	141.11	118.73	154.80	137.16	134.0	33	
Paraguay	219.73	162.32	177.71	162.72	186.74	175.03	172.9	20	
Peru	1,198.44	972.93	1,033.67	974.33	1,068.89	1,022.97	1,014.6	18	
Philippines	3,594.14	2,760.46	2,984.26	2,766.03	3,115.13	2,945.19	2,914.2	19	
Poland	4,096.13	4,410.85	4,331.23	4,406.12	4,277.47	4,342.90	4,353.7	14	
Portugal	706.48	706.04	706.78	705.70	706.29	706.37	706.2	15	
Puerto Rico	95.62	72.59	78.77	72.75	82.39	77.69	76.8	20	
Qatar	1,192.76	1,405.97	1,350.62	1,403.52	1,315.46	1,359.42	1,367.0	13	
Réunion	48.65	45.88	46.66	45.88	47.06	46.51	46.4	15	
Romania	1,196.90	1,165.93	1,175.19	1,165.62	1,179.20	1,173.14	1,171.8	15	
Russia	21,864.49	24,379.96	23,733.86	24,347.36	23,312.83	23,833.30	23,921.5	13	
Rwanda	243.69	108.66	144.61	109.72	166.07	138.47	133.5	116	
Saint Helena, Ascension and Tristan da Cunha	0.28	0.25	0.26	0.25	0.26	0.26	0.3	16	
Saint Kitts and Nevis	3.04	2.91	2.95	2.91	2.97	2.94	2.9	15	
Saint Lucia	6.53	5.22	5.57	5.23	5.78	5.51	5.5	18	
Saint Pierre and Miquelon	0.77	0.85	0.83	0.85	0.82	0.83	0.8	13	
Saint Vincent and the Grenadines	3.59	2.72	2.95	2.72	3.09	2.91	2.9	20	
Samoa	5.10	3.27	3.76	3.28	4.05	3.68	3.6	26	
São Tomé and Príncipe	5.64	3.66	4.19	3.68	4.51	4.10	4.0	25	
Saudi Arabia	7,210.09	8,244.67	7,977.35	8,232.13	7,805.61	8,019.26	8,055.8	13	
Senegal	403.62	248.41	289.84	249.58	314.42	282.72	277.0	28	
Serbia and Montenegro	929.27	988.74	973.83	987.77	963.55	975.95	978.0	14	
Seychelles	13.04	14.38	14.04	14.36	13.81	14.09	14.1	13	
Sierra Leone	158.15	76.16	98.00	76.81	111.02	94.27	91.3	65	
Singapore	677.87	736.86	721.85	736.01	711.85	724.09	726.1	14	
Slovakia	485.37	508.32	502.68	507.88	498.61	503.43	504.2	14	
Slovenia	202.64	215.18	212.04	214.97	209.87	212.49	212.9	14	
Solomon Islands	13.76	6.78	8.64	6.83	9.75	8.32	8.1	58	
Somalia	293.31	127.14	171.37	128.46	197.80	163.82	157.7	163	
South Africa	6,372.68	6,868.06	6,742.66	6,860.64	6,658.10	6,761.08	6,778.1	14	
South Korea	7,919.84	8,854.91	8,614.55	8,842.90	8,458.21	8,651.64	8,684.4	13	
Spain and Andorra	3,634.82	3,718.54	3,699.63	3,716.05	3,683.29	3,701.30	3,703.8	14	
Sri Lanka	685.90	516.57	561.98	517.72	588.60	554.07	547.8	20	
Sudan and South Sudan	1,228.81	693.11	835.95	697.21	920.91	811.45	791.7	35	
Suriname	32.70	31.08	31.53	31.07	31.77	31.44	31.4	15	
Sweden	663.12	656.23	658.64	655.97	659.22	657.96	657.6	15	
Switzerland and Liechtenstein	579.75	575.87	577.41	575.62	577.57	576.91	576.7	15	
Syria	625.05	505.74	537.87	506.49	556.51	532.21	527.8	18	
Taiwan	3,399.85	3,774.82	3,678.63	3,769.89	3,615.76	3,693.38	3,706.5	13	
Tajikistan	266.29	185.09	206.81	185.67	219.63	203.06	200.1	22	

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	1,205.64	603.75	764.08	608.44	859.68	736.66	714.5	54
Thailand	4,221.49	4,092.58	4,130.45	4,091.67	4,147.76	4,122.34	4,117.0	15
The Gambia	49.36	25.12	31.58	25.31	35.43	30.47	29.6	50
Timor-Leste	27.81	14.59	18.11	14.69	20.21	17.51	17.0	44
Togo	178.65	97.07	118.82	97.70	131.76	115.09	112.1	39
Tonga	3.28	2.44	2.67	2.44	2.80	2.63	2.6	20
Trinidad and Tobago	376.23	436.05	420.56	435.34	410.66	423.00	425.1	13
Tunisia	557.74	503.71	518.51	503.92	526.73	515.79	513.7	16
Turkey	5,981.44	6,024.45	6,018.40	6,021.18	6,006.72	6,016.94	6,017.5	14
Turkmenistan	1,078.34	1,220.97	1,184.19	1,219.20	1,160.45	1,189.92	1,194.9	13
Turks and Caicos Islands	2.14	2.04	2.07	2.04	2.08	2.06	2.1	15
Uganda	868.26	397.81	523.06	401.51	597.84	501.67	484.4	91
Ukraine	2,909.41	2,879.74	2,890.18	2,878.59	2,892.62	2,887.23	2,885.7	15
United Arab Emirates	2,563.12	2,966.65	2,862.16	2,961.88	2,795.37	2,878.65	2,892.9	13
United Kingdom	5,145.28	5,245.06	5,223.24	5,241.70	5,203.12	5,224.78	5,227.6	14
United States	60,726.07	68,840.20	66,747.34	68,739.78	65,397.06	67,073.64	67,359.6	13
Uruguay	133.73	111.03	117.16	111.16	120.69	116.07	115.2	18
Uzbekistan	1,621.60	1,479.64	1,518.65	1,480.10	1,540.13	1,511.42	1,506.0	16
Vanuatu	6.42	3.35	4.16	3.37	4.65	4.02	3.9	45
Venezuela	1,701.13	1,642.38	1,659.44	1,642.07	1,667.50	1,655.87	1,653.5	15
Vietnam	5,036.44	4,684.08	4,781.80	4,684.73	4,834.30	4,763.30	4,749.6	16
Western Sahara	13.85	8.18	9.70	8.23	10.60	9.44	9.2	31
Yemen	650.90	357.88	435.99	360.13	482.48	422.60	411.8	38
Zambia	407.59	230.03	277.38	231.39	305.54	269.26	262.7	35
Zimbabwe	384.65	249.85	285.86	250.85	307.18	279.66	274.7	25
EU27	39,629.24	41,511.55	41,048.81	41,475.91	40,715.17	41,110.10	41,172.3	14
EU28	44,774.52	46,756.61	46,272.05	46,717.61	45,918.29	46,334.87	46,399.9	14
sub sum 2020 - 2100	618,306	622,076	621,630	621,745	620,531	621,449	621,486	
EU27	-39,629	-41,512	-41,049	-41,476	-40,715	-41,110	-41,172	
EU28	-44,775	-46,757	-46,272	-46,718	-45,918	-46,335	-41,172	
sum	533,903	533,808	534,309	533,551	533,898	534,004	539,142	
base data: budget 2020 - 2100*	534,000	534,000	534,000	534,000	534,000	534,000	534,000	
rounding differences	-97	-192	309	-449	-102	4	5,142	
difference in %	-0.02%	-0.04%	0.06%	-0.08%	-0.02%	0.00%	0.96%	
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**	26.5%	10.7%	14.9%	10.8%	17.4%	14.2%	13.6%	
global (start) change rate 2020	-6.3%	-1.5%	-1.5%	-1.5%	-1.5%	-3.3%		
global change rate 2030 vs. 2010	-47%	-23%	-31%	-22%	-37%	-31%		
global overshoot in Gt	0	0	0	0	0	0		
base data: global CO2 budget 2020 - 2100 incl. LUC and ISA in Gt:							550	

* 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 RM 2 - 6	average budget	global budget
in Mill. t									
China	149,807	160,604	157,881	160,437	156,029	158,276	158,645	14	29.4%
United States	60,726	68,840	66,747	68,740	65,397	67,074	67,360	13	12.5%
EU28	44,775	46,757	46,272	46,718	45,918	46,335	46,400	14	8.6%
India	52,851	43,904	46,319	43,957	47,712	45,891	45,557	18	8.4%
EU27	39,629	41,512	41,049	41,476	40,715	41,110	41,172	14	7.6%
Russia	21,864	24,380	23,734	24,347	23,313	23,833	23,921	13	4.4%
Japan	14,680	15,940	15,620	15,922	15,406	15,668	15,711	14	2.9%
Indonesia	11,659	10,142	10,554	10,149	10,788	10,480	10,422	17	1.9%
Germany	9,055	9,754	9,577	9,743	9,458	9,603	9,627	14	1.8%
Iran	9,037	9,742	9,563	9,731	9,443	9,589	9,614	14	1.8%
South Korea	7,920	8,855	8,615	8,843	8,458	8,652	8,684	13	1.6%
Saudi Arabia	7,210	8,245	7,977	8,232	7,806	8,019	8,056	13	1.5%
Brazil	8,988	7,782	8,109	7,788	8,295	8,050	8,005	17	1.5%
Canada	6,949	7,881	7,641	7,870	7,486	7,678	7,711	13	1.4%
Mexico	7,532	7,252	7,333	7,251	7,371	7,316	7,304	15	1.4%
South Africa	6,373	6,868	6,743	6,861	6,658	6,761	6,778	14	1.3%
Turkey	5,981	6,024	6,018	6,021	6,007	6,017	6,018	14	1.1%
Australia	5,103	5,821	5,636	5,813	5,517	5,665	5,690	13	1.1%
United Kingdom	5,145	5,245	5,223	5,242	5,203	5,225	5,228	14	1.0%
Pakistan	6,363	4,514	5,009	4,527	5,300	4,923	4,855	22	0.9%
Vietnam	5,036	4,684	4,782	4,685	4,834	4,763	4,750	16	0.9%

central premises	
global CO2 budget 2020 - 2100	550 Gt
LUC / ISA budgets from 2020 on	-16 Gt
budget 2020 - 2100 to distribute in this tool	534 Gt
minimum annual global emissions	0 Gt
convergence level	0.5 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**	26%	11%	15%	11%	17%	14%
global (start) change rate 2020	-6.3%	-1.5%	-1.5%	-1.5%	-1.5%	-3.3%
global change rate 2030 vs. 2010	-47%	-23%	-31%	-22%	-37%	-31%
global overshoot in Gt	0	0	0	0	0	0

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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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