more different framework data and corresponding results at: http://results-espm.save-the-climate.info

framework data (input values here: yellow fields)		Gt	determination
global CO2 budget 2020 - 2100		**550**	global budget
land-use change (LUC) emissions 2020 - 2100		**0**	
international shipping and aviation (ISA) emissions 2020 - 2100	3%	-17	
global CO2 budget 2020 - 2100 to distribute here		533	
weighting population key in the weighted key	**15%**		national budget
scenario type used for the reference values	**RM-5-abs**		paths

Calculation **global budget** to distribute here:

LUC and ISA emissions are not considered here. Global LUC and ISA budgets are therefore offset against the global budget.

A value of **zero** for **LUC** means that by 2100, in total, net positive LUC emissions are offset by net negative LUC emissions.

reference values for the countries with the highest emissions					emissions	per capita	share in global emissions	accu-mulated	year emissions	normalised change rate
target year:	2030		2050		2019	2019	2019	share	neutrality	2020
reference year:	1990	2010	1990	2010	in Gt	in t				
China	184%	-26%	-83%	-96%	11.5	8	31%	31%	2054	2.2%
United States	-48%	-52%	-93%	-94%	5.0	15	14%	45%	2062	-2.4%
EU27	-60%	-56%	-92%	-91%	2.9	7	8%	53%	2073	-4.5%
India	212%	7%	-46%	-81%	2.6	2	7%	60%	2067	1.5%
Russia	-59%	-43%	-96%	-95%	1.8	12	5%	65%	2059	-0.7%
Japan	-48%	-51%	-92%	-92%	1.1	9	3%	68%	2065	-3.0%

largest national budgets 2020 - 2100	national budget	weighted key	emissions 2019	scope years
	Gt		Gt	
China	157.6	29.6%	11.50	14
United States	65.9	12.4%	5.04	13
India	46.0	8.6%	2.56	18
EU27	41.0	7.7%	2.93	14
Russia	23.6	4.4%	1.78	13
Japan	15.5	2.9%	1.14	14
Indonesia	10.8	2.0%	0.65	17
Germany	9.6	1.8%	0.70	14
Iran	9.4	1.8%	0.69	14
South Korea	8.8	1.6%	0.66	13
Brazil	8.1	1.5%	0.48	17
Canada	7.8	1.5%	0.60	13
Saudi Arabia	7.7	1.4%	0.59	13
Mexico	7.4	1.4%	0.49	15
South Africa	6.4	1.2%	0.47	14
Turkey	6.0	1.1%	0.41	14
Australia	5.4	1.0%	0.41	13
United Kingdom	5.2	1.0%	0.36	14
Vietnam	5.1	1.0%	0.33	15
Pakistan	4.9	0.9%	0.22	23
Italy, San Marino and the Holy See	4.8	0.9%	0.33	14
France and Monaco	4.6	0.9%	0.32	15
Egypt	4.5	0.9%	0.28	16
Poland	4.3	0.8%	0.31	14
Thailand	4.1	0.8%	0.27	15
Taiwan	3.8	0.7%	0.28	13
Nigeria	3.7	0.7%	0.13	28
Spain and Andorra	3.7	0.7%	0.26	14
Malaysia	3.6	0.7%	0.26	14
Kazakhstan	3.6	0.7%	0.27	13
Bangladesh	3.1	0.6%	0.11	28
Philippines	3.0	0.6%	0.15	20
Iraq	3.0	0.6%	0.21	14
Ukraine	2.9	0.5%	0.20	15
Argentina	2.8	0.5%	0.19	15
United Arab Emirates	2.7	0.5%	0.21	13
Algeria	2.6	0.5%	0.18	15
Netherlands	2.1	0.4%	0.16	14
Colombia	1.7	0.3%	0.09	18
Venezuela	1.6	0.3%	0.11	15
Uzbekistan	1.5	0.3%	0.09	16
Czechia	1.4	0.3%	0.11	13
Ethiopia	1.4	0.3%	0.02	73
Qatar	1.4	0.3%	0.11	13
sum without EU	483		34	
sum across all countries	533		37	15

Basic idea behind the ESPM

The ESPM consists of two steps:

(1) **National budgets**: A predefined global CO2 budget is distributed to countries. The ESPM tool offers the use of a **weighted distribution key** that includes the **'population'** and the **'emissions'** in a base year (here: 2019).

(2) **National paths**: The ESPM tool offers the Regensburg Model Scenario Types to derive plausible national paths that adhere to a national budget.

Basic idea behind the Regensburg Model Scenario Types RM 1 - 6

With the help of the RM Scenario Types, emission paths can be determined that meet a given budget. The scenario types differ in the **assumption** about the **property** of the **annual reductions**. This approach is particularly useful when it comes to making **political decisions** about emission **paths**.

Brief description of the ESPM:
https://www.klima-retten.info/PDF/ESPM_Background.pdf

Brief description of the RM Scenario Types:
https://www.klima-retten.info/Downloads/RM-Scenario-Types_short.pdf

Published paper for the six largest emitters:
https://doi.org/10.5281/zenodo.4764408