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		**650**	
land-use change (LUC) emissions 2020 - 2100		**0**	global
international shipping and aviation (ISA) emissions 2020 - 2100	3%	-20	budget
global CO2 budget 2020 - 2100 to distribute here		630	
weighting population key in the weighted key		**50%**	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 2019 in Gt	per capita 2019 in t	share in global emissions 2019	accu-mulated share	year emissions neutrality	normalised change rate 2020
target year:	2030		2050							
reference year:	1990	2010	1990	2010						
China	182%	-27%	-82%	-95%	11.5	8	31%	31%	2056	1.7%
United States	-54%	-58%	-97%	-97%	5.0	15	14%	45%	2055	-2.4%
EU27	-59%	-54%	-90%	-89%	2.9	7	8%	53%	2077	-4.5%
India	292%	34%	85%	-37%	2.6	2	7%	60%	2098	1.5%
Russia	-63%	-49%	-98%	-97%	1.8	12	5%	65%	2055	-0.7%
Japan	-49%	-52%	-93%	-93%	1.1	9	3%	68%	2064	-3.0%

largest national budgets 2020 - 2100	national budget	weighted key	emissions 2019	scope years
	Gt		Gt	
China	157.8	25.0%	11.50	14
India	77.9	12.4%	2.56	30
United States	56.9	9.0%	5.04	11
EU27	43.5	6.9%	2.93	15
Russia	21.3	3.4%	1.78	12
Indonesia	16.6	2.6%	0.65	26
Japan	15.0	2.4%	1.14	13
Brazil	12.7	2.0%	0.48	27
Pakistan	10.7	1.7%	0.22	49
Germany	9.5	1.5%	0.70	13
Mexico	9.4	1.5%	0.49	19
Nigeria	9.4	1.5%	0.13	70
Iran	9.3	1.5%	0.69	14
South Korea	7.8	1.2%	0.66	12
Bangladesh	7.6	1.2%	0.11	69
Turkey	7.0	1.1%	0.41	17
Vietnam	6.8	1.1%	0.33	21
Canada	6.7	1.1%	0.60	11
Egypt	6.5	1.0%	0.28	23
Saudi Arabia	6.5	1.0%	0.59	11
South Africa	6.4	1.0%	0.47	14
United Kingdom	5.9	0.9%	0.36	16
Philippines	5.7	0.9%	0.15	38
France and Monaco	5.4	0.9%	0.32	17
Italy, San Marino and the Holy See	5.3	0.8%	0.33	16
Thailand	5.2	0.8%	0.27	19
Ethiopia	4.7	0.8%	0.02	248
Australia	4.6	0.7%	0.41	11
Poland	4.2	0.7%	0.31	14
Spain and Andorra	4.1	0.7%	0.26	16
Malaysia	3.6	0.6%	0.26	14
Democratic Republic of the Congo	3.6	0.6%	0.00	1,028
Ukraine	3.5	0.6%	0.20	18
Argentina	3.5	0.5%	0.19	18
Taiwan	3.4	0.5%	0.28	12
Iraq	3.4	0.5%	0.21	16
Algeria	3.3	0.5%	0.18	19
Kazakhstan	3.1	0.5%	0.27	11
Colombia	2.9	0.5%	0.09	31
Myanmar/Burma	2.5	0.4%	0.04	67
Tanzania	2.5	0.4%	0.01	194
Sudan and South Sudan	2.4	0.4%	0.02	102
Kenya	2.3	0.4%	0.02	121
United Arab Emirates	2.2	0.4%	0.21	10
sum without EU	549		33	
sum across all countries	630		37	17

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