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		**700**	global budget
land-use change (LUC) emissions 2020 - 2100		**0**	
international shipping and aviation (ISA) emissions 2020 - 2100	3%	-21	
global CO2 budget 2020 - 2100 to distribute here		679	
weighting population key in the weighted key	**50%**		national budget
scenario type used for the reference values	**RM-6-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	per capita 2019	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	in Gt	in t				
China	211%	-19%	-100%	-100%	11.5	8	31%	31%	2047	2.2%
United States	-43%	-48%	-100%	-100%	5.0	15	14%	45%	2044	-2.4%
EU27	-49%	-43%	-94%	-94%	2.9	7	8%	53%	2052	-4.5%
India	266%	25%	130%	-21%	2.6	2	7%	60%	2083	1.5%
Russia	-56%	-39%	-100%	-100%	1.8	12	5%	65%	2045	-0.7%
Japan	-38%	-41%	-100%	-100%	1.1	9	3%	68%	2048	-3.0%

largest national budgets 2020 - 2100	national budget	weighted key	emissions 2019	scope years
	Gt		Gt	
China	170.0	25.0%	11.50	15
India	84.0	12.4%	2.56	33
United States	61.3	9.0%	5.04	12
EU27	46.8	6.9%	2.93	16
Russia	22.9	3.4%	1.78	13
Indonesia	17.9	2.6%	0.65	28
Japan	16.2	2.4%	1.14	14
Brazil	13.7	2.0%	0.48	29
Pakistan	11.6	1.7%	0.22	53
Germany	10.2	1.5%	0.70	15
Mexico	10.1	1.5%	0.49	21
Nigeria	10.1	1.5%	0.13	76
Iran	10.0	1.5%	0.69	15
South Korea	8.4	1.2%	0.66	13
Bangladesh	8.2	1.2%	0.11	74
Turkey	7.5	1.1%	0.41	18
Vietnam	7.3	1.1%	0.33	22
Canada	7.2	1.1%	0.60	12
Egypt	7.0	1.0%	0.28	25
Saudi Arabia	7.0	1.0%	0.59	12
South Africa	6.9	1.0%	0.47	15
United Kingdom	6.3	0.9%	0.36	18
Philippines	6.2	0.9%	0.15	41
France and Monaco	5.8	0.9%	0.32	18
Italy, San Marino and the Holy See	5.8	0.8%	0.33	17
Thailand	5.6	0.8%	0.27	21
Ethiopia	5.1	0.8%	0.02	268
Australia	5.0	0.7%	0.41	12
Poland	4.6	0.7%	0.31	15
Spain and Andorra	4.4	0.7%	0.26	17
Malaysia	3.9	0.6%	0.26	15
Democratic Republic of the Congo	3.9	0.6%	0.00	1,108
Ukraine	3.8	0.6%	0.20	19
Argentina	3.7	0.5%	0.19	20
Taiwan	3.7	0.5%	0.28	13
Iraq	3.6	0.5%	0.21	18
Algeria	3.5	0.5%	0.18	20
Kazakhstan	3.4	0.5%	0.27	12
Colombia	3.1	0.5%	0.09	33
Myanmar/Burma	2.7	0.4%	0.04	72
Tanzania	2.7	0.4%	0.01	209
Sudan and South Sudan	2.6	0.4%	0.02	110
Kenya	2.5	0.4%	0.02	131
United Arab Emirates	2.4	0.4%	0.21	11
sum without EU	592		33	
sum across all countries	679		37	19

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