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	**70%**		national budget
scenario type used for the reference values	**RM-3-lin**		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	206%	-20%	-100%	-100%	11.5	8	31%	31%	2046	2.2%
United States	-59%	-63%	-100%	-100%	5.0	15	14%	45%	2044	-2.4%
EU27	-57%	-52%	-91%	-90%	2.9	7	8%	53%	2071	-4.5%
India	353%	55%	179%	-5%	2.6	2	7%	60%	2095	1.5%
Russia	-65%	-51%	-100%	-100%	1.8	12	5%	65%	2044	-0.7%
Japan	-47%	-50%	-97%	-97%	1.1	9	3%	68%	2054	-3.0%

largest national budgets 2020 - 2100	national budget	weighted key	emissions 2019	scope years
	Gt		Gt	
China	152.5	22.5%	11.50	13
India	98.5	14.5%	2.56	38
United States	48.4	7.1%	5.04	10
EU27	43.8	6.4%	2.93	15
Indonesia	20.3	3.0%	0.65	31
Russia	18.9	2.8%	1.78	11
Brazil	15.7	2.3%	0.48	33
Pakistan	14.6	2.1%	0.22	67
Japan	14.2	2.1%	1.14	12
Nigeria	13.1	1.9%	0.13	98
Bangladesh	10.7	1.6%	0.11	97
Mexico	10.6	1.6%	0.49	22
Germany	9.1	1.3%	0.70	13
Iran	8.9	1.3%	0.69	13
Vietnam	7.8	1.1%	0.33	24
Egypt	7.8	1.1%	0.28	27
Philippines	7.5	1.1%	0.15	50
Turkey	7.4	1.1%	0.41	18
Ethiopia	7.0	1.0%	0.02	367
South Korea	6.9	1.0%	0.66	10
South Africa	6.2	0.9%	0.47	13
United Kingdom	6.2	0.9%	0.36	17
France and Monaco	5.8	0.9%	0.32	18
Thailand	5.8	0.9%	0.27	22
Canada	5.6	0.8%	0.60	9
Italy, San Marino and the Holy See	5.6	0.8%	0.33	17
Saudi Arabia	5.4	0.8%	0.59	9
Democratic Republic of the Congo	5.4	0.8%	0.00	1,544
Spain and Andorra	4.3	0.6%	0.26	17
Poland	4.1	0.6%	0.31	13
Australia	3.9	0.6%	0.41	9
Argentina	3.8	0.6%	0.19	20
Ukraine	3.8	0.6%	0.20	19
Tanzania	3.6	0.5%	0.01	286
Algeria	3.6	0.5%	0.18	21
Colombia	3.6	0.5%	0.09	39
Iraq	3.6	0.5%	0.21	17
Myanmar/Burma	3.5	0.5%	0.04	93
Sudan and South Sudan	3.5	0.5%	0.02	146
Malaysia	3.4	0.5%	0.26	13
Kenya	3.3	0.5%	0.02	176
Taiwan	3.0	0.4%	0.28	11
Uganda	2.8	0.4%	0.01	445
Kazakhstan	2.7	0.4%	0.27	10
sum without EU	582		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