

# Overview results ESPM and RM for the largest emitters

- reference values for NDCs -

	global budget:		420 Gt		680 Gt		420 Gt		680 Gt	
	Extended Smooth Pathway Model						Regensburg Model			
	weighting population	change rate 2030 vs. 1990	CO <sub>2</sub> budget 2020 - 2100	change rate 2030 vs. 1990	CO <sub>2</sub> budget 2020 - 2100	change rate 2030 vs. 1990	CO <sub>2</sub> budget 2020 - 2100	change rate 2030 vs. 1990	CO <sub>2</sub> budget 2020 - 2100	
			in Gt		in Gt		in Gt		in Gt	
China	50% 15%	108% 122%	69 81	161% 184%	123 144	128%	81	196%	146	
USA	50% 15%	-58% -51%	26 36	-46% -39%	46 64	-50%	36	-35%	66	
EU28	50% 15%	-66% -63%	22 25	-56% -55%	39 44	-63%	24	-52%	44	
India	50% 15%	167% 134%	35 25	239% 194%	62 44	143%	25	199%	42	
Russia	50% 15%	-70% -66%	9 12	-60% -55%	17 22	-64%	12	-53%	22	
Japan	50% 15%	-57% -53%	7 8	-45% -40%	12 15	-51%	8	-36%	15	
<b>implicit weighting population:</b>						<b>15%</b>		<b>11%</b>		

largest emitters	China	USA	EU28	India	Russia	Japan	sum	global
current annual CO <sub>2</sub> emissions in Gt	11	5	3	3	2	1	25	37
share in global emissions	31%	14%	9%	7%	5%	3%	70%	
t per capita	8	16	7	2	12	9		5

Key premises:

RM-5-rad was used as the scenario type, which maps the necessary global paths described by the IPCC well and minimizes the need for net negative emissions. 16% of the global budget has been reserved for AFOLU and international shipping and aviation, which is roughly their share of current annual emissions. These emissions were not considered here.

12% of the current annual emissions were assumed to be the minimum for annual net negative emissions after the achievement of emission neutrality.

More information and download of the tools at: [save-the-climate.info](https://www.save-the-climate.info).