

User Instructions

Emission Pathway	Climate Action Tracker	<input type="radio"/> Optimistic	<input type="radio"/> Pledges and Targets	<input type="radio"/> Targets Only	<input type="radio"/> Policy and Action				
	Manual	<input checked="" type="radio"/>	Plateau Years after 2020 10 ▼		CO2 Zero Year 2065 ▼				
	IPCC 1.5°C Report Data	<input type="radio"/>	Model: AIM/CGE 2.0 ▼		Scenario: ADVANCE_2020_1.5C-2100 ▼				
Display Specs	Display Ending Year	2100 ▼	Interval (Years)		<input type="radio"/> 1 <input type="radio"/> 5 <input checked="" type="radio"/> 10				
Goals and Targets	Year of Goal/Goal	2060 ▼	<input type="radio"/> None	<input checked="" type="radio"/> Temperature Increase 1.80 ▼	<input type="radio"/> CO2 PPM 400 ▼				
	Goal for 2100		<input type="radio"/> None	<input checked="" type="radio"/> Temperature Increase 1.50 ▼	<input type="radio"/> CO2 PPM 400 ▼				
	Methane Yearly Emissions	Percent Reduction from 2020 to 2060 50 ▼		Temp Incr Prob% <input checked="" type="checkbox"/> 50 <input checked="" type="checkbox"/> 66 <input checked="" type="checkbox"/> 90					
Additions, Subtractions, and Costs	Item (GT CO2)	Use	% of CDR	Start Year	Start Value	Plateau Year	Plateau Value	Natural Gas GJ/TonCO2	Electricity kWh/TonCO2
	CCS, CCUS, BECCS, etc.	<input checked="" type="checkbox"/>		▼		▼			
	CDR - Direct Air Capture	<input checked="" type="checkbox"/>		2030 ▼		2040 ▼	(Value Calc'd)	8.81	
	Other CDR1	<input checked="" type="checkbox"/>		▼		▼	(Value Calc'd)		
	Other CDR2	<input checked="" type="checkbox"/>		▼		▼	(Value Calc'd)		
	Feedbacks	<input checked="" type="checkbox"/>		▼		▼			
	Albedo (°C)	<input checked="" type="checkbox"/>		▼		▼			
DAC and CDR Cost/Ton(\$)	<input checked="" type="checkbox"/>		▼		▼				

Step 1 – Select an emissions pathway by clicking the appropriate radio button

1. Climate Action Tracker (CAT): CAT analyzes the NDC data submitted to the IPCC to develop possible emission pathways. Click on the “Climate Action Tracker” label to view description of their four pathways
2. Manual: (1) Select the number of years of constant emissions after 2020 (the IEA forecasts the number to be at least 10); then (2) Select the year that you expect gross CO2 to reach zero – this should be some years after net CO2 emissions reach zero as many greenhouse gas emissions will be difficult to eliminate. You can use the “CCS” field (see below) to account for the CO2 that will be captured by CCS, afforestation, etc. as part of any “net zero” planning
3. IPCC: Select an IPCC model and scenario to be used for the CO2 emissions pathway – the “Net CO2 emissions” values will be used (click on the “Model” or “Scenario” labels to view some data for the various scenarios). Note: if “None” is selected for the “Goal and Target” the model will compare the temperature and PPM calculations to the actual scenario values

Step 2 – Select a “Goal or Target”

1. Select the ending year for the analysis
2. Select the interval to be used between reporting years (5 = every five years starting in 2020)
3. Select a temperature goal, a CO2 PPM goal, or “None” (the latter will result in the model simply calculating the expected PPM and temperature for the emissions pathway with no CDR)

Step 3 – Specify other Additions, Subtractions, and Costs

Fields:

1. Use – if checked the “item” will be used in the calculations if the “Start Year” has a value
2. % of CDR – The percent of the total CDR to be allocated to the “item” (for three CDR fields only)
3. Start Year
4. Start Value
5. Plateau Year
6. Plateau Value
7. Natural Gas GJ/TonCO2 (See Appendix A)
8. Electricity kWh/TonCO2 (See Appendix B)

Note: The model will calculate a linear path from the “Start Value” (0 if not specified) in the “Start Year” to the “Plateau Value” value in the “Plateau Year”. The “Plateau Value” will be used for all years after the “Plateau Year”

Items – Should be “self-explanatory”

1. “CCS” – CO₂ to be removed before the CDR requirements are calculated (subtracted from Gross CO₂ emissions)
2. DAC Cost/Ton(\$)
– not implemented