

Vetting criteria from the IPCC AR6 scenario database (Working Group III, Annex 3, Section 3.1)

Indicators	Reference value	Vetting range for all global scenarios	Vetting range for illustrative pathways
Historical emissions (sources EDGAR v6 IPCC and CEDS, 2019 values)			
CO ₂ total emissions (EIP + AFOLU)	44,251 MtCO ₂ /yr	±40%	±20%
CO ₂ EIP emissions	37,646 MtCO ₂ /yr	±20%	±10%
CH ₄ emissions	379 MtCH ₄ /yr	±20%	±20%
CO ₂ emissions EIP 2010-2020 - % change	-	0 to +50%	0 to +50%
CCS from Energy 2020	-	0-250 MtCO ₂ /yr	0-100 MtCO ₂ /yr
Historical energy production (sources IEA 2019; IRENA; BP; EMBERS; trends extrapolated to 2020)			
Primary Energy (2020, IEA)	578 EJ	±20%	±10%
Electricity Nuclear (2020, IEA)	9.77 EJ	±30%	±20%
Electricity Solar & Wind (2020, IEA, IRENA, BP, EMBERS)	8.51 EJ	±50%	±25%
Future criteria (not used for exclusion, only flagged as potentially problematic)			
No net negative CO ₂ emissions before 2030	CO ₂ total in 2030 > 0	-	-
CCS from Energy in 2030	< 2000 MtCO ₂ /yr	-	-
Electricity from Nuclear in 2030	< 20 EJ/yr	-	-
CH ₄ emissions in 2040	100-1000 MtCH ₄ /yr	-	-

Note: EIP stands for energy and industrial process emissions; AFOLU stands for Agriculture, Forestry and Other Land Use.