

(a) SSP scenarios	SSP1 Sustainability	SSP3 Regional rivalry	SSP5 Fossil-fueled development
Population growth	Relatively low	Low (OECD countries) to high (high-fertility countries)	Relatively low
Urbanization	High	Low	High
Equity and social cohesion	High	Low	High
Economic growth	High to medium	Slow	High
International trade and globalization	Moderate	Strongly constrained	High
Land-use regulation	Strong to avoid environmental trade-off	Limited with continued deforestation	Medium with slow decline in deforestation
Agricultural productivity	High improvements with diffusion of best practices	Low with slow technology development and restricted trade	Highly managed and resource intensive
Consumption and diet	Low growth in consumption, low meat	Resource-intensive consumption	Material-intensive consumption, meat-rich diet
Environment	Improving	Serious degradation	Highly successful management
Carbon intensity	Low	High	High
Energy intensity	Low	High	High
Technology development	Rapid	Slow	Rapid
Policy focus	Sustainable development	Security	Development, free market, human capital
Participation of the land-use sector in mitigation policies	Full	Limited	Full
International cooperation for climate change mitigation	No delay	Heavy delay	Delay
Institution effectiveness	Effective	Weak	Increasingly effective
(b) RCP scenarios	RCP2.6 Low emissions	RCP6.0 Intermediate emissions	RCP8.5 High emissions
Radiative forcing	Peak at 3 W m^{-2} before 2100 and decline	Stabilizes without overshoot pathways to 6 W m^{-2} in 2100	Rising forcing pathways leading to 8.5 W m^{-2} in 2100
Concentration (p.p.m.)	Peak at 490 CO_2 equiv. before 2100 and then declines	850 CO_2 equiv. (at stabilization after 2100)	$> 1370 \text{ CO}_2$ equiv. in 2100
Methane emission	Reduced	Stable	Rapid increase
Reliance on fossil fuels	Decline	Heavy	Heavy
Energy intensity	Low	Intermediate	High
Climate policies	Stringent	Very modest to almost none	High range of no policies
(c) SSPxRCP scenarios	SSP1xRCP2.6 Highest mitigation	SSP3xRCP6.0 Limited mitigation	SSP5xRCP8.5 No mitigation
Bioenergy	Low	Highest	Lowest