Appendix 2-A. A brief summary of the development of emissions scenarios by the IPCC as applied in the GCF Regional Tuna Programme Funding Proposal

The World Meteorological Organisation (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988 with the assigned role of assessing the scientific, technical and socioeconomic information relevant for understanding the risk of human-induced climate change.[1] The United Nations Framework Convention on Climate Change (UNFCCC) was subsequently adopted in 1992 and entered into force in 1994. It provides the overall policy framework and legal basis for addressing global climate change issues. This evolution of the emissions scenarios used by UNFCCC to guide the policy framework is summarised below, mainly for the benefit of regional fisheries personal.[2,3,4,5,6]

Emissions scenarios are a key tool for informing IPCC assessments.[3] The history of IPCC assessment reports now covers several generations of emissions scenarios.[4] These include the "1990 IPCC First Scientific Assessment" (SA90),[5] the "1992 IPCC Scenarios" (IS92),[6] and the 2000 "Special Report on Emissions Scenarios" (SRES).[7] The SRES was used as the basis for the Fourth Assessment Report (AR4).[8] Since AR4, other emissions scenarios have been developed outside the IPCC,[9] i.e., the "Representative Concentration Pathways" (RCPs)[10] and used in IPCC's Fifth Assessment Report (AR5) and the most

[1] Le Treut, H., Somerville, R., Cubasch, U., Ding, Y., Mauritzen, C., Mokssit, A., Peterson, T. and Prather, M. 2007. Historical Overview of Climate Change. In: *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

[2] See: Girod, B., Wiek, A., Mieg, H. and Hulme, M. 2009. The evolution of the IPCC's emissions scenarios. *Environmental science & policy*, *12*(2), pp.103-118.

[3] Moss, R.H., Edmonds, J.A., Hibbard, K.A., Manning, M.R., Rose, S.K., van Vuuren, D.P., Carter, T.R., Emori, S., Kainuma, M., Kram, T., Meehl, G.A., Mitchell, J.F.B., Nakicenovic, N., Riahi, K., Smith, S.J., Stouffer, R.J., Thomson, A.M., Weyant, J.P., Wilbanks, T.J. 2010. The next generation of scenarios for climate change research and assessment. *Nature* 463, 747–756. https://doi.org/10.1038/nature08823.

[4] Pedersen, J.S.T., Santos, F.D., van Vuuren, D., Gupta, J., Coelho, R.E., Aparício, B.A. and Swart, R. 2021. An assessment of the performance of scenarios against historical global emissions for IPCC reports. *Global Environmental Change*, *66*, p.102199.

[5] IPCC. 1990. Climate Change: The IPCC Response Strategies, Working Group III.

[6] Leggett, J., Pepper, W.J., Swart, R.J., Edmonds, J., Meira Filho, L.G., Mintzer, I., Wang, M.X., Wasson, J. 1992. Emissions scenarios for the IPCC: an update. In: *Climate change 1992: the supplementary report to the IPCC scientific assessment*, pp. 69–95.

[7] Nakicenovic, N., Swart, R. 2000. *Special Report on Emissions Scenarios*. Cambridge University Press, Cambridge, UK.

[8] IPCC. 2007. In: Pachauri, R.K. and Reisinger, A. (Eds.). *Climate Change 2007: Summary for Policymaker of Synthesis Report*. Core Writing Team. Cambridge University Press, Cambridge.

[9] Moss, R.H., Edmonds, J.A., Hibbard, K.A., Manning, M.R., Rose, S.K., van Vuuren, D.P., Carter, T.R., Emori, S., Kainuma, M., Kram, T., Meehl, G.A., Mitchell, J.F.B., Nakicenovic, N., Riahi, K., Smith, S.J., Stouffer, R.J., Thomson, A.M., Weyant, J.P., Wilbanks, T.J. 2010. The next generation of scenarios for climate change research and assessment. *Nature* 463, 747–756. https://doi.org/10.1038/nature08823.

[10] van Vuuren, D.P., Edmonds, J., Kainuma, M., Riahi, K., Thomson, A., Hibbard, K., Hurtt, G.C., Kram, T., Krey, V., Lamarque, J.-F., Masui, T., Meinshausen, M., Nakicenovic, N., Smith, S.J., Rose, S.K. 2011. The representative concentration pathways: an overview. *Clim. Change* 109, 5–31. https://doi.org/10.1007/s10584- 011-0148-z

recent “Shared Socioeconomic Pathways” (SSPs) used in the Sixth Assessment Report (AR6) (Table 1).[11,12]

1990	1995	2001	2007	2013-14	2023
AR1	AR2	AR3	AR4	AR5	AR6
SA92	IS92	SRES	SRES	RCP	SSP

Table 1. The timing of the IPCC Assessment Reports and the evolution of the terminology used for emissions scenarios and assessments. AR – Assessment Report. SA92 – 1992 Scientific Assessment (six scenarios A-F); IPCC IS92 – six scenarios (A-F); SRES – Special Report on Emission Scenarios (four families covering six scenarios); RCP – Representative Concentration Pathways (4 pathways); SSP – Shared Socio-economic Pathways (five scenarios).

Four pathway scenarios under greenhouse gas (GHG) emissions and atmospheric concentrations, air pollutant emissions and land-use were originally set out by the Intergovernmental Panel on Climate Change (IPCC) in their Fifth Assessment Report (AR5). They include a stringent mitigation scenario (RCP2.6), two intermediate scenarios (RCP4.5 and RCP6.0), and the ‘business as usual’ scenario with high GHG emissions (RCP8.5). More recently, the IPCC released their Sixth Assessment Report (AR6) in March 2023, which updated and expanded the pathway scenarios to cover five Shared Socio-economic Pathways (SSPs) based on peer-reviewed scientific, technical, and socio-economic literature since the publication of AR5 in 2014 (IPCC, 2023).

Since its inception, the IPCC has produced a series of comprehensive Assessment Reports on the state of understanding of causes of climate change, its potential impacts and options for response strategies. It also prepared Special Reports, Technical Papers, Methodologies and Guidelines. These IPCC publications have become standard references, widely used by policymakers, scientists and other experts. In 1992, the IPCC released emission scenarios to be used for driving global circulation models to designed to project the impacts of climate change. The so-called ‘IS92 scenarios’ were pathbreaking. They were the first global scenarios to provide estimates for the full suite of greenhouse gases (GHG) and potential impacts of GHG emissions on the global environment.[13]

In response to a 1994 evaluation of the earlier IPCC IS92 emissions scenarios, the 1996 Plenary of the IPCC requested a Special Report on Emissions Scenarios (SRES). The reason that scenarios are reviewed, and classifications change, is because it is important to regularly reassess the relevance of emissions scenarios against a background of changing global circumstances, policy development and

[11] O’Neill, B.C., Kriegler, E., Riahi, K., Ebi, K.L., Hallegatte, S., Carter, T.R., Mathur, R., van Vuuren, D.P. 2014. A new scenario framework for climate change research: the concept of shared socioeconomic pathways. *Clim. Change* 122, 387–400. https:// doi.org/10.1007/s10584-013-0905-2.

[12] Riahi, K., van Vuuren, D.P., Kriegler, E., Edmonds, J., O’Neill, B.C., Fujimori, S., Bauer, N., Calvin, K., Dellink, R., Fricko, O., Lutz, W., Popp, A., Cuaresma, J.C., KC, S., Leimbach, M., Jiang, L., Kram, T., Rao, S., Emmerling, J., Ebi, K., Hasegawa, T., Havlik, P., Humpenoder, ¨ F., Da Silva, L.A., Smith, S., Stehfest, E., Bosetti, V., Eom, J., Gernaat, D., Masui, T., Rogelj, J., Strefler, J., Drouet, L., Krey, V., Luderer, G., Harmsen, M., Takahashi, K., Baumstark, L., Doelman, J.C., Kainuma, M., Klimont, Z., Marangoni, G., Lotze-Campen, H., Obersteiner, M., Tabeau, A., Tavoni, M. 2017. The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. *Global Environmental Change* 42, 153–168. https://doi.org/10.1016/j.gloenvcha.2016.05.009.

[13] Nakicenovic, N., Alcamo, J., Davis, G., Vries, B.D., Fenhann, J., Gaffin, S., Gregory, K., Grubler, A., Jung, T.Y., Kram, T. and La Rovere, E.L. 2000. Special report on emissions scenarios. A Special Report of IPCC Working Group III. Published for the Intergovernmental Panel on Climate Change. Summary for Policy Makers. 28 pages.

implementation; to compare them with long-term developments; determine if they are still plausible; and consider the latest available evidence.[14]

Subsequently, the SRES in 2000 recommended that a range of SRES scenarios with a variety of assumptions regarding driving forces be used in any analysis. The six scenario groups – the three scenario families[15] A2, B1, and B2, plus three groups within the A1 scenario family, A1B, A1FI, and A1T – and four cumulative emissions categories were developed as the smallest subsets of SRES scenarios that capture the range of uncertainties associated with driving forces for emissions.[16]

The report was accepted by the IPCC Working Group III (WGIII) plenary session in March 2000. The SRES scenarios covered a wide range of the main forces likely to drive future emissions, from demographic to technological and economic developments. This set of emissions scenarios, with broader application than the IS92 scenarios, provided input to the IPCC Third Assessment Report (see Table 1). The main differences between the three scenario categories used up until 2013-14 are summarised in Table 2.

[14] Pedersen, J.S.T., Santos, F.D., van Vuuren, D., Gupta, J., Coelho, R.E., Aparício, B.A. and Swart, R. 2021. An assessment of the performance of scenarios against historical global emissions for IPCC reports. *Global Environmental Change*, *66*, p.102199.

[15] Scenarios that have a similar demographic, societal, economic, and technical change storyline.

[16] This was consistent with the IPCC 1990, 1992 and 1995 scenario reports.

Aspect	SA90-Scenarios (IPCC, 1990a)	IS92-Scenarios (IPCC, 1992a)	SRES-Scenarios (IPCC, 2000a)
Titles	Scenario A (Business as Usual), B–D	IS92a–f	A1B, A1T, A1FI, A2, B1, B2
Implicit and explicit storyline axes	Energy supply mix and efficiency (p. xxxiv)	Population, income growth and fossil fuel resources (p. 11, Table 1)	Storylines: regional vs. global, economic vs. environmental (p. 4, Box SPM-1)
Intervention characteristics	"[…] under the other IPCC emissions scenarios which assume progressively increasing levels of control, rates of increase in global mean temperature…" (p. xi)	"Six alternative IPCC scenarios (IS92 a–f) now embody a wide array of assumptions […] affecting how the future greenhouse gas emissions might evolve in the absence of climate policies beyond those already adopted." (p. 10)	"As required by the Terms of Reference, the scenarios in this report do not include additional climate initiatives, which means that no scenarios are included that explicitly assume implementation of the United Nations Framework Convention for Climate Change (UNFCCC) or the emissions targets of the Kyoto Protocol. However, GHG emissions are directly affected by non-climate change policies designed for a wide range of other purposes. Furthermore government policies can, to varying degrees, influence the GHG emission drivers such as demographic change, social and economic development, technological change, resource use, and pollution management. This influence is broadly reflected in the storylines and resultant scenarios." (p. 3)
Probabilities	"Based on current models we predict: […]" (p. xi)	"The reader should be cautioned, however, that none of the scenarios depicted in this section predicts the future." (p. 75) "The premises for the 1992 IPCC Scenarios a and b most closely update the SA90 scenario from IPCC (1990)." (p. 76) "Four additional scenarios have been constructed to examine the sensitivity of future greenhouse gas emissions to a wider range of alternative input assumptions for key variables." (p. 79)	"There is no single most likely, "central", or "best-guess" scenario, either with respect to SRES scenarios or to the underlying scenario literature. Probabilities or likelihood are not assigned to individual SRES scenarios. None of the SRES scenarios represents an estimate of a central tendency for all driving forces or emissions, such as the mean or median, and none should be interpreted as such. The distribution of the scenarios provides a useful context for understanding the relative position of a scenario but does not represent the likelihood of its occurrence." (p. 11)
Implications of scenarios	Temperature change communicated with the emissions scenarios (p. xi)	Temperature change communicated in the same report (p. 18, Fig. 2)	No implications communicated in the SRES. Implications communicated in the Third Assessment Report.

Table 2. Main changes in the description of the three scenario families regarding titles, intervention characteristics, probabilities and impact communication.[17]

The four scenarios developed by SRES represent the range of driving forces and emissions in the scenario literature to reflect the understanding and knowledge of the late 1990s and underlying uncertainties (A1, A2, B1, B2).[18,19] They excluded "disaster" or ''surprise'' scenarios. Any scenario necessarily included subjective elements which were open to various interpretations with the result that preferences for the scenarios varied among users. The scenarios formed important elements of the Special Report on Emissions Scenarios in 2000.[20]

[17] Girod, B., Wiek, A., Mieg, H. and Hulme, M. 2009. The evolution of the IPCC's emissions scenarios. *Environmental science & policy*, *12*(2), pp.103-118.

[18] The ''open process'' defined in the Special Report on Emissions Scenarios (SRES) Terms of Reference called for the use of multiple models, seeking inputs from a wide community as well as making scenario results widely available for comments and review. These objectives were fulfilled by the SRES multi-model approach and the open SRES website.

[19] Included are anthropogenic emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6), hydrochlorofluorocarbons (HCFCs), chlorofluorocarbons (CFCs), the aerosol precursor and the chemically active gases sulfur dioxide (SO2), carbon monoxide (CO), nitrogen oxides (NOx), and non-methane volatile organic compounds (NMVOCs). Emissions are provided aggregated into four world regions and global totals. In the new scenarios no feedback effect of future climate change on emissions from biosphere and energy has been assumed.

[20] See Appendix I of the full Special Report on Emissions Scenarios, (SRES), IPCC, 2000

Four different narrative storylines[21] were developed to describe the relationships between emission driving forces and their evolution and add context for the scenario quantification. Each storyline represented different demographic, social, economic, technological, and environmental developments, which may be viewed positively by some people and negatively by others.

There are six scenario groups that should be considered equally sound that span a wide range of uncertainty. These encompass four combinations of demographic change, social and economic development, and broad technological developments, corresponding to the four families.

The A1 and B1 scenario families are based on the low International Institute for Applied Systems Analysis (IIASA) 1996 projection.[22] They share the lowest trajectory, with global population increasing to 8.7 billion by 2050 and declining toward 7 billion by 2100, combining low fertility with low mortality.

- The A1 storyline and scenario family describes a future world of very rapid economic growth, global population that peaks in mid-century and declines thereafter, and the rapid introduction of new and more efficient technologies. Major underlying themes are convergence among regions, capacity building, and increased cultural and social interactions, with a substantial reduction in regional differences in per capita income. The A1 scenario family develops into three groups that describe alternative directions of technological change in the energy system. The three A1 groups are distinguished by their technological emphasis: fossil intensive (A1FI), non-fossil energy sources (A1T), or a balance across all sources (A1B).[23]
- The A2 storyline and scenario family describes a very heterogeneous world. The underlying theme is self-reliance and preservation of local identities. Fertility patterns across regions converge very slowly, which results in continuously increasing global population. Economic development is primarily regionally oriented and per capita economic growth and technological change are more fragmented and slower than in other storylines. The A2 scenario family is based on a high population growth scenario of 15 billion by 2100 that assumes a significant decline in fertility for most regions and stabilization at above replacement levels. It falls below the long-term UN High 1998 projection of 18 billion.
- The B1 storyline and scenario family describes a convergent world with the same global population that peaks in mid-century and declines thereafter, as in the A1 storyline, but with rapid changes in economic structures toward a service and information economy, with reductions in material intensity, and the introduction of clean and resource-efficient technologies. The emphasis is on global solutions to economic, social, and environmental sustainability, including improved equity, but without additional climate initiatives.
- The B2 storyline and scenario family describes a world in which the emphasis is on local solutions to economic, social, and environmental sustainability. It is a world with continuously increasing global population at a rate lower than A2, intermediate levels of economic development, and less rapid and more diverse technological change than in the B1 and A1 storylines. While the scenario is also oriented toward environmental protection and social equity, it focuses on local and regional levels. The B2 scenario family is based on the long-term UN Medium 1998 population projection of 10.4 billion by 2100.

[21] A narrative description of a scenario (or family of scenarios), highlighting the main scenario characteristics, relationships between key driving forces and the dynamics of their evolution.
[22] https://pure.iiasa.ac.at/id/eprint/5008/
[23] Balanced is defined as not relying too heavily on one particular energy source, on the assumption that similar improvement rates apply to all energy supply and end use technologies.

The SRES noted that important uncertainties ranging from driving forces to emissions may be different in different applications. The report identified climate modelling; assessment of impacts, vulnerability, mitigation, and adaptation options; and policy analysis among the uncertainties. The report suggested that the assessment of the robustness of options in terms of impacts, vulnerability, and adaptation may require scenarios with similar emissions but different socio-economic characteristics, as reflected by the six scenario groups. For mitigation analysis, variation in both emissions and socio-economic characteristics may be necessary. For analysis at the national or regional scale, the most appropriate scenarios may be those that best reflect specific circumstances and perspectives. [24]

The Representative Concentration Pathway (RCP) introduced in 2013 was a GHG concentration (not emissions) trajectory adopted by the IPCC and used for climate modelling and research for IPCC AR5 in 2014. The four pathways describe different climate change scenarios, all of which are considered possible depending on the amount of GHG emitted in the years to come.

RCPs are prescribed pathways for GHG and aerosol concentrations, together with land use change, that are consistent with a set of broad climate outcomes used by the climate modelling community. The pathways are characterised by the radiative forcing produced by the end of the 21st century. Radiative forcing is the extra heat the lower atmosphere will retain as a result of additional GHG, measured in Watts per square metre (W/m^2).

The RCPs – originally RCP2.6, RCP4.5, RCP6, and RCP8.5 – were labelled on the basis of a possible range of radiative forcing values in the year 2100 (2.6, 4.5, 6, and 8.5 W/m^2, respectively). The higher values mean higher GHG emissions and therefore higher global temperatures and more pronounced effects of climate change. The lower RCP values, on the other hand, are more desirable for humans but require more stringent climate change mitigation efforts to achieve them.

The RCPs represent a wider set of futures than was used in previous SRES emissions scenarios by the climate modelling community and included the effect of mitigation strategies. As with SRES, no particular scenario is deemed more likely than the others, however, some require major and rapid change to emissions to be achieved.

The four RCPs were:

- **RCP8.5 –** a future with little curbing of emissions, with a CO2 concentration continuing to rapidly rise, reaching 940 ppm by 2100.
- **RCP6.0** – lower emissions, achieved by application of some mitigation strategies and technologies. CO2 concentration rising less rapidly (than RCP8.5), but still reaching 660 ppm by 2100 and total radiative forcing stabilising shortly after 2100.
- **RCP4.5** – CO2 concentrations are slightly above those of RCP6.0 until after mid-century, but emissions peak earlier (around 2040), and the CO2 concentration reaches 540 ppm by 2100.

[24] This was applied to all analysis presented in Bell J.D., Johnson, J.E. and Hobday, A.J. 2011. *Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change*. Chapter 8. pp 433-491. Secretariat of the Pacific Community, Noumea, New Caledonia. 941 pages.

- **RCP2.6** – the most ambitious mitigation scenario, with emissions peaking early in the century (around 2020), then rapidly declining. Such a pathway would require early participation from all emitters, including developing countries, as well as the application of technologies for actively removing carbon dioxide from the atmosphere. The CO_2 concentration reaches 440 ppm by 2040 then slowly declines to 420 ppm by 2100).[25]

In August 2021, IPCC released a report concerning the physical science of climate change and describing five possible scenarios for the future. The scenarios were the result of complex calculations based on the speed for which humans curb GHG emissions. The calculations also capture socioeconomic changes in areas such as population growth, urban density, education, land use and wealth. For example, a rise in population is assumed to lead to higher demand for fossil fuels and water. Education can affect the rate of technology developments. Emissions increase when land is converted from forest to agricultural use. Each scenario was labelled to identify both the emissions level and the so-called Shared Socioeconomic Pathway (SSP) (Table 3)

[25] Emissions are on track to reach ~420 ppm by the end of 2023 https://gml.noaa.gov/ccgg/trends/

Table 3. **Scenarios used in the SSP classification**

Scenario	SSP	Description
1 - Most optimistic: 1.5°C by 2050	1-1.9	The IPCC's most optimistic scenario describes a world where global CO_2 emissions are cut to net zero around 2050. Societies switch to more sustainable practices, with focus shifting from economic growth to overall well-being. Investments in education and health go up. Inequality falls. Extreme weather is more common, but the world has dodged the worst impacts of climate change. This scenario is the only one that meets the Paris Agreement's goal of keeping global warming to around 1.5°C above preindustrial temperatures, with warming hitting 1.5°C but then dipping back down and stabilizing around 1.4°C by the end of the century.
Scenario 2 – Next Best: 1.8°C by 2100	1-2.6	Envisages that global CO_2 emissions are cut severely, but not as fast, reaching net-zero after 2050. It imagines the same socioeconomic shifts towards sustainability as SSP1-1.9. But temperatures stabilize around 1.8°C higher by the end of the century.
Scenario 3 – Middle of the road: 2.7°C by 2100	2-4.5	This is a "middle of the road" scenario. CO_2 emissions hover around current levels before starting to fall mid-century, but do not reach net-zero by 2100. Socioeconomic factors follow their historic trends, with no notable shifts. Progress toward sustainability is slow, with development and income growing unevenly. In this scenario, temperatures rise 2.7°C by the end of the century.
Scenario 4 – Dangerous: 3.6°C by 2100	3-7.0	On this path, emissions and temperatures rise steadily and CO_2 emissions roughly double from current levels by 2100. Countries become more competitive with one another, shifting toward national security and ensuring their own food supplies. By the end of the century, average temperatures have risen by 3.6°C.
Scenario 5 – Avoid at all costs: 4.4°C by 2100	5-8.5	This is a future to avoid at all costs. Current CO_2 emissions levels roughly double by 2050. The global economy grows quickly, but this growth is fuelled by exploiting fossil fuels and energy-intensive lifestyles. By 2100, the average global temperature is a scorching 4.4°C higher.

The Funding Proposal for the GCF has been prepared on the basis of analyses using three future GHG emissions scenarios, representing near-term and medium-term timeframes considered meaningful for planning and policy in the Pacific Islands region:

- 2030 high emissions that assume continued population growth and energy-intensive development (SSP5-8.5 or where data weren't available, RCP8.5). This represents the current "business as usual' trajectory of emissions globally.
- 2050 moderate emissions that stablise global temperature increase and represent the current trajectory (SSP2-4.5 or where data weren't available, RCP4.5), and
- 2050 high emissions that assume continued population growth and energy-intensive development (SSP5-8.5 or where data weren't available, RCP8.5).

Because the literature addressing climate change-related impacts on the Pacific Islands region spans three decades, the terminology and classification of scenarios across this time frame has changed in the literature in step with changes in the scenario terminology of the IPCC. As preparation of the Funding Proposal has drawn on available literature across this time frame, the Funding Proposal uses the most recent SSP scenario hierarchy based on Table 4 (below).

Table 4. A comparison between scenarios used in various IPCC Assessment Reports (AR4. AR5, AR6), with alignment to the SSP scenario categorisation used in the preparation of the Funding Proposal to the GCF.

SSP	Characteristics	Comparison to AR4 SRES scenarios	Comparison to AR5 scenarios	Impact
1-1.9	An extremely low scenario that reflects aggressive GHG reduction and sequestration efforts.	No analogue	RCP 2.6	Very low
1-2.6	A low scenario in which GHG emissions stabilize by mid-century and fall sharply thereafter.	Very close to B1 by 2100, but higher emissions at mid-century.[26]	RCP 4.5	Low
2-4-7.0	A medium scenario in which GHG emissions increase gradually until stabilizing in the final decades of the 21st century. At the upper end of the scale, CO_2 emissions roughly double from current levels by 2100. By the end of the century, average temperatures have risen by 3.6°C.	Similar to A1B by 2100, but closer to B1 at mid-century.	RCP 6.0	Medium
5-8.5	A high scenario that assumes continued increases in GHG emissions with CO_2 emissions levels roughly doubling by 2050. By 2100, the average global temperature is a scorching 4.4°C higher.	Broadly equivalent to A2/A1FI[27]	RCP 8.5	High

[26] https://ar5-syr.ipcc.ch/topic_futurechanges.php#node24
[27] https://ar5-syr.ipcc.ch/topic_futurechanges.php#node24