## References for Rainforest News 72, June 2022

# Climate change will be catastrophic

#### Page 1

Mackey, B.G., Moomaw, W., Lindenmayer, D. and Keith, H. 2022. Net carbon accounting and reporting are a barrier to understanding the mitigation value of forest protection in developed countries. *Environ. Res. Lett.* 17, 054028.

UN SEEA-EA: United Nations System of Environmental Economic Accounting-Ecosystem Accounting. The United Nations Statistical Commission adopted the SEEA-EA at its 52<sup>nd</sup> session in March 2021

Global Stocktake (GST): https://unfccc.int/topics/global-stocktake

Rowlatt, J. and Gerken, T. (2021) COP26: Document leak reveals nations lobbying to change key climate report. BBC News 21 October 2021. https://www.bbc.com/news/science-environment-58982445

Haywood, A.M., Valdes, P;J;., Aze, T., Barlow, N., Burke, A., Dolan, A.M., von der Heydt, A.S., Hill, D.J., Jamieson, S.S.R., Otto-Bliesner, B.L., Salzmann, U., Saupe, E., Voss, J. (2019) What can Palaeoclimate modellling do for you? *Earth Systems and Environment 3*, 1-18

IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)].

IPCC Global Warming of 1.5 °C: An IPCC Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (eds Masson-Delmotte, V. et al.) (World Meteorological Organization, 2018).

IPCC, 2021: Summary for Policymakers. In: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 3–32, doi:10.1017/9781009157896.001.

Friedlingstein, P. et al. (2022). Global Carbon Budget 2021. Earth Syst. Sci. Data 14. 1917–2005.

King, D., Schrag, D., Dadi, Z., Ye, Q. and Ghosh, A. 2021. *Climate Change: A risk assessment*. London: UK Foreign & Commonwealth Office.

Weitzman, M.L. (2007) A Review of The Stern Review on the Economics of Climate Change. *Journal of Economic Literature Vol. XLV* (September 2007), pp. 703-724.

Weitzman, M.L. (2011) Fat-Tailed Uncertainty in the Economics of Catastrophic Climate Change. *Review of Environmental Economics and Policy* 5(2), 275-292.

Wagner, G. and Weitzman, M.L. (2015) *Climate Shock: The Economic Consequences of a Hotter Planet.* Princeton University Press, Princeton and Oxford.

Daniel, K.D., Litterman, R.B. and Wagner, G. (2019) Declining CO2 price paths. *PNAS* 116(42), 20886-20891.

Michaelis, P. and Wirths, H. (2020) DICE-RD: an implementation of rate-related damages in the DICE model. *Environmental Economics and Policy Studies*. https://doi.org/10.1007/s10018-020-00269-4

Bury, T.M., Bauch, C.T. and Anand, M. (2019). Charting pathways to climate change mitigation in a coupled socio-climate model. *PLoS Computational Biology 15*(6): e1007000. https://doi.org/10.1371/journal.pcbi.1007000

Kopp, R. E., R. Shwom, G.Wagner, and J. Yuan (2016), Tipping elements and climate–economic shocks: Pathways toward integrated assessment, *Earth's Future*, *4*, 346–372 doi:10.1002/2016EF000362.

Wunderling, N., Donges, J.F., Kurths, J. and Winkelmann, R. (2021) Interacting tipping elements increase risk of climate domino effects under global warming. *Earth System Dynamics* 12, 601-619.

Wagner, G. (2021). This is why even scientists underestimate climate change. Bloomberg Risky Climate. 6 August 2021.

https://mail.google.com/mail/u/0/#inbox/FMfcgzGkZkQSbFbLhmXZcpBNkgrvMjnM. A key point in this paper is that economics lacks the tols to specifically deal with cascading effects. MORE

Stern, N., Stiglitz, J.E. and Taylor, C. (2022) The economics of immense risk, urgent action and radical change: Towards new approaches to the economics of climate change. *Working Paper 28474*, National Bureau of Economic Research, Cambridge, MA 0213.

#### Australia's role

Parra, P.A., Hare, B., Hutfilter, U.F. and Roming, R. (2019). Evaluating the significance of Australia's fossil fuel global footprint. Report prepared by Climate Analytics for the Australian Conservation Foundation (ACF)

#### **Biofuels**

European Commission (2020). Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Renewable Energy Progress Report. Brussels, 14.10.2020 COM (2020) 952 Final.

Cockburn, H. (2021).UK's biggest carbon emitter Drax accused of 'greewashing' wood-fired power at COP26, campaigners say. *Independent* Friday 12 November 2021.

## Native forest logging adds to the climate-biodiversity crisis

UN SEEA-EA: United Nations System of Environmental Economic Accounting-Ecosystem Accounting. The United Nations Statistical Commission adopted the SEEA-EA at its 52<sup>nd</sup> session in March 2021

Global Stocktake (GST): https://unfccc.int/topics/global-stocktake

Rowlatt, J. and Gerken, T. (2021) COP26: Document leak reveals nations lobbying to change key climate report. BBC News 21 October 2021. https://www.bbc.com/news/science-environment-58982445

Haywood, A.M., Valdes, P;J;., Aze, T., Barlow, N., Burke, A., Dolan, A.M., von der Heydt, A.S., Hill, D.J., Jamieson, S.S.R., Otto-Bliesner, B.L., Salzmann, U., Saupe, E., Voss, J. (2019) What can Palaeoclimate modellling do for you? *Earth Systems and Environment 3*, 1-18.

King, D., Schrag, D., Dadi, Z., Ye, Q. and Ghosh, A. 2021. *Climate Change: A risk assessment*. London: UK Foreign & Commonwealth Office.

Weitzman, M.L. (2007) A Review of The Stern Review on the Economics of Climate Change. *Journal of Economic Literature Vol. XLV* (September 2007), pp. 703-724.

Weitzman, M.L. (2011) Fat-Tailed Uncertainty in the Economics of Catastrophic Climate Change. *Review of Environmental Economics and Policy* 5(2), 275-292.

Wagner, G. and Weitzman, M.L. (2015) *Climate Shock: The Economic Consequences of a Hotter Planet.* Princeton University Press, Princeton and Oxford.

Daniel, K.D., Litterman, R.B. and Wagner, G. (2019) Declining CO2 price paths. *PNAS* 116(42), 20886-20891.

Michaelis, P. and Wirths, H. (2020) DICE-RD: an implementation of rate-related damages in the DICE model. *Environmental Economics and Policy Studies*. https://doi.org/10.1007/s10018-020-00269-4

Bury, T.M., Bauch, C.T. and Anand, M. (2019). Charting pathways to climate change mitigation in a coupled socio-climate model. *PLoS Computational Biology 15*(6): e1007000. https://doi.org/10.1371/journal.pcbi.1007000

Kopp, R. E., R. Shwom, G.Wagner, and J. Yuan (2016), Tipping elements and climate–economic shocks: Pathways toward integrated assessment, *Earth's Future*, *4*, 346–372 doi:10.1002/2016EF000362.

Wunderling, N., Donges, J.F., Kurths, J. and Winkelmann, R. (2021) Interacting tipping elements increase risk of climate domino effects under global warming. *Earth System Dynamics* 12, 601-619.

Wagner, G. (2021) This is why even scientists underestimate climate change. Bloomberg Risky Climate. 6 August 2021.

https://mail.google.com/mail/u/0/#inbox/FMfcgzGkZkQSbFbLhmXZcpBNkgrvMjnM. Key points in this paper, in addition to the conservative nature of a lot of scientists, are (a) that economics lacks the tools to specifically deal with cascading effects; and (b) most economists show overconfidence in the power of markets and reluctance to acknowledge market failure on a grand scale such as that relating to climate change.

Stern, N., Stiglitz, J.E. and Taylor, C. (2022) The economics of immense risk, urgent action and radical change: Towards new approaches to the economics of climate change. *Working Paper 28474*, National Bureau of Economic Research, Cambridge, MA 0213.

# Native forest logging in Queensland

Ngugi, M.R., Neldner, V.J., Ryan, S., Lewis, T., Li, J., Norman, P. and Mogilski, M. 2018. Estimating potential harvestable biomass for bioenergy from sustainably managed private native forests in Southeast Queensland, Australia. *Forest Ecosystems* (2018) 5–6. DOI 10.1186/s40663-018-0129-z

Downham, R, Gavran, M and Frakes, I. 2019. *ABARES National Wood Processing Survey:* 2016–17, ABARES technical report 19.3, Canberra, June. CC BY 4.0. https://doi.org/10.25814/5cf8ebadb377f

State and Territory Greenhouse Gas Inventories 2018. Australia's National Greenhouse Accounts, May 2020. https://www.industry.gov.au/sites/default/files/2020-05/nga-state-and-territory-greenhouse-gas-inventories-2018.pdf

### The climate-biodiversity crisis

Barber, C.V., Petersen, R., Young, V., Mackey, B. and Kormos, C. 2020. *The Nexus Report: Nature Based Solutions to the Biodiversity and Climate Crisis*. F20 Foundations, Campaign for Nature and SEE Foundation.

Deprez, A., Rankovic, A., Landry, J., Treyer, S., Vallejo, L. and Waisman, H. (IDDRI) (2021) Aligning high climate and biodiversity ambitions in 2021 and beyond: Why, what, and how? IDDRI, Study N°05/21

Arjaliès (2021) Backing biodiversity to save ourselves. *Financial Times* 13 September 2021. https://www.ft.com/content/d29231ca-3bdc-4bd1-a477-5504c772259a.

### Native forest logging must stop

King, D., Schrag, D., Dadi, Z., Ye, Q. and Ghosh, A. 2021. Climate Change: A risk assessment. London: UK Foreign & Commonwealth Office.

Pörtner et al. 2021. Scientific outcome of the IPBES-IPCC co-sponsored workshop on biodiversity and climate change: IPBES secretariat, Bonn, Germany, DOI:10.5281/zenodo.4659158.

Pörtner et al. 2021. Scientific outcome of the IPBES-IPCC co-sponsored workshop on biodiversity and climate change: IPBES secretariat, Bonn, Germany, DOI:10.5281/zenodo.4659158.

 $Department \ of \ Agriculture \ and \ Fisheries. \ \underline{https://www.daf.qld.gov.au/business-priorities/forestry/native-timber-action-plan/state-owned-native-timber}$ 

Bury, T.M., Bauch, C.T. and Anand, M. (2019). Charting pathways to climate change mitigation in a coupled socio-climate model. *PLoS Computational Biology 15*(6): e1007000. https://doi.org/10.1371/journal.pcbi.1007000

Wunderling, N., Donges, J.F., Kurths, J. and Winkelmann, R. (2021) Interacting tipping elements increase risk of climate domino effects under global warming. *Earth System Dynamics* 12, 601-619.

Wunderling, N., Donges, J.F., Kurths, J. and Winkelmann, R. (2021) Interacting tipping elements increase risk of climate domino effects under global warming. *Earth System Dynamics* 12, 601-619.