

Matt Ridley Op-Ed is a Laundry List of IPCC Misrepresentations

Right on cue, Matt Ridley has [another](#) error-filled [opinion piece](#) in the Wall Street Journal anticipating the forthcoming Working Group II (WG2) release of the IPCC's Fifth Assessment Report (AR5) on climate change impacts, adaptation, and vulnerability. The op-ed misrepresents a laundry list of the IPCC's findings and claims the WG2 report (a draft of which leaked publicly in November) has become more cautious about the effects of climate change. In reality, the WG2 report reveals that climate change is an increasingly urgent threat and that our level of adaptation and preparedness remains low.

Overly Optimistic on Climate Sensitivity

On the issue of warming, Ridley hearkens back to [climate sensitivity](#), a topic that featured prominently at the time of the release of the IPCC's Working Group I (WG1) report on the physical science basis of climate change. To support his claim that warming won't be so bad, Ridley obscures the scientific understanding of climate sensitivity and cites a [survey](#) by Lewis and Crok of the most optimistic sensitivity papers that project only 1°C of warming by 2090. This directly contradicts the far more comprehensive work of the IPCC, which projects close to 4°C of warming by about 2100 under a business-as-usual emissions scenario. A variety of studies have arrived at differing estimates on the exact sensitivity of the climate to forcing by greenhouse gases, but Lewis and Crok's conclusions are well outside the mainstream. [Yet another study](#) recently showed further flaws in their method: it doesn't take the geographic distribution of aerosols into account, causing it to be biased low.

Misuse of IPCC's Economic Cost Analysis

As for climate change impacts on human welfare, Ridley evaluates this in economic terms, misusing the IPCC's assessment of climate change's economic impacts to imply that costs will be minimal. The draft WG2 report only quantifies the costs of climate impacts up to 2.5°C of warming, which it values at up to 2% of GDP. However, this degree of warming is a scenario that would only take place if we take significant action on climate mitigation. WG2 concludes its discussion of economic costs with the statement: *"little is known about aggregate economic impacts of warming above 3°C"* (WG2 Summary for Policymakers, p.11 line 22). If we do not take action on climate mitigation, we could be experiencing around 4°C of warming by about 2100 according to the business-as-usual (RCP 8.5) scenario (WG1 Annex II Table 7.5). That's uncharted territory and possible within the lifetimes of some who are alive today.

Misses the Big Picture on CO₂ Fertilization

Ridley goes on to argue that "most experts" agree that small amounts of warming have net benefits, parroting a line of argument that the scientific consensus has repeatedly shown to be flawed. As evidence, he says satellites have recorded a 14% increase in greenery on the planet over the past 30 years partly due to anthropogenic CO₂ emissions, enabling plants to grow faster with less water. However, CO₂ is not the only nutrient essential to ecosystems' health. While enhanced CO₂ allows plants to [maximize their water efficiency](#) (requiring less water to achieve photosynthesis) the levels of other [nutrients still limit growth](#). So while plant

production in some arid regions may benefit from higher CO₂ concentrations, in many other regions nutrient limitation will prevent much greening.

Furthermore, any benefits that do occur are erased by the many negative impacts associated with climate change that lead to net losses. The AR5 discusses high-risk levels of current climate change impacts on human systems, including: the incidence and range of disease in Africa; property loss and mortality due to wildfires in North America; and decreased food production and food quality in South America. Medium-risk levels are given for many more impacts. In this respect, the AR5 goes into much greater detail than the AR4, and shows greater certainty with respect to observed human impacts.

Paints Adaptation as Alternative to Mitigation, When Really We Need Both

Despite the increase in observed climate impacts and risks laid out in WG1 and WG2, Ridley makes the claim that people can adapt and capture the benefits while minimizing the harms. He implies that the WG2 report admits to there being less need for mitigation in light of its focus on adaptation. However, greater need for adaptation is due to our collective delay taking the necessary degree of action to mitigate the impacts of climate change, not because the IPCC changed its mind and realized that adaptation is easier than mitigation. We are now forced to adapt to climate change impacts we have already begun to witness, *in addition to* needing reductions in emissions to limit even worse impacts in the future.

Relies on Usual Suspects Outside of Science Mainstream

Finally, Ridley argues that the real debate in the climate community is between scientists who think climate change is “fairly harmless” versus those “who think the future is alarming.” However, Ridley cites the same handful of skeptic and contrarian scientists—including [Judith Curry](#), [Richard Lindzen](#), [Nic Lewis](#), and [Richard Tol](#)—who are cited ad nauseam by impacts deniers and action delayers seeking to undermine the increasingly robust scientific consensus on climate change. The IPCC, in contrast, assesses the broadest range of scientific literature on climate change. To this end, the WG2 Technical Summary states: “*the number of scientific publications available for assessing climate change impacts, adaptation, and vulnerability more than doubled between 2005 and 2010, allowing for a more robust assessment that supports policymaking*” (WG2 Technical Summary, p.2).