



WWF EXPECTATIONS FOR THE IPCC SPECIAL REPORT ON GLOBAL WARMING OF 1.5°C

September 2018



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WWF is following the scientific developments around 1.5°C with great interest.

We have engaged in the expert review process for the IPCC Special Report on Global Warming of 1.5°C and see this as a critical input to the 2018 Talanoa dialogue, a process in the UN climate negotiations meant to help ramp-up ambitions under the Paris Agreement before 2020.

In this briefing, WWF outlines our substance and process expectations for the Summary for Policymakers (SPM) of the Special Report.

Substance

The SPM must reflect the Special Report's underlying assessment of the latest scientific evidence. Therefore it is important that the SPM highlights that:

- Policy and individual choices are available which lead to emission reductions. These choices make a difference, and mean that breaching global warming of 1.5°C is not inevitable.
- The emerging 1.5°C science reinforces the importance of rapid and deep cuts to greenhouse gas emissions – 40-50% by 2030 and net zero by 2050 – because early action improves the chance of limiting global warming to 1.5°C:
 - That a transformation is needed across the economy – energy, land, urban, and industrial systems. We need to recognize that this is challenging as the scale of the needed change is unprecedented except for in a few sectors. Such a transformation will require a just transition from the current to the 1.5°C-consistent state.
 - That a transformation is needed in many societies as behavior change and lifestyle choices are important to drive down emissions.
 - That enhanced early action is needed because current country pledges (i.e. NDCs under the Paris Agreement) are insufficient to limit global warming to 1.5°C.
 - That it is crucial that different actors play their part – including countries, subnational governments and other non-state actors.
- Stabilizing global mean surface temperature requires net-zero CO₂ emissions by 2050 and declining total radiative forcing from other anthropogenic forcers.
- Global carbon budget estimates have increased since the AR5 for a variety of reasons – definitional and reference case – and that there are specific scientific reasons why.
- Carbon dioxide removal will be needed on top of rapid and deep emissions cuts.
 - That demand-side measures and rapid and deep emission cuts can reduce the dependence on riskier, and unproven technological approaches to carbon dioxide removal.
 - That land-based carbon dioxide removal options can have benefits over and above climate mitigation.
- A 1.5°C world is more dangerous than the present but safer than a 2°C world in terms of climate impacts; with higher levels of global warming worse still. So the SPM must reflect:
 - That we are already seeing climate-induced impacts at the current global warming of ~1°C and that nations agreed to limit global warming to 1.5°C.
 - That 1.5°C has substantially lower risk of climate-induced impacts than 2°C for nature – e.g. on land, in oceans, and the polar regions.
 - There are substantial increase in extremes between the present day and a global warming of 1.5°C and 2°C with associated damage to communities, economies and ecosystems across the world.
- Temperature overshoot scenarios have higher risks for people and nature than do scenarios which always remain below 1.5°C warming.
 - That overshoots much higher than 1.5°C are worse for nature and people – they could have irreversible impacts on some species, ecosystems and their ecological functions and services to humans.
 - That overshooting has higher impacts and leads to a higher reliance on carbon dioxide removal.
- Adaptation to climate change is already needed and will continue to be needed at the current global warming of ~1°C:

- That higher and multiple interrelated climate risks are projected at 1.5°C global warming and even more at 2°C, and that higher temperatures reduce adaptation options.
- There are limits to adaptation, particularly for low-lying and coastal countries, and highly sensitive ecosystems such as coral reefs and polar regions.
 - That limits to adaptation and associated losses exist at every level of global warming and increase with temperature rise.
- 1.5°C impacts will hit poor and vulnerable communities harder and so affects sustainable development.
 - Development levels and choices made are crucial factors in determining the impacts of climate change.
 - There are pathways consistent with 1.5°C which have high synergies and low trade-offs with respect to sustainable development and the SDGs and can be achieved with high economic growth.
- The framing of costs and benefits needs to provide balanced information to help policymakers:
 - That context is important if comparing costs for 1.5°C and 2°C-consistent pathways – abatement costs alone could be misleading as they do not show full costs such as the costs of inaction (e.g. avoided impacts) or lower projected growth with higher global warming.
- Improvements in many aspects are needed to successfully limit global warming to 1.5°C and to adapt to impacts of climate change. These include:
 - International cooperation.
 - Investment in and strengthening of institutional capacity of both countries and non-state actors.
 - Shifting finance flows.
 - Technological innovation and transfer.
 - Changes in human behavior and lifestyles.
 - Consideration of impacts to nature.

Process

We expect that the SPM is approved as scheduled in October at IPCC48 in Korea and that the underlying report is accepted at the same time to ensure that the latest scientific and policy-relevant information is fed into the Talanoa dialogue at UNFCCC COP24 in December.

This will help inform countries of the importance of raising the ambitions of the Paris Agreement pledges before 2020.

Conclusion

WWF is a committed observer organization to the IPCC.

In October we will join other observers at the IPCC48 session in Korea to highlight that the information above should be emphasized in the SPM.

Our objective is to ensure that governments, businesses and the public can take actions informed by the best scientific information, that shows that 1.5°C is safer than higher temperatures and that our choices can make a difference.

WWF supports strong action by national governments and non-state actors (investors, cities, business, regional and local governments), and citizens.

We must work together and make choices that cut emissions consistent with a 1.5°C pathway to limit the damaging impacts of climate change.



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

panda.org/climateandenergy

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