

The Role of Science in Accountability

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Climate change science

- Climate change is a science-driven process
- The IPCC is the formal mechanism to link science to the UNFCCC and diplomatic processes
- This is and needs to be scientifically conservative, with its summary reports approved by governments

Broader role of science in accountability

- The climate system is evolving so rapidly that the long delay to peer reviewed consensus means that many early warning signals are disregarded
- These issues need to be openly debated in the scientific community and brought to the attention of governments and the more formal processes
- We need clear mechanisms to deal with risk and probability

Science and the public

- Role of scientists in public information and debate
- Neutrality versus active engagement
- Challenge of climate skeptics and disinformation

Science-based indicators

- Directly from monitoring and assessment: CO₂ concentration, sea ice extent, etc.
- National emissions
- Indicators and indices: ecological footprint, Environmental Sustainability Index, Environmental Performance Index, etc.

Role of science-based NGOs

- Social sciences and behavior change towards sustainable lifestyles
- Science and ethics - International Environment Forum
- Scientific advice to other processes and stakeholders: Pope's Encyclical