

ESA as a partner can come into the 'Lighthouse Activities' explaining, attributing and predicting Earth System change, 'My Climate Risk' about decadal changes and their impacts / risks, and 'Safe Landing Climates' for the long-term future. Also Digital Earths, with observations to complement high resolution modelling.

Joerg Shultz (EUMETSAT – chair of CEOS/CGMS WGClimate)

- Opportunity in providing case exercise for ESA CCI CDRs to demonstrate the value of CDRs, e.g. for Stocktake. They will be published on a web tool, publication to include selected case studies early 2022.
- Keep supporting CEOS/CGMS WGClimate ECV Inventory process, participate in the gap analysis & workshop on specific ECVs.
- Support the coordination bodies directly: CEOS GHG Task Team.

Sara Venturini (GEO WG Climate)

- CCI could contribute to the NAPs technical guidance doc with CCI use cases, data and maps targeting resilience building in key sectors.
- GEO's response to IPCC special reports/AR6 on EO gaps could include CCI innovative approaches.

Myles Allen (lead author IPCC AR)

- The big challenge for IPCC over the next decade is to assess how close we are to achieving the Paris temperature targets and assess global trends and drivers of temperature change – need precise, time-resolved observations to quickly see if policies are 'bending the curve' on temp.
- Contribution CCI can make: observations on the rate of change of anthropogenic forcing of climate change and its components. E.g. address the uptick in radiative forcing from aerosols using CMIP6 ensemble to 2025: are reflected SW TOA flux trends due to external forcing (aerosol clean-up) or a cloudiness response to changing surface temps? Myles has a long-list of other questions CCI could contribute to.

Questions:

Can ESA contribute more as a observer by addressing the scientific questions? > The possibility of hosting IPCC technical support units should be on ESA's agenda as this is always a challenge for IPCC. ESA could play a substantial role in supporting article 8 – adaptation and impact assessment efforts. And ESA CCI could be used in the Stocktake in assessing our trajectory towards to temp goal. There's also a huge role for EO in globalizing impact assessments. E.g. Remote Sensing to address impacts in Africa. ESA can make a major contribution in terms of developing the global observation systems to give us an overview of climate impacts across the Earth. This is a focus in terms of ESA's contribution to developing countries as well as the IPCC process.