SBSTA Chair information event with the scientific community

Monday 8 June, 13:00–15:00

Virtual meeting

Introduction

The COVID-19 pandemic is a world changing event with far ranging impacts on the science community. Given the global response to the coronavirus pandemic, science missions and conferences that were scheduled in the next months have been postponed or cancelled, gaps in some in situ long-running climate records are likely, and research budgets may be negatively affected.

With in-person science meetings around the world grinding to a halt as a result of efforts to contain the spread of the coronavirus, the IPCC is exploring alternative working arrangements to keep its sixth assessment report on track. The original timeline of that report is likely to face inevitable delays, given disruptions in the ability of scientists to contribute, travel bans, university closures and staff redundancies. The possible delay of the completion of the sixth assessment report will have a spillover effect on some SBSTA activities that will consider the findings of this report including the second periodic review and the first global stocktake which are scheduled to end at fixed dates. The timings of the SBSTA Research Dialogue and Earth Information Day will also be affected.

In 2018, greenhouse gas concentrations reached new highs of CO_2 at 407.8±0.1 ppm, CH_4 at 1869±2ppb and N₂O at 331.1±0.1 ppb.¹ Global average figures for 2019 will not be available until late 2020, but real-time data from specific locations, including the Mauna Loa Observatory in Hawaii, indicate that GHG levels continued to increase in 2019 and during 2020 with observed concentrations of CO_2 at Mauna Loa reaching 417.93 ppm, recorded on 24 May 2020.

Evidence suggests that as a result of the COVID-19 shutdown there will be a 4-7 per cent drop in fossil fuel emissions over 2020 (dependent on when lockdown restrictions will be eased).² This decrease is much larger than the downtown of emissions during the 2008 financial crisis (which subsequently led to a rise in emissions of 6% during the recovery period).

The pandemic is, in its way, a global, natural experiment that offers an opportunity to develop a better understanding of sources of pollution. The scientific community is focusing, not only on how measures to contain COVID-19 have reduced air pollution and emissions of greenhouse gases, but also on questions such as:

- Do weather and climate determine where COVID-19 occurs?
- Will climate change make COVID-19 worse?
- What can the global response to COVID-19 teach us about our response to climate change?
- Which barriers and constraints were quickly overcome in response to the pandemic, and how do these open opportunities for climate action?
- Which innovations have emerged in response to the pandemic, and how can climate science learn from their emergence?

It has been the practice of the SBSTA Chair to hold an informal meeting with representatives from the scientific community and constituted bodies following the annual meeting of the research dialogue held at the first sessional period of the year (normally May/June).

¹ WMO Statement on the State of the Global Climate in 2019.

https://library.wmo.int/doc_num.php?explnum_id=10211

² Le Quere et al. (2020) Nature https://www.nature.com/articles/s41558-020-0797-x

SBSTA 52 has been postponed (until October 4–12, 2020). However, in order to maintain momentum for the UNFCCC process, the SBSTA Chair invites colleagues from the scientific community and constituted bodies to participate in an information event on Monday 8 June 2020 to discuss the impacts that the COVID-19 pandemic has on science.

This complementary event will also provide an informal space to discuss new opportunities emerging for recovering from this crisis, for understanding better the Earth's climate as well as what has changed and new options for enhanced scientific exchange on climate change. It is not a space for negotiating or decision making.

Discussions will focus on the impacts of the COVID-19 pandemic and consider: What are the impacts of COVID-19 on greenhouse gas emissions and the climate system? What are the impacts of COVID-19 on the scientific community undertaking research and systematic observation? What are the options and opportunities to enable scientific support for a resilient recovery and for knowledge sharing?

Draft agenda

13:00-13:05	Opening SBSTA Chair
13.05-13.25	Overview of impacts of COVID-19 on the climate system and GHG emissions and concentrations
	 Representatives from: World Meteorological Organization Global Carbon Project
	Q&A and discussion
13.25-14.55	COVID-19 and climate change science: Impacts, Options and Opportunities for knowledge sharing
	 Representatives from: Intergovernmental Panel on Climate Change Integrated Assessment Modelling Community Global Climate Observing System Joint Working Group on Climate of the Committee on Earth Observation Satellites and Coordination Group for Meteorological Satellites World Climate Research Programme Intergovernmental Oceanographic Commission / Global Ocean Observing System International Science Council / Future Earth
	Q&A and discussion
14.55-15:00	Closing comments by the SBSTA Chair