

Status of WMO & climate

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

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Secretary General
WMO

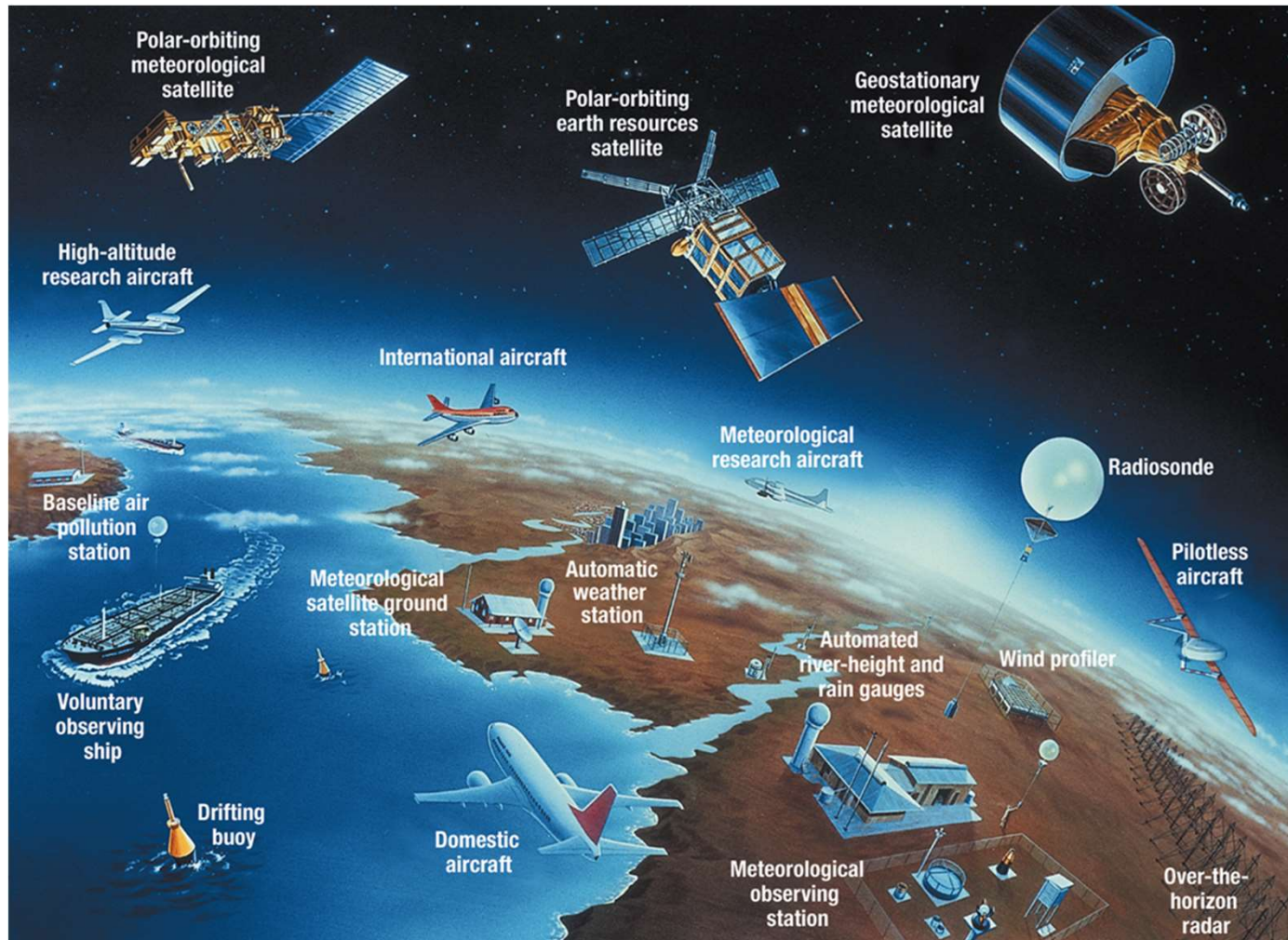


WMO OMM

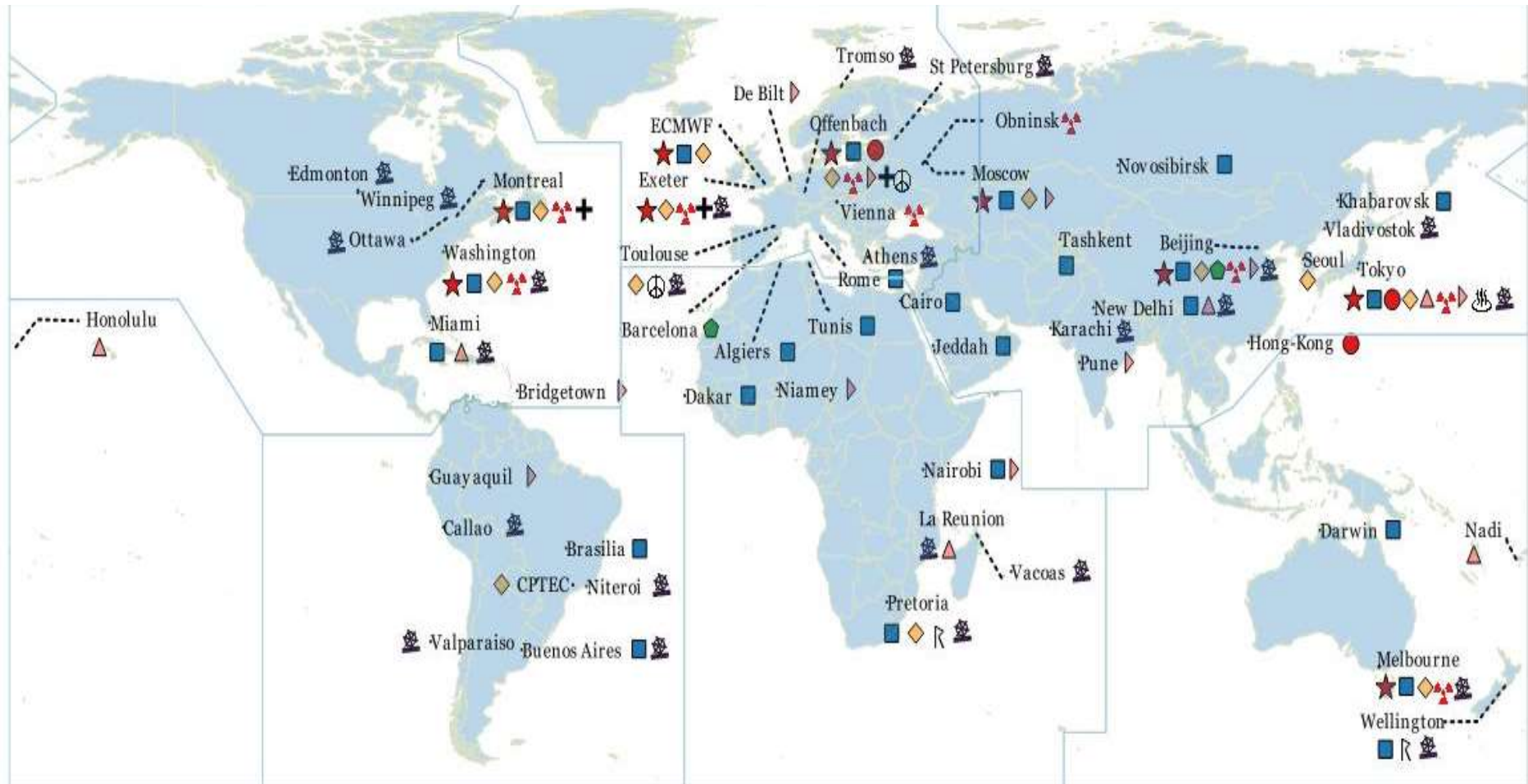
World Meteorological Organization
Organisation météorologique mondiale

WMO: global Earth observing system

- Weather, climate, water, oceans, air quality, greenhouse gases & cryosphere
- Free and open real-time exchange of global data



WMO: Global Forecast & Climate Centres

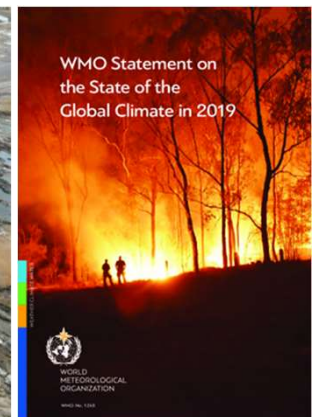
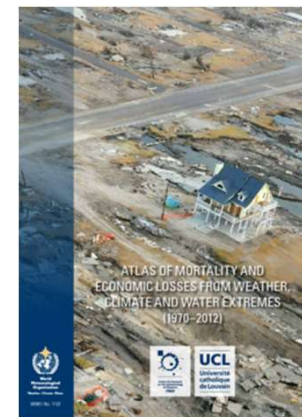
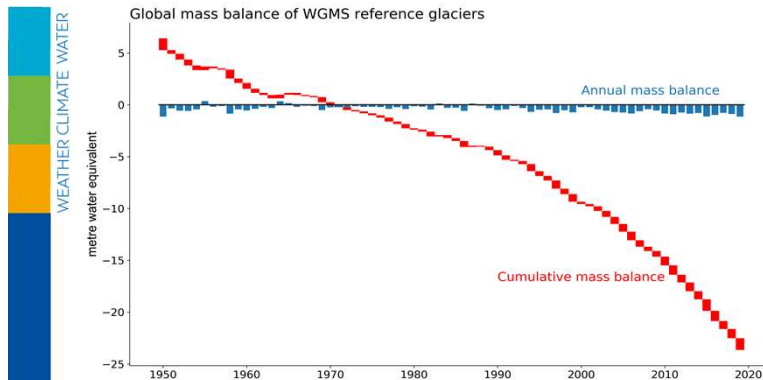
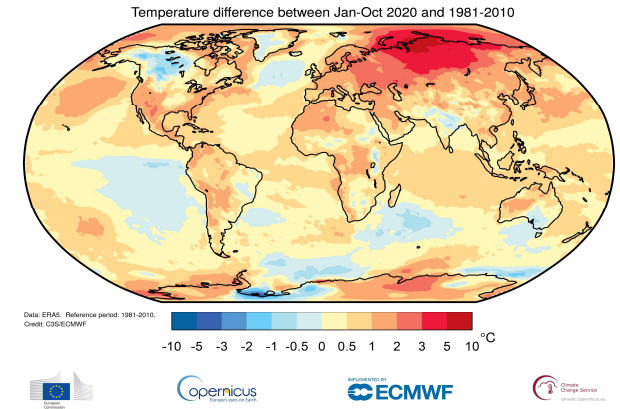
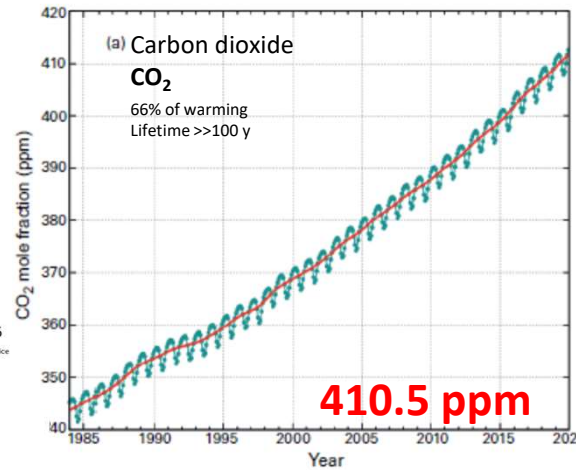
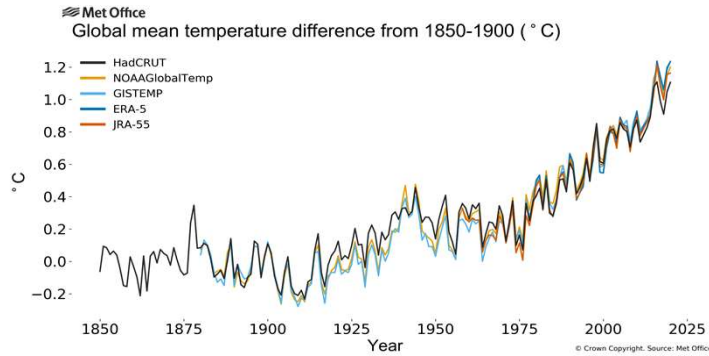


Legend

- | | | |
|---|--|---|
| ★ World Meteorological Centres* (9) | ● RSMC Nowcasting (3) | ☪ RSMCs Non-Nuclear Emergency Response (2) |
| ⊙ Atmospheric Transport Modelling (10) | ▲ RSMCs TC (6) | ☪ RSMCs Volcano watch services for international air navigation (1) |
| ◇ Global Producing Centres for Long-Range Forecasts (13) | ⬆ RSMCs Sand/Dust (2) | ℞ RSMCs Severe Weather Forecasting (2) |
| ⊕ Global Producing Centres for Annual to Decadal Climate Prediction (3) | ▷ Regional Climate Centres (11) | ⚓ RSMCs marine meteorological services (24) |
| ■ RSMCs Geographic (25) | ☄ RSMCs Nuclear Emergency Response (9) | |

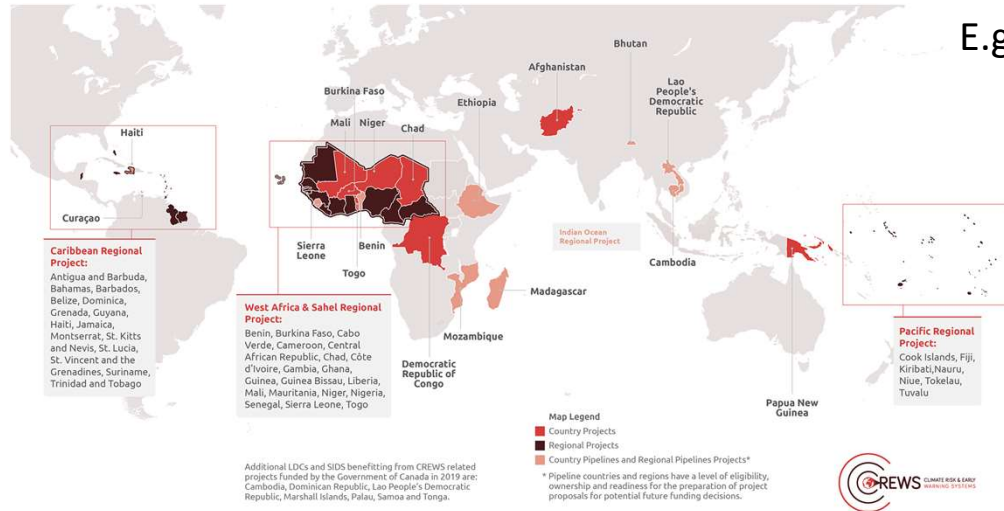
WMO: Status of climate & climate science

- Weather parameters, greenhouse gases, sea level, glaciers & sea ice
- Founder and co-host of IPCC, key role in IPCC reports



WMO: Capacity development

- Only 40 % of the Members have proper Early Warning Systems
- Lack of observations from Africa, Island states & Latin America



E.g. Climate Risk & Early Warning Systems => 100 M€



- 85 M€ for Climate Service Development in African, Caribbean & Pacific countries
- Investments in Early Warning Systems a very powerful way to adapt to climate change, return of investment ~10 fold

WMO Facts

- UN Specialized Agency on **weather, climate & water** with 193 Members
- 2nd oldest UN Agency, 1873- with **science and technology** based action
- Coordinates work of > **200 000 national experts** from meteorological & hydrological services, academia & private sector
- Co-Founder and host agency of **IPCC**, WMO SG UN Climate Principal
- Global **real-time standardized weather & climate observing system** backbone of services
- 13 WMO global centres, which provide global short and long term forecasts
- **Sharing of know-how**, developed => developing countries & regional co-operation



Why WMO?

1. Weather forecasts not possible without WMO
2. Aviation not possible without WMO
3. Climate science very limited without WMO
4. Global sharing of data and know-how
5. Essential contribution to public safety, agriculture, energy, health, businesses & all means of transportation (road, marine, railroad)



Biggest risks for World's economy 2021 by WEF

Top Risks

by likelihood

- 1 Extreme weather
- 2 Climate action failure
- 3 Human environmental damage
- 4 Infectious diseases
- 5 Biodiversity loss
- 6 Digital power concentration
- 7 Digital inequality
- 8 Interstate relations fracture
- 9 Cybersecurity failure
- 10 Livelihood crises

Top Risks

by impact

- 1 Infectious diseases
- 2 Climate action failure
- 3 Weapons of mass destruction
- 4 Biodiversity loss
- 5 Natural resource crises
- 6 Human environmental damage
- 7 Livelihood crises
- 8 Extreme weather
- 9 Debt crises
- 10 IT infrastructure breakdown



WMO OMM

Historical WMO Reforms 2016-

1. Constituent body reform

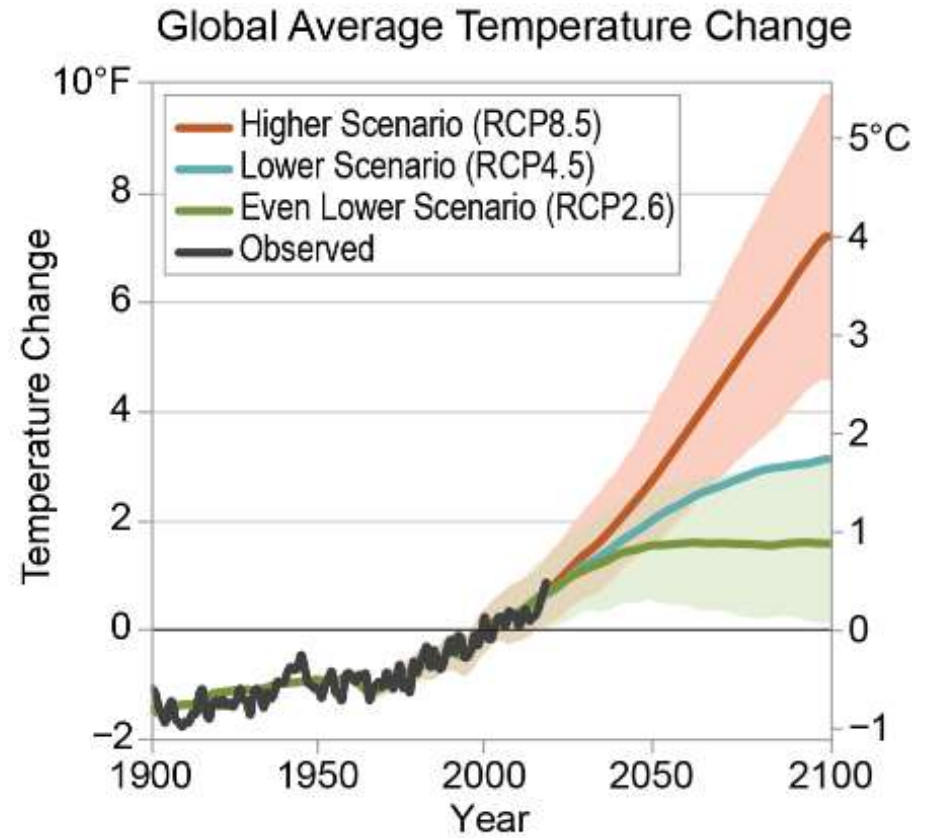
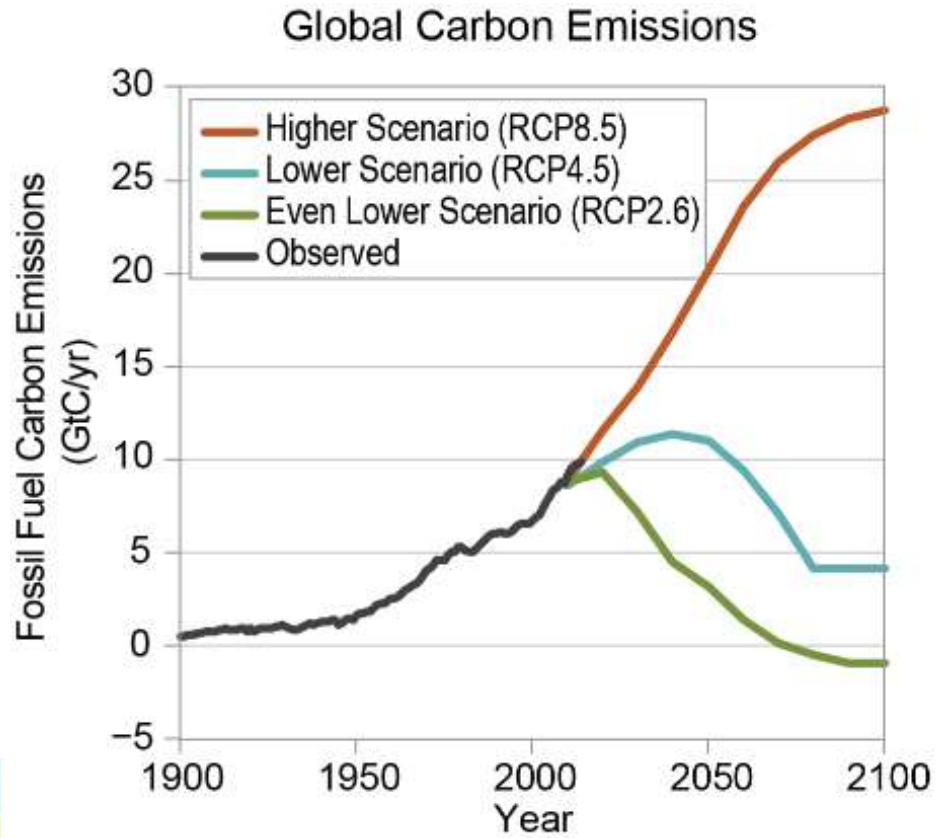


2. Secretariat alignment & reform

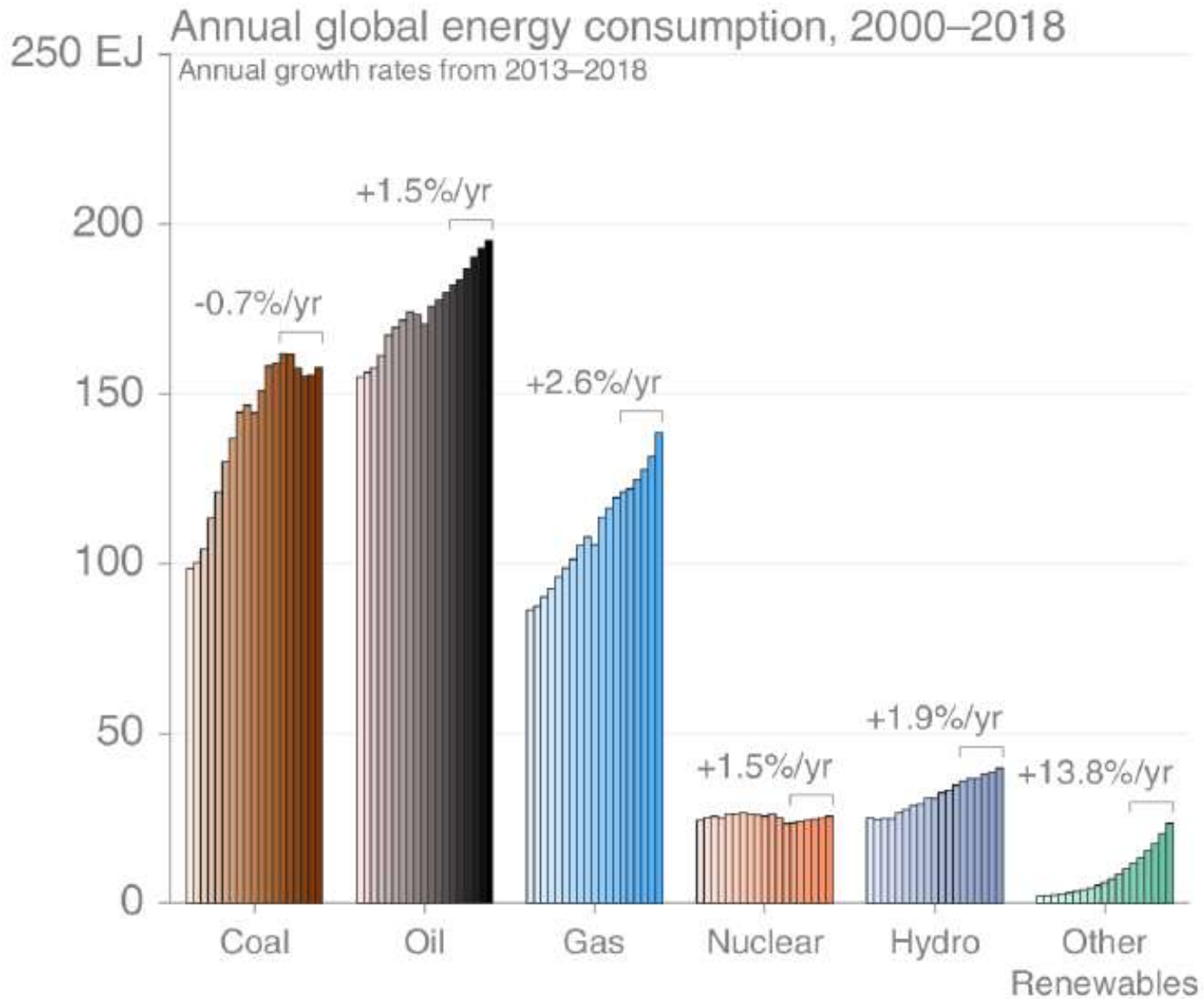


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Carbon emissions-temperature



Energy consumption 2000-2018



COVID-19/Secretariat

1. Videoconferences instead of physical meetings

- Very powerful way to run the meetings
- Result orientation & efficiency
- Savings of staff working hours (Members & Secretariat) & travel costs
- Also physical meetings needed, future a mixture

2. Teleworking

- Experience mostly positive
- Does not fit to all duties nor individuals, director driven approach
- Partial teleworking will be applied also after the Covid-19



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WMO-Forerunner in the UN



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