



Melanchthonstadt Bretten



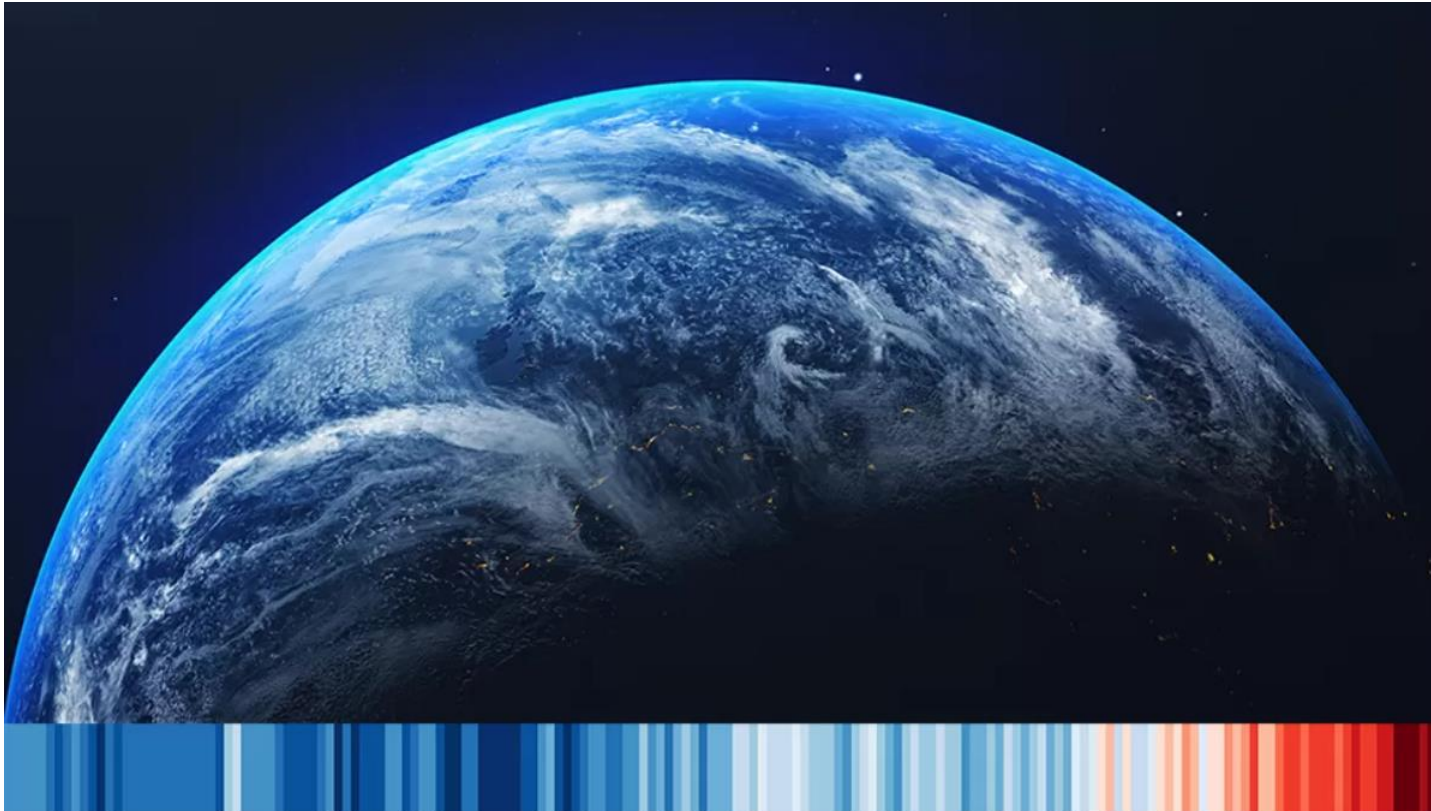
Climate change knows no borders

Workshop 9:
Climate change

BRETTEN

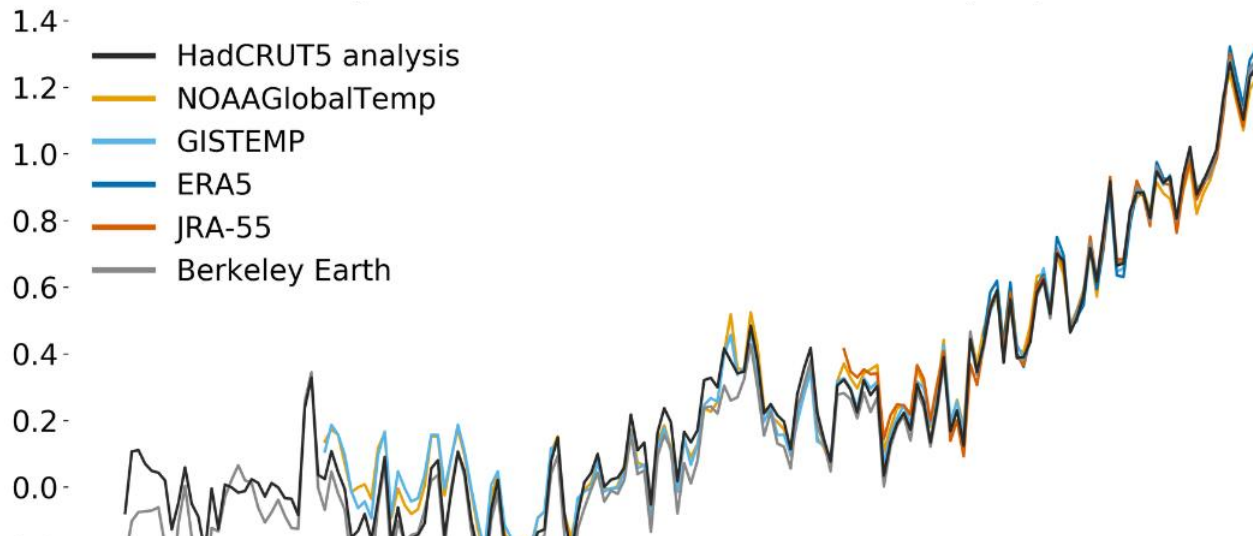
Why are we all here?

We want to talk about climate change...



Interactive quiz

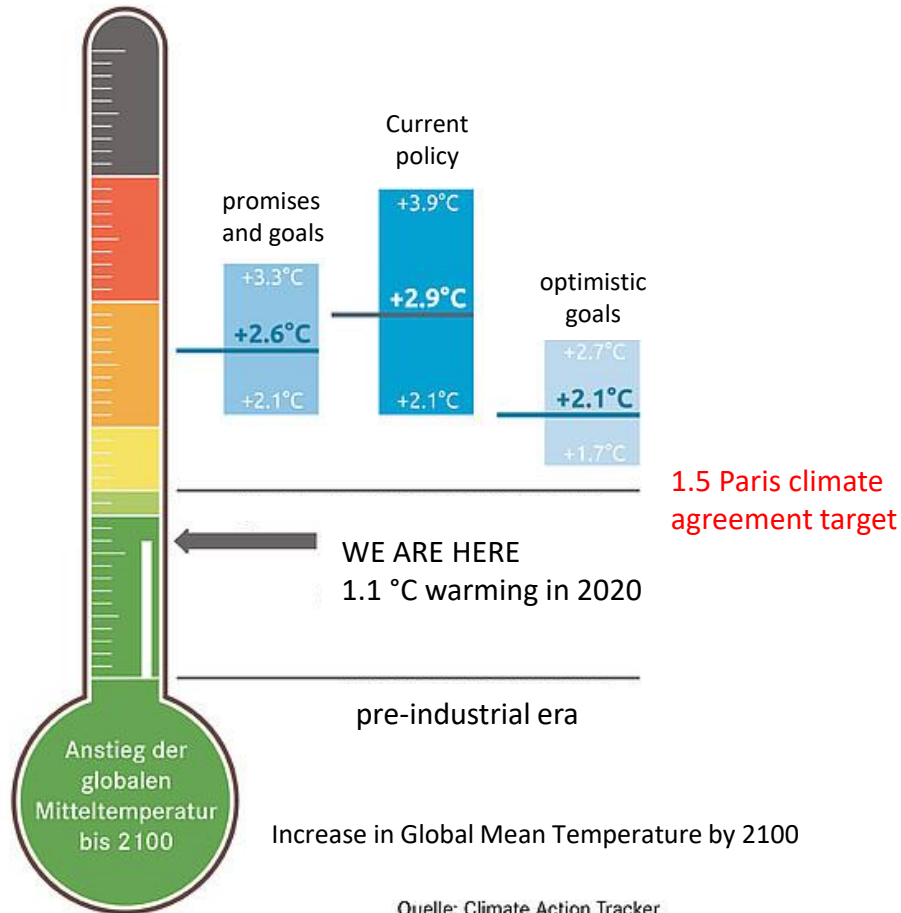




- The most recent seven years, 2015 to 2021, are the seven warmest years on record.
- The average global temperature in 2021 was about 1.11 (± 0.13) °C above the pre-industrial level.













Fixed maximum temperature rise?









CLIMATE ACTION TRACKER



- The 1.5-degree limit will be missed under current policies.
→ 3 °C until 2100
- Achievement of the 1.5 °C possible as early as 2026

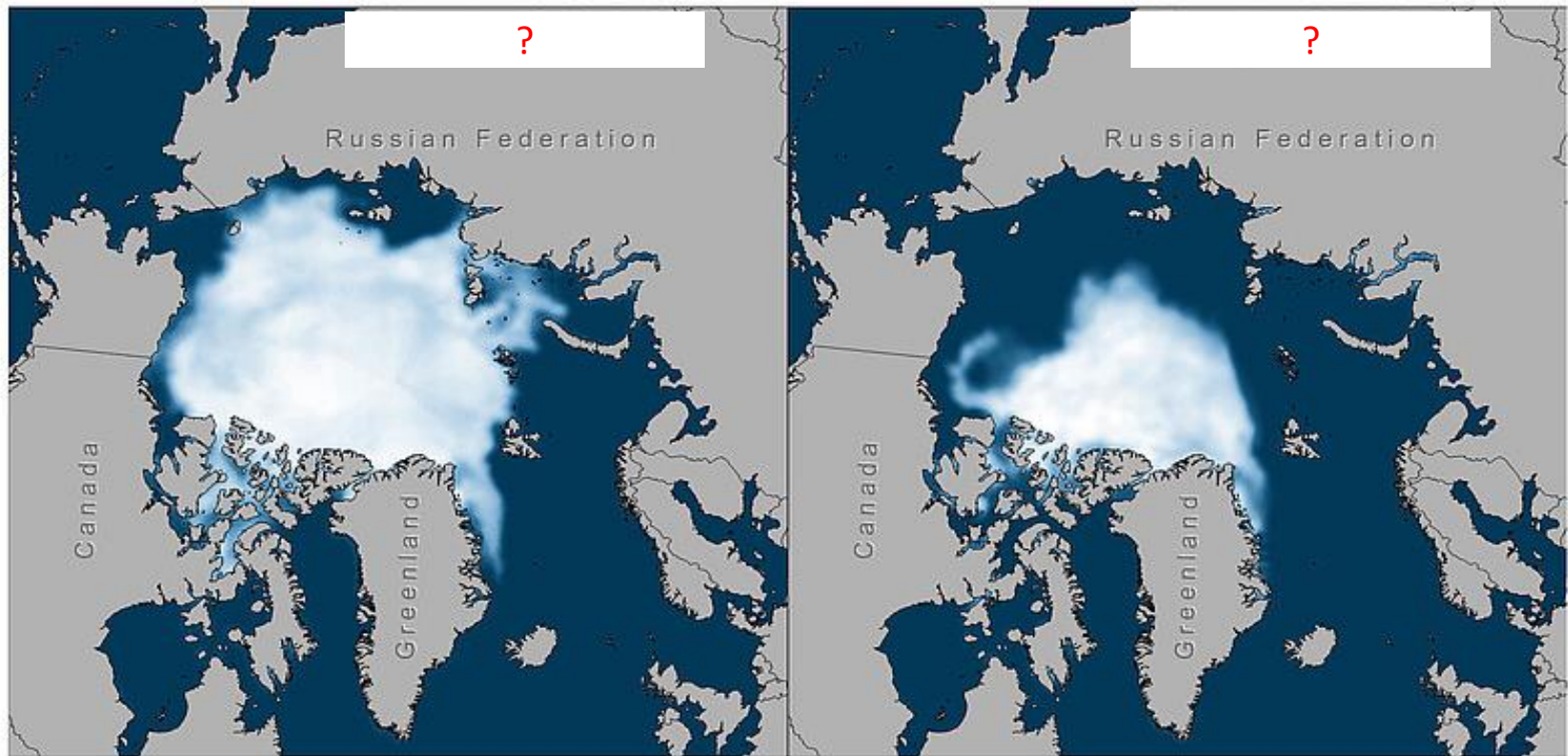
Impact of global warming

C	1.5°C	2°C	IMPACT of 2°C compared to 1.5°C
 <p>LOSS OF PLANT SPECIES</p>	 of plants will lose 1/2 their habitable area	 of plants will lose 1/2 their habitable area	
 <p>LOSS OF INSECT SPECIES</p>	 of insects will lose 1/2 their habitable area	 of insects will lose 1/2 their habitable area	
 <p>FURTHER DECLINE IN CORAL REEFS</p>			

C	1.5°C	2°C	IMPACT of 2°C compared to 1.5°C
 <p>EXTREME HEAT</p>	 of the global population exposed to severe heat every 1 in 5 years	 of the global population exposed to severe heat every 1 in 5 years	
 <p>SEA-ICE-FREE SUMMERS IN THE ARCTIC</p>			

Arctic sea ice development

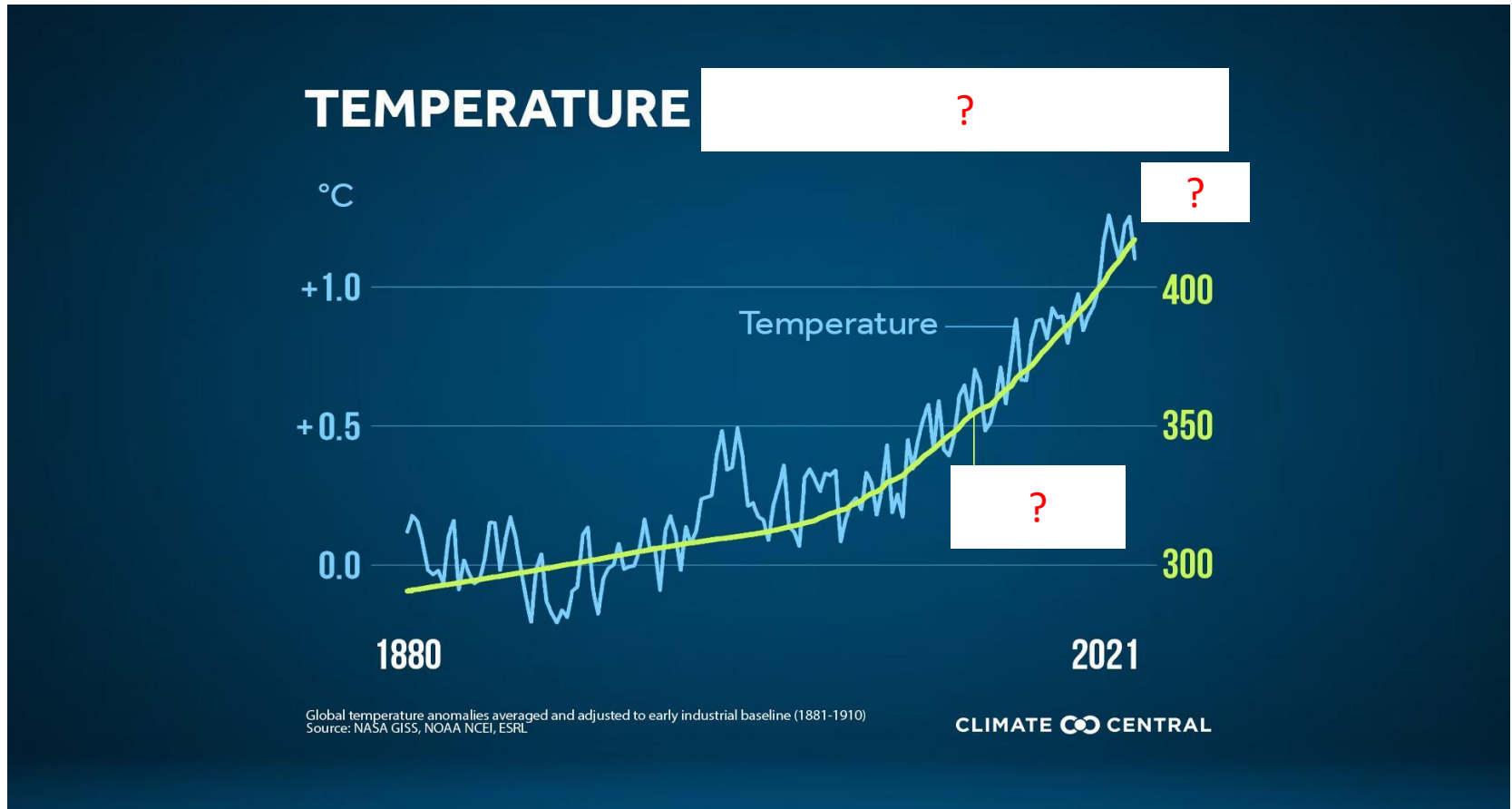
Sea ice surface in the Arctic Ocean



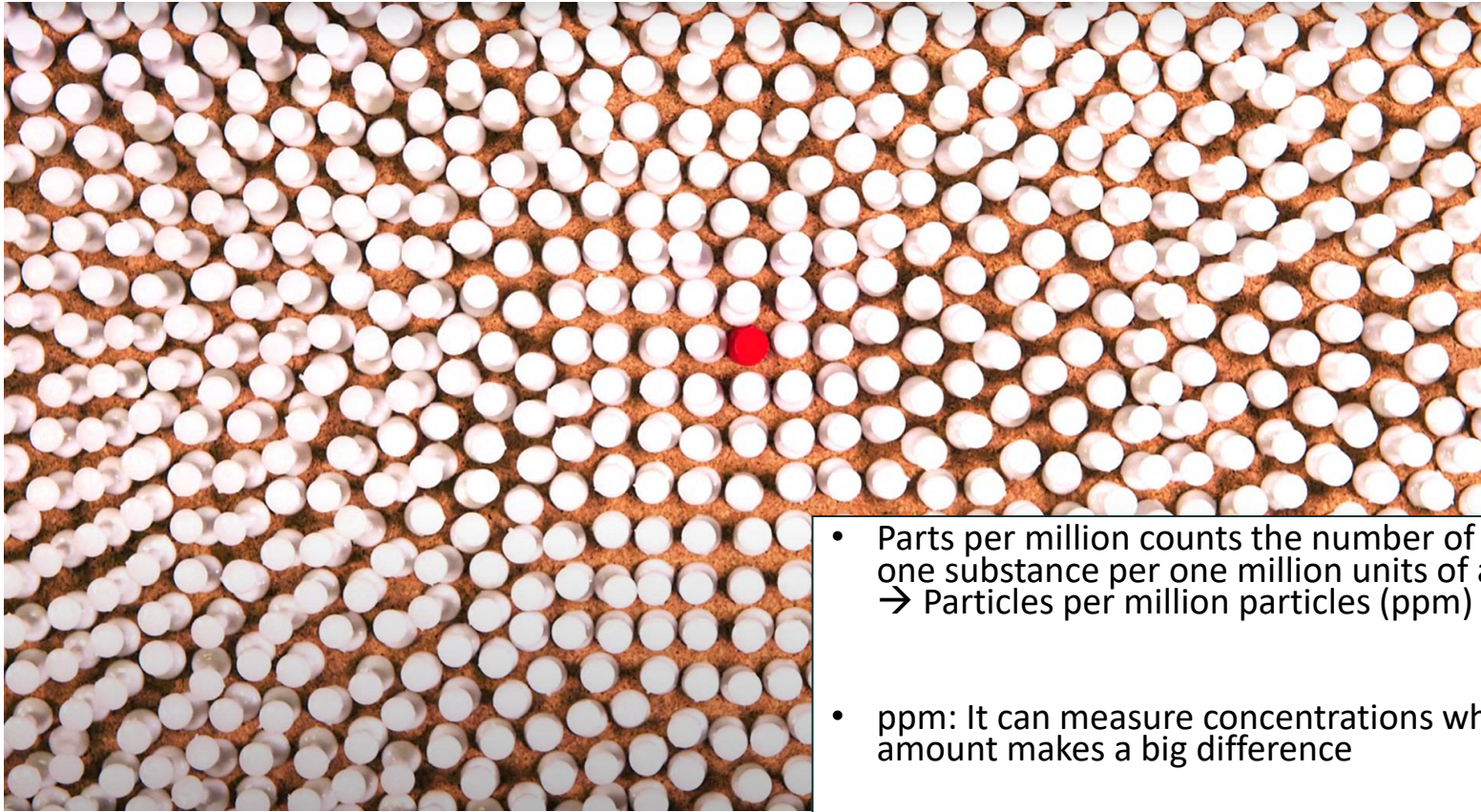
Grafik: Roessler, Team Polar and Cold Regions (DLR-EOC)

Temperature

?

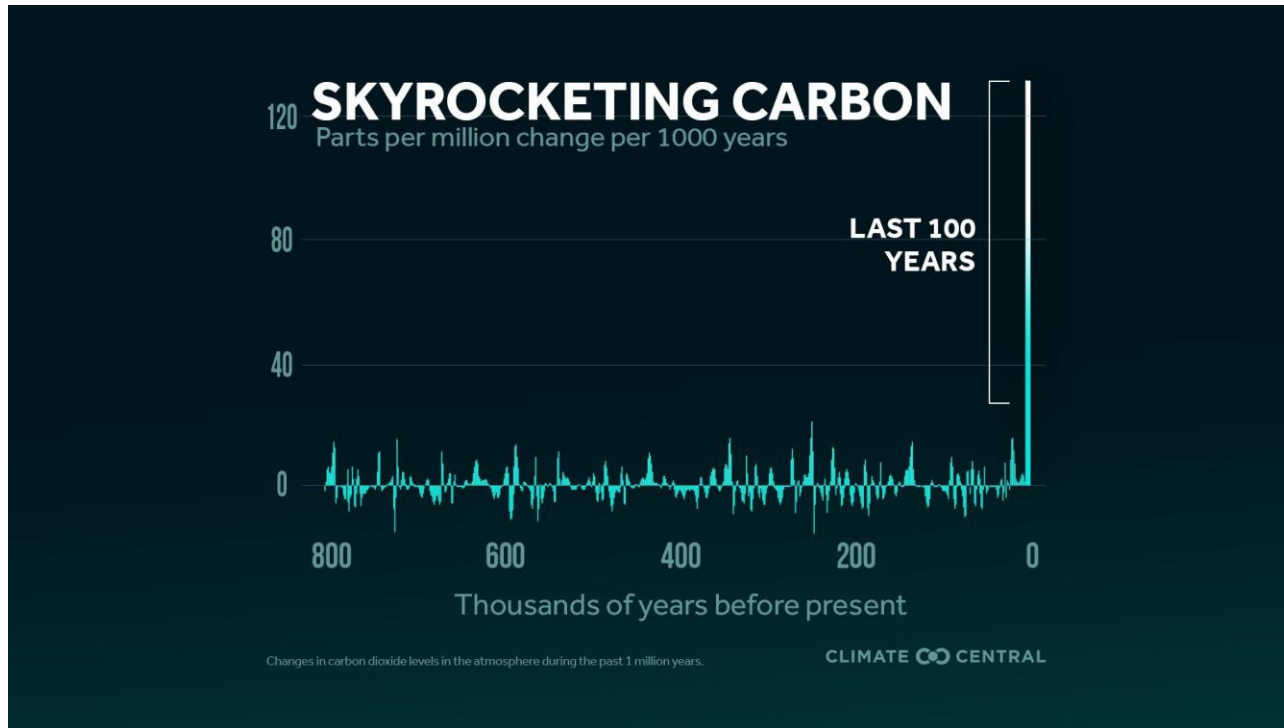


Explanation parts per million



- Parts per million counts the number of units of one substance per one million units of another.
→ Particles per million particles (ppm)
- ppm: It can measure concentrations when a small amount makes a big difference
- Carbon dioxide remain in the atmosphere for up to 2000 years

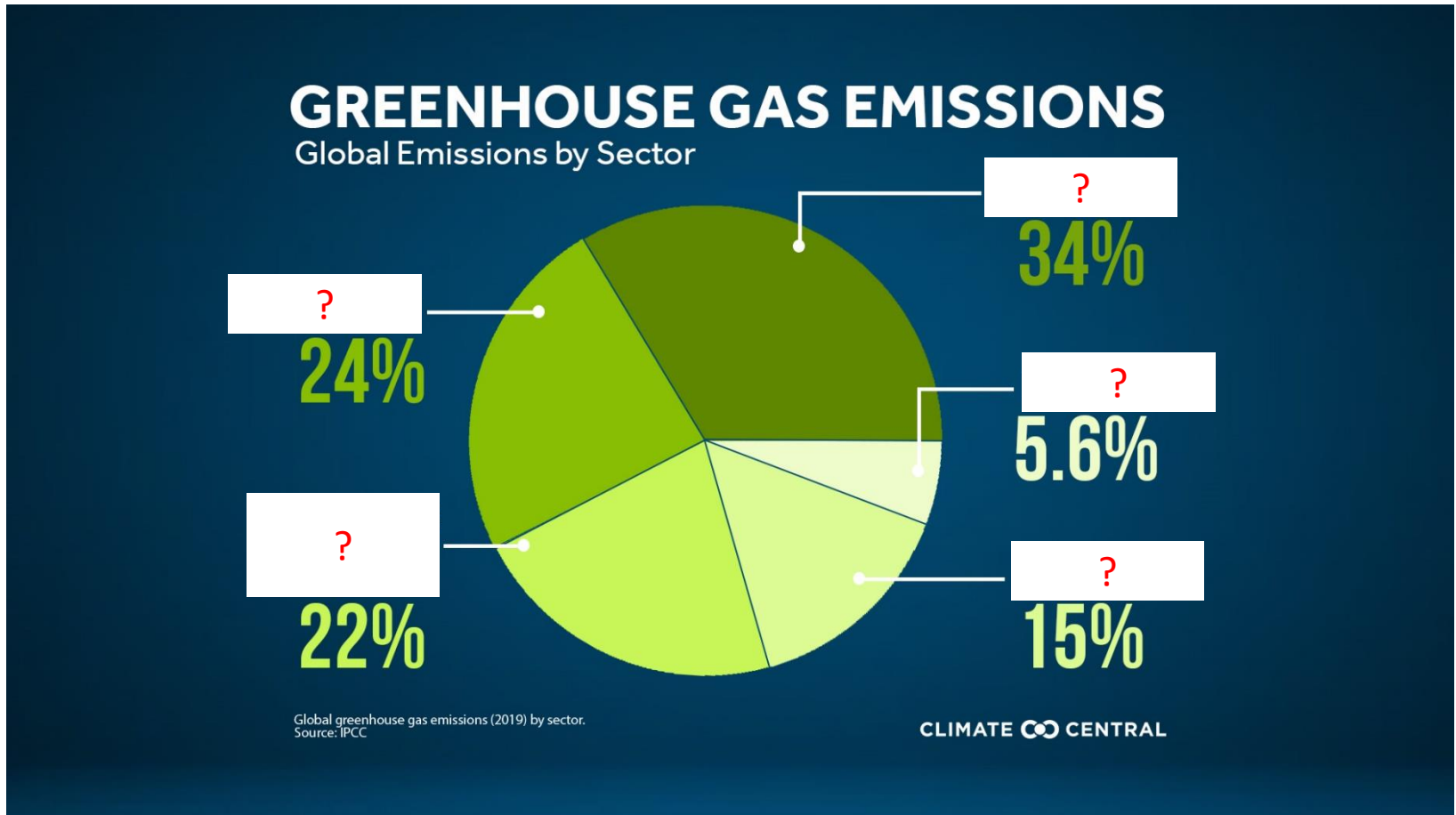
Development of carbon dioxide concentration



Annual average
2021: 414,7 ppm

→ highest value in
at least a million
years!

Greenhouse gas emissions by sector



So, what can we do about climate change?

Answers to this question should be worked out later in the Workshop.

However, one thing is for sure: We have to tackle it together – NOW!
Everyone should try to make their contribution.



Let's get started TOGETHER! 😊



MelanchthonStadt Bretten



Thank you 😊

BRETTEN