

OCEAN WARMING

NOVEMBER 2017

- The ocean absorbs most of the excess heat from greenhouse gas emissions, leading to **rising ocean temperatures**.
- Increasing ocean temperatures **affect marine species and ecosystems**. Rising temperatures cause coral bleaching and the loss of breeding grounds for marine fishes and mammals.
- Rising ocean temperatures also affect the benefits humans derive from the ocean – **threatening food security, increasing the prevalence of diseases and causing more extreme weather events and**

temperatures, coupled with ocean acidification (the decrease in pH of the ocean due to its uptake of CO₂), affect marine species and ecosystems and, consequently, the fundamental benefits humans derive from the ocean.

The consequences of excess heat from greenhouse gas emissions. Redrawn and modified after von Schuckmann et al. (2016).

Impact on marine species and ecosystems