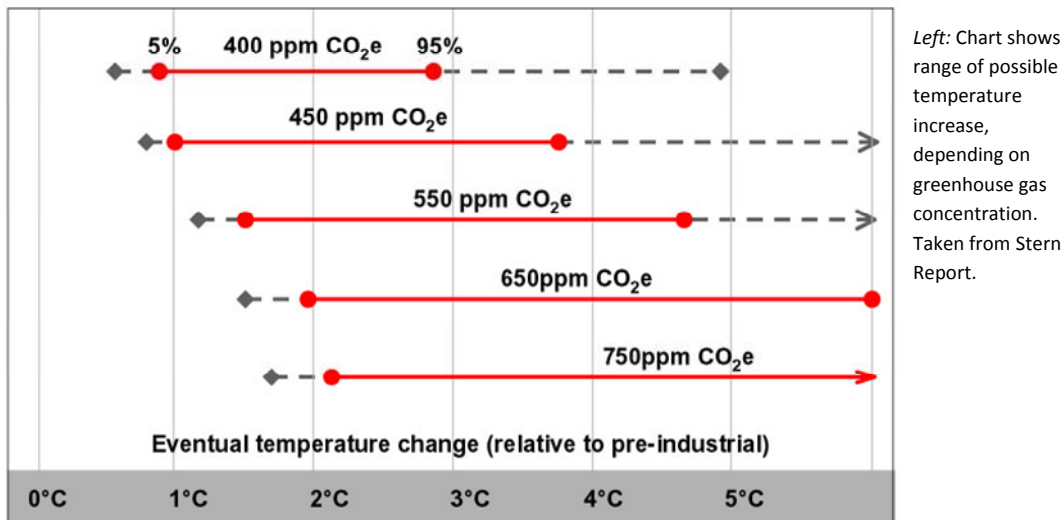


## Climate change facts and figures

Most of the following facts are taken from the latest IPCC report, released on 2 February 2007<sup>1</sup>.

- Eleven of the last twelve years rank among the hottest years since 1850, when records on global surface temperatures began.
- Global temperatures have climbed 0.76 degrees since the latter half of the 19th century and the rate of temperature increase for the last 50 years is twice that of the last 100 years. Even if the world would stop emitting greenhouse gases now, the global average temperature would continue to rise, due to the atmosphere's inertia.



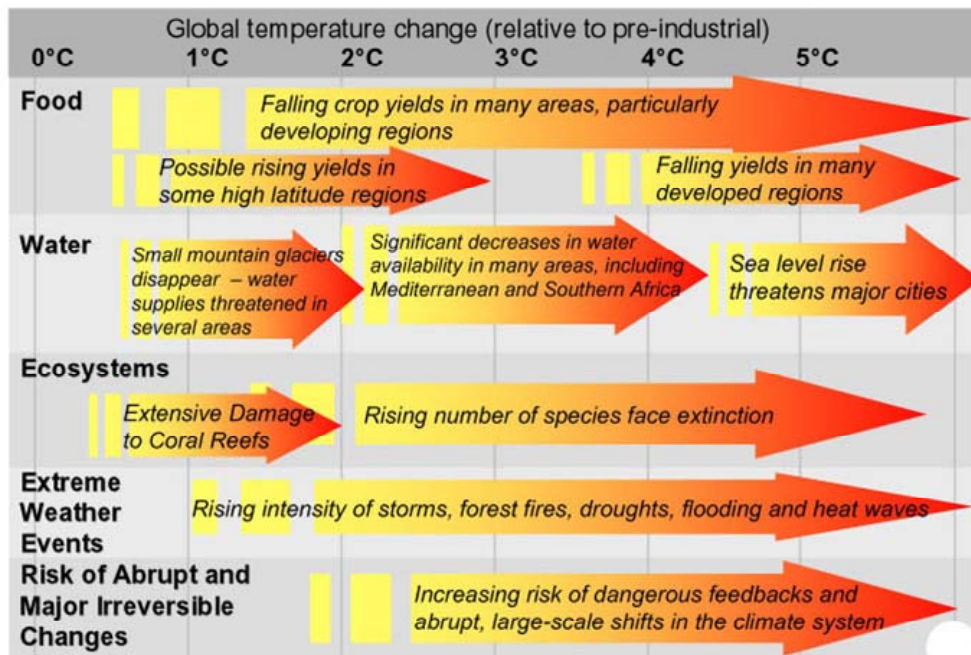
- The global atmospheric concentration of carbon dioxide has jumped 35 % since 1750. The current value is well over the average of the last 650,000 years, as shown by ice cores drilled out of the world's glaciers.
- Average temperatures in the world's oceans have increased down to depths of 3,000 metres. The oceans have been absorbing up to 80 % of the temperature increase, causing sea waters to expand and worsen sea level rise.
- The frequency of heavy precipitation has increased.
- Sea levels are currently rising at the rate of some 3 mm per year since 1993 and rose 17 cm during the 20th century. The rate of sea level rise from 1993 to 2003 was 42 percent faster than the rate from 1961 to 2003.

<sup>1</sup> The report is available at <http://www.ipcc.ch/SPM2feb07.pdf>

<sup>2</sup> See for example in the EU's submission to the UNFCCC from October 2006 at <http://unfccc.int/resource/docs/2006/cmp2/eng/misc03.pdf>

<sup>3</sup> Chart taken from Stern Report; see also Meeting the EU 2 degrees Celsius climate target: global and regional emission implications; Michel den Elzen and Malte Meinshausen; available at <http://www.mnp.nl/bibliotheek/rapporten/728001031.pdf>

- Average temperatures in the Northern Hemisphere in the last 50 years were higher than in any other such period in the last 500 years and probably higher than in the last 1,300 years
- The average amount of sea ice in the Arctic has dropped by 8 percent since 1978; in summer it has dropped by 22 percent.
- The warming of the atmosphere and ocean along with the loss of ice show that global climate change can not be explained without human activity and is not due to natural causes alone.
- Sea level is expected to rise by 18cm to 59cm between 1990 and 2100.
- Weather extremes such as heat waves, drought and heavy rainfall will continue to become more frequent. Storms are likely to become more severe.



Left: Expected impacts of climate change, depending on temperature change. Taken from Stern Report