

Climate delay

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The oceans are a large buffer, which is why there is a climate lag.

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The expected future climatic impact of present day activities. It is often referred to as *climate commitment*.

The [climate](#) reacts with a delay to all of the factors that affect it. For example, [greenhouse gases](#) emitted now will have an affect in the future. Climate delay (or climate commitment) is an attempt to predict how much of an affect present changes will have later. The 'commitment' is the amount of change 'committed' to climate, but not yet realized or not yet measurable in [temperature](#).

The main reason for the delay, or 'lag' as it is sometimes referred to, is the very large heat capacity of the oceans. The effect of the oceans is like that of a huge buffer.

The knowledge of climate commitment is used in [climate models](#). One scenario taking climate commitment into account predicts that by the year 2100 the Earth will be about 1°C warmer than now. Even if greenhouse gases could be stabilized at present levels.

The [IPCC](#) has worked with the concept of climate commitment since 1995.

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