

Plenary closure Midterm Assessment 2012

Climate change and IPCC: Why they matter for both mitigation and adaptation

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Although climate change and increasing global temperatures are sometimes perceived to have stopped over the last ten years, overall an increasing trend in global temperatures can be observed during the last fifteen to twenty years. The diminishing Arctic sea ice mass is very clearly an indication of changes in the climatic system. Recent data show that the current Arctic sea ice mass is several million square meters less than what it used to be.

A recurring question is whether the climate is changing due to human or natural influences. The IPCC has concluded that most of the observed increase in temperatures is very likely to be due to the observed anthropogenic greenhouse gas concentrations. Greenhouse gas emissions have increased over the last fifty years and ice cores, dating back 800.000 years, have shown that CO₂ levels were significantly lower than current levels.

Scenarios clearly, and with a high certainty, predict the effects of climate change such as changes in precipitation, especially in Europe. These projections and scenarios clearly show the need for both mitigation as well as adaptation measures. There is a lot of inertia in the natural system regarding climate change, we need to pay a long time for the effect of emissions in the past. This means that adaptation will be important for many decades in the future. Moreover, because of the accumulation process, the longer we wait with reducing emissions after a global peak of GHG-emissions, the harder it gets to reduce the amount of GHG in the atmosphere.

Van Ypersele concluded that the work of Knowledge for Climate and its partners is of major importance for the world. However, implementation of the results will not be easy. In particular, the co-creation of knowledge is important as the ivory tower time is gone, but the scientific quality and integrity in presenting results is of major importance. The IPCC will therefore continue its work, without being policy prescriptive.