

Make our Planet Great Again Initiative Declaration of the Laureates

As a group of scientists from a wide field of expertise, we are here together today because we are deeply concerned about climate change and the grave risk it poses for our planet, the interplay between the ocean, the atmosphere and the climate, and ultimately the well-being of all humankind. We recognise the need to continue building upon the scientific heritage of humanity and our work is part of the ongoing effort to advance our understanding of Planet Earth and to make it a better place to live.

Climate change is already negatively affecting our society on a global scale and scientific future scenarios predict further negative impacts. We face challenges on many levels, which include the development of sustainable lifestyles that limit the effects of a globally changing climate and its impact on marine and terrestrial biodiversity.

Understanding the way our planet and society work and searching for solutions to limit and adapt to the global changes ahead are major duties and responsibilities both for us and for future generations. Global change will affect all of us and we all share responsibility to address it.

Addressing these challenges means we must adapt, which requires an enhanced understanding of the mechanisms of climate change to improve predictions and alleviate their negative impacts. We must also mitigate the effects resulting from the underlying anthropogenic activities and necessitating a transition to non-fossil-fuel-based lifestyle. Food security is also at risk due to current and future climate change and requires urgent attention using innovative approaches that guarantee sustainability. Urgent action is called for, and we are convinced that policy makers and stakeholders require sound scientific and technical evidence to guide effective decisions.

More research efforts are needed. General predictions about the extent of climate change in the next century do exist. However, neither regional climate effects, nor their precise impacts on biodiversity, nutrition or water availability are sufficiently well-known. There are large knowledge gaps concerning the magnitude of future warming, the rates of melting of glaciers and hence the rates of sea level rise, and future changes in weather extremes ranging from tropical cyclones to El Niño. This is mainly due to an imperfect understanding of the Earth's and ocean's climate systems, which requires sustained efforts to improve earth system observations and modelling. Nevertheless, using our current knowledge, it is imperative that we find new and innovative engineering and policy approaches for an efficient transition to an energy supply that no longer relies on fossil fuels.

We call for more international cooperation to engage with these global tasks. We firmly stand behind the French-German initiative "Make our Planet Great Again". Our aim is to mobilise the global scientific community, to train the next generation of researchers and decision-makers, and to raise awareness for the changes that will first impact the most vulnerable regions and populations of the world. We, MOPGA participants, junior and senior researchers, together with our host teams and home institutions, are eager to help address these global challenges. Let us work together to make our planet better !