

Cyprus Declaration on Climate Change

Preamble: The Organizing Committee of the International Conference on Energy, Water & Climate Change in the Mediterranean & the Middle East (EWACC2010, 11-15 January 2010) concludes that the conference findings are both important and troublesome, and need to be communicated to policy makers and the public. Based on the outcome of the conference, the Committee has formulated recommendations to be known as "The Cyprus Declaration on Climate Change", to be communicated to academies of science and research councils, decision makers, scientists and the interested public.

The Mediterranean and the Middle East constitute one of the largest and most populous areas on Earth where the adverse effects of climate change will be severely manifested: substantial annual rainfall decreases are expected in this century, leading to water shortages and desertification. The projected annual mean temperature increase is larger than the global mean, and hot weather extremes during summer will be much more frequent and protracted. These effects will be felt most strongly in the coastal and low-altitude densely populated fertile regions, which are also most directly affected by sea level rise.

During the extended hot and dry summers, heat stress will intensify. The adverse health impacts can be direct, through extreme weather conditions, or indirect through vector- and water-borne diseases, reduced water quality, air quality and the availability of food. Detrimental impacts are also expected on potable water resources, agriculture and tourism. The economic and socio-political impacts can be harsh and possibly hard to manage, especially if mitigation and adaptation measures are not implemented soon.

A judicious management of the aforementioned climate risks is necessary. It is concluded that scientific, technological and agricultural solutions are available or can become available in the near future to combat the negative consequences of climate change; one example being saline agriculture. By pursuing novel, low-carbon technologies, including the use of solar power, opportunities will evolve to mitigate and adapt to climate change.

Further, it is important to establish a culture of data sharing and coordination because many measures need to be taken on an international level. The quality and availability of environmental data must be improved and the observational data and model projections should be carefully analyzed in regional assessments to support policy making and public awareness.

Considering the common interest of the peoples of the Mediterranean and the Middle East, the region should pursue coordinated scientific positions in the international debate. Scientific and academic institutions in the region are instrumental to develop a coordinated research agenda and communicate the findings to governments and policy makers. This ties in with the need to invest in education, essential to further innovation, to achieving water and energy security, and is a prerequisite for prosperity and economic growth.