

The 2011 Gulf Research Meeting

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Workshop 1

# Impact of Climate Change on the Gulf Region

## **Workshop Directors**

**Dr. Mohamed A. Raouf** Independent Environment Researcher **Dr. Kristian Coates-Ulrichsen** Research Fellow London School of Economics and Political Science

#### Abstract

The impact of climate change on the Arabian Gulf countries is accelerating and becoming more complex. The region faces numerous environmental threats and challenges, such as desertification, biodiversity loss, marine and coastal pollution, air pollution, and water scarcity and quality. In addition to these traditional environmental threats, various other environmental problems have emerged in recent years, particularly those relating to the negative (direct and indirect) impact of longterm climate change. Gulf countries face a difficult situation as their political economies depend on fossil fuels for revenue generation and economic growth, while these are the primary cause of carbon dioxide (CO2) emissions. Climate change thus presents a double challenge, which is both environmental and economic, should the global energy mix shift away from oil in a climate-aware world. In the Arabian Peninsula, the lack of arable land and water resources prevents the development of carbon sinks, forests and green areas. Moreover, rising sea levels jeopardize patterns of urban settlement, including the coastal mega-projects and artificial islands throughout the Gulf. The workshop will discuss various policy aspects from formulation to application, monitoring and evaluation, as well as their interrelationship with existing and possible future models of economic growth and development. Studies of single country or regional climate change policies and impacts are welcomed. Specific issues such as water, energy, security and the ways in which they are interrelated will be also examined.

### Workshop Description and Rationale

Besides being petroleum exporters, the Gulf countries have been under pressure for carbon emissions arising from the large-scale use of fossil fuels. The UAE, Saudi Arabia and Iran figure among the world's top 50 emitters of carbon dioxide (Iran ranks 18, Saudi Arabia 22, and the UAE 43) and have some of the highest per capita economic footprints in the world. The Gulf economies depend on oil, gas and petrochemical industries. Even though the region's total carbon emissions are very low (only 2.4 percent of the global total) compared to other regions, per capita emissions are very high. They are also the main exporters of fossil fuel to other countries, which is still the main source of energy worldwide. Hence they share responsibility with the rest of the world for climate change and must work to diversify the energy mix and look for more environmentally friendly and sustainable sources of energy. This Workshop aims to feed these debates over the economic and energy dimensions of policy into regional and international discussions over the threat from, and measures to mitigate and adapt to, longer term climate change. It seeks to achieve this through a multidisciplinary approach combining experts on the scientific and technological aspects of climate change and environmental degradation with regional expertise on the political economy of the Gulf States and its political, economic and social dimensions. It will build on existing research focusing on environmental issues, economic diversification and development projects in the GCC states and their strategies for incremental transition toward post-oil economies. It will also interlink these with existing research on regional and international perspectives on climate change policymaking and coalition-building and add a crucial Gulf voice to these debates. Contextualizing this within other non Western contributions will allow for an empirical assessment of the state of research in the broader field of climate change issues in the Gulf and its implications for rentier state structures and economies, as well as a more theoretical contribution to international political economy, comparative politics, climate change economics and changing patterns of energy supply and demand. As such, the Workshop welcomes a combination of empirical country or region-wide studies and theoretical contributions on a wide range of issues, including but not limited to those listed below:

- •Climate change policy in the GCC countries
- •Overview of climate change impacts on the Arabian Gulf region
- •Updated status of climate change negotiations.
- •Climate change and security issues in the region
- •Linkage between climate change and environmental migrants in the Gulf
- •Impact of climate change and environmental degradation on biodiversity
- •Water issues and climate change
- •Climate change and energy
- •Economics of climate change and implications for the GCC

#### Anticipated Participants

Papers presented to the workshop may cover regional, country or thematic studies. Regional and Country studies examine how the region or individual Gulf countries are formulating and applying policies to mitigate and manage climate change, in addition to the various policy tools and adaptation mechanisms used. Thematic studies may focus on environmental policies for specific issues such as water, biodiversity, migration, coastal and marine resources, and so on. Research questions include what has been achieved and what is still needed to be done, interlinkages between specific environmental issues and climate change, and holistic approaches to the study of its multi-dimensional impact on major oil-producing countries. The Workshop encourages the participation of scholars and practitioners focusing on a wide variety of issues ranging from political economy, security studies, migration, energy policy, economic policymaking and development, environmental and climate change policy, to experts on the scientific and technological aspects of mitigation and regional and international participants in the climate change framework. The Workshop aims to be multidisciplinary and feature a balance of academic and policy-based participants both from the Gulf and the wider community. It would particularly encourage submissions from individuals working on ongoing research projects such as the EU-GCC clean energy project or the WANA Forum Environmental Panel, as well as participants in the new university-industry research collaborative projects in the Gulf States, notably (but not only) KAUST and MIST.

#### **Workshop Director Profiles**

**Dr. Mohamed Abdel Raouf Abdel Hamid** has a doctorate in environmental sciences from Ain Shams University in Egypt and has undergone and advanced course in environmental management at Augsburg University, Germany. Dr. Raouf, who has been a lecturer of Environmental Accounting and Economics, has worked on several sustainable development plans and been a consultant for the Egyptian Ministry of Industry, Red Sea Sustainable Tourism Initiative in Egypt, DANIDA and Federation of Egyptian Industries for the Clean Production Seed Project, the National Environmental Action Plan of Egypt, Egypt's CDM Strategy, the Socio-Economic Study of Al-Luhaia Fishing Port project in Yemen, the Badr Petroleum co-budgeting team and Bapetco-Shell Egypt Sustainable Development Team Member. In addition, he was also a part of the project team which prepared the Green Gulf Report (2006). He authored a book titled Economic Instruments as an Environmental Policy Tool: The Case of GCC Countries (Dubai: Gulf Research Center, 2007).

**Dr. Kristian Coates Ulrichsen** is the Kuwait Research Fellow in the Kuwait Programme for Development, Governance and Globalisation in the Gulf States Centre for the Study of Global Governance at the London School of Economics and Political Science (LSE). His work includes The Logistics and Politics of the British Campaigns in the Middle East (Palgrave, 2010). His latest book, Insecure Gulf: The End of Certainty and the Transition to the Post-Oil Era (Hurst & Co.) was published on May 23, 2011.