



Gulf Research Centre Cambridge
Knowledge for All

Workshop 12

Energy Challenges in the Gulf

Workshop Directors:

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Abstract

The Middle East's Gulf region is endowed with one of the world's largest reserves of hydrocarbons and it is also an area with significant potential for development of solar energy projects. For a very long time, the region has been looked at as a main export source of oil and gas supplies to the rest of the world. However, as we entered the 21st century, the energy balance of most of the Gulf countries started to come under a lot of pressure as a result of rapid economic and population growth rates, including large energy-intensive industrialization programs.

Today, several Gulf countries are facing increasing energy supply deficits, and some have even started importing gas from outside the Gulf region. Most of these are also seriously considering alternative sources of energy, including renewables and nuclear, to address the alarming increase in energy use in the region (projected to be the fastest in the world after Asia).

The Gulf being one of the regions with the highest per-capita energy intensity, efforts are also focused on demand-side management (DSM) options. Unfortunately, the heavy energy price subsidies that feature in all the Gulf economies remain a major barrier to any serious DSM actions.

Intra-Gulf energy exchanges through regional or sub-regional energy (electricity and gas) grids are also considered, and a GCC power grid is already operational, but it is unclear yet how these schemes would operate and/or if there are enough tangible incentives to develop them.

This workshop will review and discuss all the above-mentioned issues and highlight the challenges ahead for this region within the context of mounting political and economic turbulences in the Middle East region and the rest of the world. It will also look at the climate change implications of such challenges and how they will be addressed as some of the Gulf countries aspire to play a more important role in the transition to a cleaner energy world.

Description and Rationale

The purpose of the workshop is to provide an independent platform for participants from the Gulf and outside the region to discuss the key challenges the Gulf countries are expected to face in meeting their medium- to long-term domestic energy needs and the potential impact these will have on this region's currently predominant role of exporter of energy resources to the rest of the world.

The workshop will consist of a series of short presentations focusing on the proposed themes listed below and based on the submission of short papers (no more than 10 or 15 pages with data inserted in an appendix) covering the key pertinent aspects of each of the proposed themes. In order to enable participants to engage fully in the workshop discussions, paper/presentation contributors are encouraged to avoid submitting highly technical papers.

The proposed themes of discussions are as follows:

- Gulf's current domestic energy policy and regulation
- Gulf's energy intensity and demand-side management issues
- Gulf's existing and future energy supply of fossil fuels
- Gulf's renewable energy potential
- Gulf's nuclear energy alternative
- Gulf's existing and future energy/feedstock demand (focus on power and industrial users)
- Intra-Gulf energy exchanges and development of Gulf energy infrastructure
- Gulf's existing and future oil and gas exports/imports
- Gulf's energy policy making and climate change considerations
- Impact of political turbulences in the region on Gulf's future energy and industrial policies

Other proposed relevant themes of discussions are welcome.

Anticipated Papers

Papers will be requested from representatives from the following organizations, *inter alia*:

- Government energy policy making agencies
- National and international energy companies involved in the Gulf

- Privately-owned energy & industrial groups based in the Gulf
- International organizations
- Regional financial entities
- Academic and research institutions

Workshop Director Profiles

Dr Naji Abi-Aad was appointed Senior Advisor to the CEO of Qatar Petroleum International (QPI) in September 2011, after spending six years as Research Advisor for Qatar Petroleum and its Board of Directors Department, and as Media and Research Strategist in the Office of Qatar's Deputy Premier, Minister of Energy & Industry. Before moving to Qatar, Dr Abi-Aad was between 1999 and 2005 Managing Director of Econergy, a Beirut-based research center which focuses on the analysis of the economic and energy development in the East Mediterranean and the Gulf. Between 1988 and 2003, Dr Abi-Aad held the position of Senior Advisor for the Middle East within the French-based *Observatoire Mediterranéen de l'Énergie* (OME). Dr Abi-Aad studied at the American University of Beirut before being awarded a Ph.D. degree in Energy Economics from Grenoble University in France. During his 30 years of experience, he has undertaken numerous consulting assignments, conference presentations and studies, particularly on oil and gas developments in the Middle East. He has authored over 80 reports and studies on Middle East energy issues, as well as a book on security of petroleum supply from the region (*Instability & Conflict in the Middle East: People, Petroleum & Security Threats*, Macmillan, London, 1997).

Dr Mostefa Ouki, is Vice-President, Energy Resources, Nexant Ltd. and heads the company's Global Gas group. He has 25 years of experience in managing and executing gas and energy-related techno-economic studies and advisory assignments for national and international energy companies, multilateral and bilateral development agencies, and financing institutions in various regions of the world. He has also conducted a number of assignments on the development of oil and gas-related infrastructure projects and has managed and executed master plan studies on upstream and downstream infrastructures in key hydrocarbon-producing countries in the Middle East and North Africa region. Dr. Ouki started his training in the energy sector with Algeria's oil and gas company Sonatrach in Algiers and worked in Washington, D.C. for the World Bank on gas development projects. Prior to the formation of Nexant, he was with the energy technology and consulting division of Bechtel and worked for the UK-based oil and gas engineering company Penspen. Dr Ouki holds a degree in petroleum engineering economics from Algeria's National Hydrocarbons Institute and M.Sc. in Energy Resources, M.A. and Ph.D. in economics from the University of Pittsburgh, Pennsylvania, USA. He is a member of the Arab Energy Club; American Economic Association; Association of International Petroleum Negotiators; UK Energy Institute; International Association of Energy Economics; and the Society of Petroleum Engineers.

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