



ISSAM FARES INSTITUTE  
FOR PUBLIC POLICY  
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# Climate Change and Environment in the Arab World

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## Renewable Energy Policies in the Gulf countries: A case study of the carbon-neutral “Masdar City” in Abu Dhabi

Gulf Countries are heavily dependent on the export of oil and natural gas to generate revenue for their national budgets, as well as maintaining a supply of cheap energy for their domestic use. Yet recently, some leaders in the Gulf have started looking away from conventional fossil fuels and taken an interest in the possibilities of renewable energy.

One particular state, Abu Dhabi, the oil-rich capital of the United Arab Emirates (UAE), has already begun the process of ‘transforming oil wealth into renewable energy leadership’, with the aim of remaining at the region’s forefront in the energy sector, beyond the age of oil and gas. Its first project is the ‘Masdar Initiative’, which, through the creation of Masdar City, a carbon neutral town, it hopes to attract both international attention and first-class innovative research.

In his case study of Masdar City, Dr. Danyel Reiche, Professor of Comparative Politics at the American University of Beirut, considers the goals and realities of the planned city and its wider implications on the rest of the Arab world.

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## Paving the road to Masdar City

Masdar City is just one essential piece of a larger economic development plan for Abu Dhabi, which is collectively known as the Masdar Initiative. The Initiative, which began in 2006, uses various investment models to promote sustainable energy around the globe. This includes a \$250 million venture capital fund investing in promising technologies such as photovoltaics—solar panels, for example. Masdar City is currently the tangible representation of the initiative. The plan is to create the single largest carbon-neutral, waste-free city in the world. In partnership with the Massachusetts Institute of Technology, the city plans to home the Masdar Institute of Science and Technology—the first institution in the region dedicated to research-driven graduate programs. Similarly, Abu Dhabi has successfully offered up Masdar City as host to the International Renewable Energy Agency (IRENA) by providing a free state of the art building for its headquarters, as well as a generous \$135 million donation to help the agency in its incubation period. With the presence of these two major institutions in conjunction with an economic free zone, developers hope to draw in investments from a vast array of companies, essentially to fulfill the objective of accommodating a population of 40,000 residents as well as 50,000 daily commuters.

**The Issam Fares Institute for Public Policy and International Affairs (IFI) at the American University of Beirut (AUB)** was inaugurated in 2006 to harness the policy-related research of AUB’s internationally respected faculty and other scholars, in order to contribute positively to Arab policy-making and international relations. IFI is a neutral, dynamic, civil, and open space that brings together people representing all viewpoints in society. It aims to: raise the quality of public policy-related debate and decision-making in the Arab World and abroad; enhance the Arab World’s input into international affairs; and, enrich the quality of interaction among scholars, officials and civil society actors in the Middle East and abroad.

Research and Policy Memo #9

**The Research and Policy Forum on Climate Change and Environment in the Arab World** provides a mechanism that brings together AUB professors, other academics and researchers, civil society, the private sector and policymakers. By promoting close interaction between researchers and policymakers, it aims to help formulate more effective environmental policies in the Arab World, and to mitigate the impact of expected climate change scenarios and other environmental challenges. The AUB-IFI Climate Change Forum comprises lectures, research, publications, comprehensive regional databases of scholars and research, and regular workshops, seminars and conferences.

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## Obstacles facing Masdar City

There are certain realities on the ground that the creators of Masdar City must tackle in order to assess and ensure the success of such an endeavor. These include questions such as, why would residents choose to live in Masdar City? With an inhospitable climate and no established nightlife or entertainment, is it optimistic to assume that a much needed well-educated workforce would move to this location? Secondly, whilst many companies have expressed interest in opening offices in Masdar City, this interest is more likely driven by profiting from the short-term construction of the city, with no intention of maintaining a long-term presence.

This missing regional demand, in addition to the stringent labor laws in the UAE and the global financial crisis, may pose problems for the long-term success of Masdar City.

**“Renewable energy and carbon-neutral initiatives in the region are a starting point and a may be a foundation towards legislative climate protection.”**

## Other Renewable Energy Initiatives in the region

Similar to Abu Dhabi, Qatar is in the process of building “Energy City”, the “next major energy hub”, housing major energy companies and for the development of new green technology. Bahrain has also set up a new renewable energy initiative, producing 11-15% of the electricity used by Bahrain World Trade Center towers in the financial capital of Manama. Additionally, Saudi Arabia’s King Abdullah University of Science and Technology (KAUST) is building its sustainable campus in Jeddah.

The renewable energy and carbon-neutral initiatives in the region are a starting point and may be a foundation towards legislative climate protection for the Gulf Cooperation Council countries. ■

  
**Further Reading:**  
**Reiche, D. *Renewable Energy Policies in the Gulf-Countries: A case study of the carbon-neutral “Masdar City” in Abu Dhabi. Energy Policy (2009)***  
[http://www.wupperinst.org/uploads/tx\\_wibeitrag/Masdar\\_City\\_EP\\_Reiche.pdf](http://www.wupperinst.org/uploads/tx_wibeitrag/Masdar_City_EP_Reiche.pdf)

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