Developments in Renewable Energy in Saudi Arabia

By Stephen Jurgenson and Michael Hindus

A number of projects and initiatives may mark the beginning of a new renewable energy industry in Saudi Arabia.

The Middle East and North Africa region has an extraordinary potential for the development of renewable energy resources. It is therefore not surprising that the King Abdullah City for Atomic and Renewable Energy (K.A.CARE)’s February 2013 white paper on renewable energy procurement in Saudi Arabia has been met with great interest internationally, and has been well received within the renewables industry and the private sector in the Middle East in general.

The renewables industry has faced challenges in the Middle East—in natural-resource-rich Gulf states in particular—due to the relative expense of solar power and wind power compared to oil and gas generation. In the case of solar power, interconnection costs, and operation and maintenance costs in the sandy desert environment, have added to the challenges. Morocco and Egypt currently have the largest installed renewable energy generating capacity, largely wind and hydro. This represents a small proportion of the installed generation capacity in those countries, and a tiny fraction of the installed generating capacity in the region. However, as demand for electricity in the region grows, and the relative cost of renewable energy technology decreases, more regional governments are seeking to diversify their energy supply to renewable sources. If current plans proceed there will be considerable opportunities for the private sector in renewables in the Middle East, both in developing power generating facilities and in the manufacturing and services in the supply chain.

Saudi Arabia -The K.A.CARE Procurement Programme for Renewable Energy

In Saudi Arabia, the move towards renewable energy is considered to be of national importance. Saudi Arabia has a young and rapidly growing population. Domestic power consumption per capita in Saudi Arabia is higher than in many other countries, and is projected to increase per capita. With these factors, some commentators are of the view that, if Saudi oil consumption grows to match the growth in domestic power demand, Saudi Arabia could within 20 years become a net importer of oil. Given the importance of oil exports to the Saudi economy, Saudi Arabia is actively seeking new sources of energy, including new natural gas reserves, nuclear power, and renewable energy. With Saudi Arabia’s large natural solar energy resource, and large areas of desert, the prospect of wide-scale development of solar power in Saudi Arabia has gained much attention. However, the intended aim of K.A.CARE’s White Paper is the development of all forms of renewable energy.
K.A.CARE was established by Royal Order on 17 April 2010 with a mandate to contribute to the sustainable development in Saudi Arabia in industries related to renewable and atomic energy. With the White Paper, K.A.CARE is proposing a Competitive Procurement Process (CPP) for renewable generating facilities from sources including wind, solar, geothermal and waste-to-energy. The CPP will consist of an introductory procurement round with pre-packaged sites identified by K.A.CARE, followed by additional procurement rounds conducted over a two- to three-year window that will target up to 7,000 MW of contracted capacity. Hybrid technologies and smaller-scale facilities will be considered in future rounds. K.A.CARE’s target is to procure 23.9GW of renewable energy by 2020 and 54GW of renewable energy by 2032.

Proposals and bidders will be evaluated on their financial strength, experience, project development status, and degree of local content, indicating Saudi Arabia’s goal to develop a domestic supply chain and to ensure that industry know-how is retained and developed in Saudi Arabia. Local content will be evaluated based on goods and services sourced in Saudi Arabia as approved by a certification body to be established by K.A.CARE, and for training and research and development activities performed in Saudi Arabia. Transmission costs will be included in the proposal evaluation, with bidders submitting a contract price inclusive of transmission costs up to the point of interconnection. System upgrade costs beyond the point of interconnection will be added to the proposed contract price in the final round of the evaluation. National Grid Saudi Arabia (NGSA) will be responsible for physical construction of the interconnection.

The White Paper states that each project will enter into a power purchase agreement (PPA) with Sustainable Energy Procurement Company (SEPC), suggesting that an IPP model will be adopted, as has been adopted on a number of previous conventional power plant procurements in Saudi Arabia. Further, each project must be a corporate entity organised and existing under Saudi law, and may be a joint venture company. The PPA will have a 20-year term, with payments made to the project based on metered electricity, and with the price indexed to the US Dollar/Saudi Arabian Riyal exchange rate. The PPA will be governed by Saudi law, will be subject to dispute resolution in Saudi Arabia, and will include requirements as to training, job localization, and research and development.

It is possible that foreign investors in renewable energy in Saudi Arabia will be able to benefit from Certified Emissions Reductions (CERs) in accordance with the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC). Saudi Arabia, as a Non-Annex I signatory country, does not have any binding targets for the reduction of carbon dioxide emissions, but is eligible to host Clean Development Mechanism (CDM) projects under the terms of the protocol. This may allow foreign investors from Annex I countries to invest in emission-reducing projects in Saudi Arabia and receive CERs for use in Annex I countries, subject to the independent crediting rules of those countries.

For a CDM project to start generating CERs tradable in an Annex I country, the project must satisfy the CDM’s many requirements. The project must be approved by the Designated National Authority (DNA) of the host country, as well as the DNA of the investor country and then be registered by the CDM Executive Board. The DNA of Saudi Arabia is the National Committee for Clean Development Mechanism. The project must also demonstrate “additionality” — in general, that the emission reductions represented by the CERs would not have occurred in the ordinary course but for the project. The additionality requirement of the CDM process is a very high hurdle to meet, especially where the government of the host country would supply a large amount of a project’s funding directly or indirectly and market conditions and national policy strongly favor the project. A project that qualifies as “first-of-its-kind” in the country might clear the additionality requirement more easily, as might projects that qualify for small scale or microscale treatment. Investors may also consider seeking approval for a so called Programme of Activities (PoA), so that many small, individual projects within the umbrella of the PoA would in effect receive advance approval subject to conditions. Another high hurdle, of course, is continued demand for CERs, the sufficiency of which is at great risk, due in part to the real potential that the Kyoto Protocol will be allowed to expire. In any event,
the White Paper makes no specific mention of CERs. It is implicit however, that if a developer seeks to secure CERs, the developer has the responsibility to seek the necessary approvals.

**Other Developments**

K.A.CARE may not be the only initiator of renewable energy projects in Saudi Arabia. Other institutions in Saudi Arabia have announced plans for projects or are already participating in the industry. This includes existing power companies and municipalities, and major state-owned institutions such as Saudi Aramco. Saudi Electricity Company is planning in 2013 to solicit bids for the Dibba 1 IPP, as the Kingdom's first large-scale integrated CSP technology combined-cycle project, with a capacity of 600MW. The municipal government of Mecca has also announced a plan to construct 100MW, 50MW and 25MW solar power plants, and recently received bids from ACWA power and EDF-led consortia. Saudi ARAMCO has also studied and implemented small-scale projects with Japan’s Solar Frontier, including a 10MW solar PV electricity generation facility at a new company complex in Dhahran and a 500KW solar project on Farasan Island in the Red Sea.

**Conclusion**

The new resolve by Saudi Arabia to pursue renewable energy projects should provide many opportunities for private sector investment. Those interested in being involved should be considering the opportunities and developing their strategies now.

If you have questions, please contact the Pillsbury lawyer with whom you regularly work, or these lawyers.

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