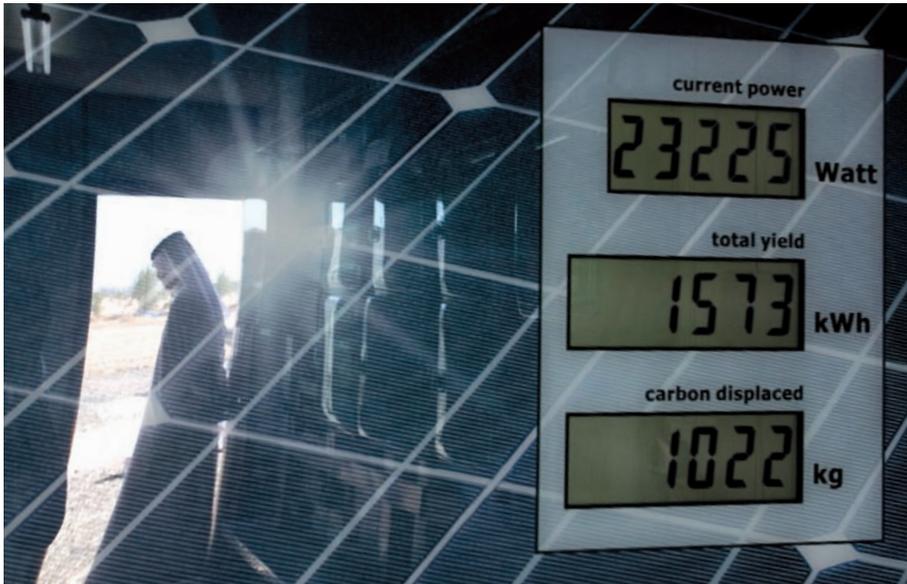


ENERGY

A BRIGHT FUTURE

By Alice Berge Abu Dhabi



Call it doing well by doing good. Abu Dhabi's Masdar Initiative has become a profile-raiser for the emirate, an aggressive move to rebrand the city from one of the world's worst polluters per capita into the Silicon Valley of environmental design. As part of the Abu Dhabi Future Energy Company, a division of government-owned investment firm Mubadala, Masdar is pushing an aggressive, billion-dollar plan to develop and commercialize clean energy technologies.

The Masdar Initiative's headline project is Masdar City, a carbon-neutral community that aims to produce more energy than it consumes, using energy-efficient design and on-site renewable energy sources. The Emirate broke ground on Masdar City last February. It's scheduled to open in 2016 and cost \$22 billion.

The bulk of the city's power will come from solar panel installations on the ground and on rooftops, storing energy in Abu Dhabi's municipal grid by day and using it at night. Masdar-funded researchers will also explore less mature technologies like geothermal and waste-

to-energy methods. Housing 50,000 residents and 40,000 commuters, Masdar hopes the project will be a high-tech real estate venture as well as showcasing research and development – a living case study on clean energy applications.

"Masdar is the playground or testing ground where all of these different applications will come together," says Ziad Tassabehji, a former venture capitalist now heading the Masdar Clean Tech Fund, the Masdar Initiative's \$250 million investment, which is run in partnership with Credit Suisse.

That Abu Dhabi, home to the world's fifth-largest oil reserves, is spending billions on clean energy has raised more than a few eyebrows, and helped attract visitors to Abu Dhabi's World Future Energy Summit in January. The three-day expo was put on for companies looking to do business with Masdar and with each other. Masdar used the forum to drop major announcements, including a pledge that by 2020, renewable energy will account for at least 7 percent of Abu Dhabi's power use. General Elec-

tric also announced that it will be Masdar City's first major tenant, part of its broader business engagement with Mubadala.

Oil and gas majors like Shell, BP, and Chevron, the traditional enemies of clean energy proponents, also attended the event. "That the oil people are here for this conference is a very big deal," says Eithne Treanor, an oil expert and media consultant. "Those who make their living off the carbon-fueled economy, it seems, have reconciled themselves that clean energy is an unavoidable part of the global energy mix."

Smaller exhibitors like Torresol Energy of Spain, a renewable energy firm established as a joint venture between Masdar and Sener Group, showed off Masdar's global reach. Sener offers decades of work in clean energy. In return it gets a boost from Masdar capital as well as a foothold in the lucrative MENA market.

Abu Dhabi-based Enviromena was also on display. As Masdar's first major commission, Enviromena has instantly become the largest solar-energy contractor in the Middle East. "We consider this the first market in the MENA region ... this project is really a launch pad," says Sami Khoreibi, Enviromena's CEO. Khoreibi sees "tremendous interest" from around the region in developing solar power systems. Unlike oil and gas resources, which are concentrated in a handful of states, countries from Saudi Arabia to Morocco share abundant sunlight and vast tracts of desert ideal for solar power generation.

"We're seeing an awakening on all levels in the Middle East," says Khoreibi. "Individuals through to the government see the value of going green."

Procurement for Masdar City alone has ramped up capacity at firms like Enviromena and put pressure on not-so-green supply chains. To support Masdar's zero-carbon calculus, the company demanded that producers churn out concrete made with recycled materials and steel made wholly from scrap metal.

Stimulating the market for clean energy could become Masdar's greatest achievement. In the process, it may just rake in the greenbacks too. ■