Oil-rich Abu Dhabi champions ecological cause

January 24 2011, by Ali Khalil

Visitors look at the project model of Masdar City during the opening ceremony of the World Future Energy Summit in the Emirati capital Abu Dhabi, in 2008. It floats on a sea of oil in a country that has the largest ecological footprint, yet Abu Dhabi aims to convince the world of its environmental credentials through its futuristic Masdar initiative.

It floats on a sea of oil in a country that has the largest ecological footprint, yet Abu Dhabi aims to convince the world of its environmental credentials through its futuristic Masdar initiative.

On the ground, there are few signs of the will to combat climate change in Abu Dhabi, where even simple solar heaters are seldom spotted on the rooftops of the parched emirate.

But the Gulf state appears keen to convince the world that its ambition to develop into a leading player in environmental causes is limitless.

For four years now, Abu Dhabi has gathered leading developers of clean energy to discuss and exhibit the latest innovations in the fight against climate change during its annual World Future Energy Summit.

It has also managed to snatch the right to host the headquarters of the International Renewable Energy Agency despite criticism for its huge carbon footprint.

This past week, UN chief Ban Ki-Moon led an army of foreign guests who descended on Abu Dhabi for the summit, praising its bid to promote clean energy.

As he addressed the summit, two giant counters showed an instantly updated figure of the amount of greenhouse gases in the earth's atmosphere.

The United Arab Emirates, a federation of seven Gulf emirates including Abu Dhabi, has the largest per capita carbon footprint in the world.

"Your Masdar Initiative speaks of... a vision to build on and go beyond the age of fossil fuels to a new sustainable future," he said at the beginning of the summit.

Masdar, a government initiative established in 2006 to advance renewable energy and sustainable technologies, is building the Zero-carbon Masdar City on the outskirts of Abu Dhabi as an example of future eco-friendly cities.

The development that is planned to spread over six square kilometres (2.3 square miles) got its first residents in October as some 175 students joined another of Masdar projects, the Masdar Institute of Science and Technology, developed in cooperation with the Massachusetts Institute

of Technology.

The city, which is to host 40,000 people, is under construction and so far features only the institute's campus -- a cluster of buildings topped with photovoltaic solar panels -- as well as a solar power farm.

"We have a 10-megawatt photovoltaic system on the site that generates too much electricity (for now) that we have to export to the grid," Frank Wouters, the director of Masdar Power, told AFP.

Outside the city, Masdar is jointly building with France's Total and Spain's Abengoa a 100-megawatt concentrated solar power plant named Shams 1, and touted to be the world's largest at a cost of $600 million.

"The moment when the Shams 1 plant will connect to the grid, and this will be in August next year, it will be the largest plant in the world," said Michael Geyer, director of International Business Development at Abengoa Solar.

"Larger plants will come, but later," he told reporters during the four-day summit.

Masdar has also expanded its business beyond the UAE's borders, buying stakes in foreign clean energy projects.

"We have a number projects worldwide. We have several billion dollars worth of projects under construction," Wouters said, including London Array wind farm, off Britain's shores, which will be the world's largest.

But not all of the projects originally touted at the launch of Masdar have come into being.

One to develop a local solar panels factory has been scrapped due to lack

of a regional market and a drop in prices.

"The worldwide manufacturing industry for solar (power) has changed dramatically. Prices have dropped to a very different level from where they were in 2007. That necessitates certain technology, but also certain scale," Wouters said.

"It is always something on our mindset because we want Masdar, and the UAE, to be a manufacturing hub, but it has to make sense," he said, adding Masdar would for now concentrate on its photovoltaic panels factory in Germany.

The Masdar City project has also slowed down, pushing its completion date from 2016 to between 2020 and 2025. Its director Alan Frost said in October the project was adapting to a slowing acquisition of tenants.

The estimated cost of the city has also dropped from $22 billion to no more than $19.8 billion.

"Masdar City hasn't shelved anything," insisted Wouters.

"It has of course modified its approach... Part of that has been the redefinition of its masterplan" making Masdar the master developer, rather than building itself.

In the meantime, he said Masdar was working on "creating awareness" about the environment in energy-rich Abu Dhabi, which sits on proven oil reserves totalling 98.2 billion barrels -- 95 percent of the UAE's reserves, which are the world's seventh largest.

Abu Dhabi, like most countries in energy-rich Gulf, provides its population with subsidised power, desalinated water and petrol, which appears to have helped over the years in perpetuating a wasteful pattern

of consumption.

"It needs changing people's mindsets... It is something that doesn't happen overnight," Wouters said.

(c) 2011 AFP