

A dream city in the desert of the United Arab Emirates



AS WE ALL know, as each day goes by, the world's natural resources are being depleted and we are at risk of losing some of them permanently in the near future.

Crude oil is one of them and as the world is still as oil-thirsty as ever, with no sign of alternative sustainable energy sources ready for commercialisation, those states that have reserves of this black gold can afford to dream of and find means to fulfil something outrageous.

For the past decades, we have witnessed the rise of some really amazing establishments in various Middle Eastern states, for example Dubai's artificial ski slope and its man-made, tree-shaped islands as well as various wide roads in the UAE built for motorists with a surface so smooth their supercars can achieve maximum speed with no sweat.

According to a 2010 report by the World Wildlife Fund, the UAE ranked among the largest carbon footprints in the world, so it is no sur-

prise that these things qualify as some of the world's most unsustainable developments too. However, there is one development that has tried to go against the tide in the UAE.

For all urban planners, one of the main questions for making a city sustainable is whether upgrading ancient, densely packed cities like London and Bangkok or putting effort and resources into making brand new cities is the way to go. Retrofitting infrastructure and making existing cities more sustainable seem to be an impossible task. But building a whole new city based on sustainable philosophies also proved to be an immense task, as was Masdar, the city in Abu Dhabi that I am about to talk about.

In 2006, the president of the UAE and the ruler of Abu Dhabi had an idea. He knew that one day oil, Abu Dhabi's source of wealth, would run out eventually so he brainstormed with all his advisers and came up

with a long-term plan that would allow the country to diversify its economy away from oil.

Their idea was "renewable energy". So, they came up with the initiative to build a functional city in a vast desert near the capital that would inspire greater understanding and investment in greener technology.

The city was intended to serve two

main purposes. First, it would inspire and act as proof that renewable energy can be utilised to run a city and by doing so they hoped to attract more investment and encourage start-ups focused on greener energy, making the city a hub for new technologies.

Second, if the city was to be a success and become a hub that would transform the state from an econo-

my dependent on oil to one based on renewable technology, it would mean less oil was needed for domestic consumption and more could be exported, making more money in the process.

Masdar is very energy efficient and almost car-free. The team came up with a mixture of ancient know-how and cutting-edge technologies to achieve its goals. The city has shorter and narrower streets that are usually blocked at the end by tall buildings, creating enough turbulence that will suck hot air up from the ground level.

The whole city was built on a raised platform, separating it from the heat from the desert, with routes underneath the platform for electric, driver-less buses for residents. Also, they built the largest solar farm in the Middle East.

However, the 2008 global financial crisis that led to Dubai's unserviceable debt of more than US\$59 billion (Bt1.9 trillion) forced Abu

Dhabi, which is Dubai's sister city, to bail out Dubai. That left Abu Dhabi with less to spend on its own projects, such as the city of Masdar, and they had to silently pull the plug on the project.

The whole city, upon initiation in 2006, was planned to be completed in 2015 but since then the deadline has been extended indefinitely.

It is a shame that such a grand project, which would have proved to the world that a whole city could be run on sustainable and renewable energy, was brought to an end by a city that is the host to some of the world's most unsustainable developments.

However, the success of the initial phase of Masdar has slowly helped to change attitudes towards renewable energy among other Middle Eastern states, which I hope would embark on the same journey and prove to the world again that renewable energy is the way to go for the future.