



Turbine that turns wind to water may be answer to UAE's water problems

DUBAI // A wind turbine designed to produce 100 litres of drinkable water in an hour by extracting humidity from the air will begin its first test run next month.

The device will be set up at a desert reserve in Ghantoot for the next two years, and its makers say it could one day solve water problems across the region.

"Water is very precious here and it's difficult to produce even one glass," said Marc Parent, chief executive of the company behind the project, Eole Water. The governments in the region are always looking for new technology for water. This could be an environmentally friendly alternative to desalination."

The Dh6.7 million project, funded solely by Eole Water, is being run in cooperation with Emirates Marine Environment Group (Emeg). Emeg will allow Eole Water to put the turbine in the Ghantoot nature reserve, where it will be on display to visitors.

"It's mainly for people to see it and show that it works," said Ali Saqer Al Suweidi, president and founder of Emeg. "I would like all of Dubai to see it, so it could solve the water problems in the region."

The turbine was originally supposed to go online by the end of last year but Mr Parent said obtaining requisite paperwork took longer than expected. It was to be based at an Emeg-owned island at the waterfront but it was feared the device would disrupt some of the wildlife there, Mr Al Suweidi said. The turbine is 24 metres high with a 13-metre diameter rotor. It works by driving in air, which is heated to become steam and then condensed. The condensation is accumulated and filtered in the main stem of the turbine, eventually becoming drinking water.

This is the second device to be tested by Eole Water in the UAE. From October last year to this March, similar equipment is being trialled in Mussaffah.

The initial test, costing the company about Dh225,000, was largely a success, with the device producing an average of 62 litres of water an hour. The latest trial aims to show that the device works under even the harshest conditions, such as during the summer when sandstorms are common and temperatures can spike to 50°C.

"This is the best place to test the machine," Mr Parent said. "If we put it somewhere easy, it would be no test at all. There's a lot of salt in the air, sandstorms, dry air and hot temperatures. But by the end of this test, if we know that it works well in the UAE in the summer, we know it can work anywhere in the world."