



Mobile Solar Powered Water Purification

by Energy Matters

Friday 25 December, 2009



With ocean levels rising and potable water becoming increasingly scarce; water purification systems are gaining increasing attention.

Large-scale desalination plants are already being constructed in Australia, but for those in remote areas experiencing prolonged drought or victims of natural disasters, often the only option is for water to be trucked in.

U.S. based World Water and Solar Technologies offer a renewable energy powered solution - the MobileMax. Utilising solar power, water pumping and purification technologies, the systems can bring near-immediate solutions to water and power problems existing in remote areas of the globe as well as an emergency response to water crises, such as was experienced in the aftermath of Hurricane Katrina.

3 MobileMax models provide solutions to different situations; one for fresh water that may be contaminated, another for brackish water and also a model that can turn sea water into water fit for drinking called the MaxPure.

The MaxPure model can deliver up to 113,000 litres of fresh water per day - enough to provide thousands of people with drinking water in emergency conditions.

The unit also provides power to run lights, tools and electronic equipment. Weighing in at 2.8 tonnes, but small enough to be towed on a trailer, the MaxPure is powered by 18 solar panels with a combined output capacity of 3.4 kW. Energy is stored in a 31kWh AGM/Gel deep cycle battery bank. The unit is capable of purifying seawater containing 45,000 parts per million of total dissolved solids, biological and sediment.

The MobileMax systems have already seen action in some of the world's trouble spots. A unit was placed in a refugee camp in Darfur and helped prevent the spread of cholera. In Ethiopia, two Mobile MaxPure units were commissioned to be installed in remote, drought-stricken regions of the country to provide relief to the residents of those areas. After the devastating hurricanes that battered Haiti in 2008, two Mobile Max water purification systems were brought to Haiti to help alleviate the ensuing water crisis.