

Two Oceans Aquarium – Demonstration Solar PV and Wind Power Plant

Project 90 by 2030 and the **Two Oceans Aquarium** at the Waterfront in Cape Town requested **Power Solutions** to install a grid-connected solar photovoltaic and wind energy system at the Two Oceans Aquarium.

The main objective of this project is to provide a platform where education about energy usage and electricity saving can be demonstrated in a practical and tangible way. The site will target not only the general public, but will also create awareness among visiting school groups about the benefits of renewable energy and what can be done to help reduce energy consumption in South Africa.

Power Solutions installed a **2 kWp** solar system and a **1kWp vertical axis wind turbine** at **Two Oceans Aquarium** at the Waterfront, in Cape Town. The system feeds power into the **Aquarium's electricity grid**, which allows **Two Oceans** to reduce the energy it uses to run its administration block, thus creating a carbon neutral area within its operations and off-setting its current electricity costs. In addition, **Two Oceans** is able to reduce its carbon emissions by **5.6 tons of CO₂ per year**.

The electricity generated by the system is monitored and displayed on a LED display and a LCD screen at the entrance of the aquarium. These displays will create awareness among visitors and staff members, who are able to evaluate first-hand how much energy is saved at the site.

This grid-connected solar PV and wind system is one of the first systems to obtain permission from the City of Cape Town municipality for grid connection.

"Whoever teaches his son teaches not alone his son but also his son's son, and so on to the end of generations"

