

**Dear Customers,**

As the first quarter of 2019 comes to an end we are proud to showcase our latest project recently completed in March.

**Recently completed projects**

A solar powered bottled water plant for a game reserve, utilizing reusable glass bottles instead of plastic bottles.



Ecotech was asked to design, manufacture and install a containerised water purification and water bottling system for the Okavango Delta, Botswana. The brief was to custom design the necessary equipment to purify and sanitize the water from the Delta to the point of bottling in reusable glass bottles. In addition, the system had to generate and operate off its own solar power/battery system.

The client wanted to reuse glass bottles to alleviate the pressure on a fragile ecosystem where plastic bottles were becoming an environmental problem. The treatment and power generation process were built into 2 x 6-meter sea containers and transported by road to site. Pre-treatment of the raw water feeding the entire tented camp was upgraded using a more eco-friendly method of treatment, thereby avoiding the use of any harsh chemicals.

The Ultrafiltration treatment plant is PLC controlled, allowing for automatic rinsing and flushing of the UF modules, thereby making it very operator friendly. There is a carbonation system to produce sparkling water. The system also produces still water, giving the client both options to present to their guests.

A specialised bottle dishwasher is installed to sanitize bottles for reuse.



This is fed directly from a solar powered water heating system which easily reaches 65-70 degrees C by midday, thereby using very little power to heat the water. The containers are both airconditioned and there is a storage unit for filled bottles stacked in crates. The entire system operates off its own solar power – solar panels on the container roofs produce enough power for daytime bottling operations, and a large battery bank stores power to keep the air conditioners operating at night. The benefit to the client - by designing and manufacturing the above equipment, Ecotech was able to assist the client in providing their high-end accommodation establishment guests with water bottled on site.



The client was able to reduce its carbon footprint in the Okavango Delta and reduce the number of plastic bottles being brought into the Delta and then having to be taken out again once used.

We as Ecotech were proud to be involved in such a prestigious project. The future of our fragile ecosystems is of top priority, and we are proud to be doing our part in reducing the need for single-use plastic.