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Off-Grid Solar | Engineered



POWERED BY THE SUN: XIGERA SAFARI LODGE



As the cost and environmental case for solar energy continues to strengthen, luxury lodges are turning to the sun to meet their energy needs. None more so than Xigera Safari Lodge, Red Carnation's new luxury lodge currently under construction in one of the world's most remote and pristine wilderness areas: The Okavango Delta, Botswana. The Okavango is the largest inland delta in the world and a UNESCO world heritage site. There are no paved roads here. No power lines. No cell signal. There are however a few luxury lodges spread out over the region, enabling a lucky few to experience this inland wonder. With the introduction of solar, the silence is only interrupted by the wildlife itself. It is a place largely untouched by man, and the goal is to keep it that way. Traditionally tourism operators in remote regions had to rely solely on diesel generators to meet their power requirements. This however, is changing and opting for solar power is one of many ways that Xigera is reducing its environmental footprint and embracing sustainable practices.

South African based EPC, 1Energy, specialists in remote, off-grid solar was awarded the contract to design and install the Xigera Energy Centre: a

sophisticated solar hybrid power system, the likes of which are powering the future of luxury tourism. 1Energy was uniquely positioned to deliver this pioneering energy project having a strong track record of successful projects in far flung regions throughout Africa and the Indian Ocean. The company has been operating in these remote areas for the better part of a decade, specialising in off-grid systems for the luxury tourism industry.

The system comprises 400kW of solar PV, with the heart of the power system being five of the latest Tesla Powerpacks, with a power capacity of 285kW, and total available storage capacity of 1.14MWh. Tesla's lithium storage offering is leading the charge in the off-grid space, both in terms of price and technology. "We are most impressed by the quality of the equipment and the ease of assembly. The engineering has been very well executed, and the development roadmap looking ahead shows that Tesla has clearly identified the levers to extracting optimum efficiency from solar hybrid power systems" says Andy Heathcote-Marks, Director at 1Energy.

The solar system is designed to supply over 95% of Xigera's energy needs. The generators will run only in the event of extended poor weather conditions, and although still an essential part of the system, will mostly remain idle, saving the lodge an estimated 175 000 liters of diesel, and the environment 500 tons of carbon emissions each year.



As the new custodians of Xigera, The Red Carnation Hotel Collection has a profound love of Africa, with Bushmans Kloof Wilderness Reserve & Wellness Retreat in the Western Cape, The Twelve Apostles Hotel and Spa in Cape Town and the internationally acclaimed Oyster Box in Umhlanga.

World renowned for exceptional service, generous hospitality, extraordinary dining and beautiful interiors, Xigera embodies everything that makes Red Carnation Hotels so unique and special, drawing on their global team's expertise, reputation for excellence and family-owned-and-run passion. The Xigera team is led by Mike & Marian Myers, who have over 30 years' experience in the bush, alongside owner and director Vicki Tollman.

Xigera operates in an incredibly beautiful but environmentally sensitive area and therefore making use of solar generation provides benefits beyond just fuel savings. The fact that diesel no longer powers the lodge means less diesel being transported through these areas. Fewer trucks into and out of areas such as the Okavango Delta compounds the saving of greenhouse emissions and

lowers the impact on the land and wildlife that inhabit the area. Lodges that have opted for solar have reported wildlife coming closer to camps as noisy generators aren't scaring them off, allowing for a better guest experience and a more peaceful camp environment. It is for reasons such as these that the tourism sector is starting to look very seriously at solar energy as their primary source of power. As owner of Xigera, Vicki Tollman says "We have a unique opportunity with Xigera to implement vital sustainability initiatives that make a genuine difference. We are proud to work with partners and suppliers such as 1Energy, who share our ethos and want to work together to make travel matter for our people, the planet and for wildlife"

We are living in exciting times, where sustainable energy solutions such as solar are starting to not only compete with but supersede traditional means of electricity generation, and in the not-too-distant-future we will look back at fossil fuel as the dinosaur it truly is.