

The Naled3d Factory

Robben Island goes green

April 2010



SANERI (*South African National Energy Research Institute*) and **the Naledi3d Factory** are collaborating on the visualisation of some of the renewable energy technologies selected to be used in the “greening” of Robben Island, working together with the Robben Island Museum team...

The Robben Island Museum and SANERI are embarking on an initiative to “investigate, develop and implement an Energy Efficiency and Renewable Energy programme to give effect to the ‘Greening of Robben Island’”. The project will aim to reduce energy usage and dependencies on conventional fossil fuels and high energy use technology on the Island¹.



An important element of this Programme is the development of virtual environments that will show the island and some of the identified key areas relevant to energy-efficient and renewable energy usage on the island.

These virtual environments, also referred to as virtual reality (VR) simulations, will be subsequently used to demonstrate a selection of the envisaged technologies.

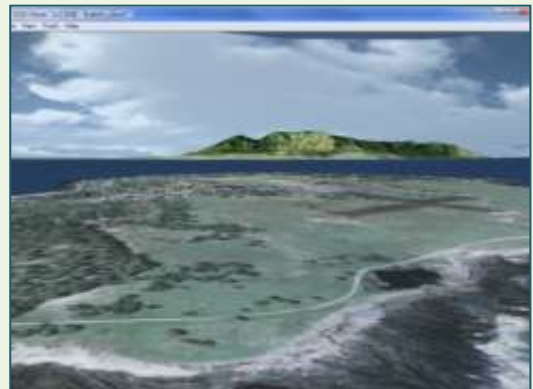
The target users of the simulation will be visitors to the island (predominantly children) and will be housed at the museum, as well as the control room where the energy use of the island is managed.

The simulation(s) will be developed in a number of smaller, manageable sections (or even separate simulations) that will show each of the following areas:

- Harbour
- Prison complex
- Housing area
- A discrete section for each of the identified technologies to be demonstrated

For the first phase of the Greening Project, it is envisaged that the following energy-efficient technologies will be adopted for use on the island:

- Solar
 - water heating
 - Photovoltaic
 - Micro CSP (Concentrated solar power)
- Wind turbine
- Biomass digester.



¹ Robben Island Greening Programme Executive Summary, SANERI Working for Energy Programme, 2nd December, 2009