

<http://www.tuvaluislands.com/news/archives/2009/2009-07-19.html>

## **Facing climate-change annihilation, Island nation goes solar**

CanWest News Services

July 19, 2009

A tiny island nation in the Pacific Ocean - that could be wiped off the map because of global warming - is seeking to set an example for the world by shedding its dependency on oil and becoming powered entirely by renewable energy sources.

Tuvalu is a Polynesian island nation located midway between Hawaii and Australia. It is made up of four reef islands and five atolls, with the highest elevation a little over four metres above sea level. The doomed archipelago is the second lowest elevation country in the world after Maldives.

And recently, the island has become the poster child for the potentially catastrophic damage global warming could cause.

In an effort to combat climate change, and with the help of industrialized nations, all nine inhabited islands by 2020 plan to be rid of generator fuel, which is currently shipped from New Zealand at a huge environmental cost.

Tuvalu has experienced major flooding of crops and roads as the tides grow higher each year. And scientists predict a large sea level rise this century of anywhere from a half a metre to two metres, says Dale Marshall of the David Suzuki Foundation.

If that happens, the ocean could swallow Tuvalu within 50 years and force the evacuation of the entire population of nearly 12,000 people.

"These islands are going to be wiped out," said Marshall. "Some of these islands, the highest point is a metre."

Tuvalu, he said, is hoping Australia will take residents in and allow them to remain a sovereign nation, should they have to flee their islands.

"If some predictions are right and the sea rises two metres, then even a serious decrease in emissions might still wipe them out," he said.

"But if the prediction is closer to under a metre and if we do have deep emission cuts then we might be able to avoid the impacts on small islands."

Tuvalu's plight has caught the attention of a non-profit consortium of electric companies from the G8 industrial nations, including two from Canada - Hydro-Quebec and Ontario Power Generation.

The consortium - or e8 as it's called - began the Tuvalu initiative by donating a large-scale solar-energy system 14 months ago. The solar system was installed on the roof

of Tuvalu's largest football stadium and now supplies five per cent of the electricity needed by the nation's capital, Funafuti.

The operation has reduced Tuvalu's consumption of generator fuel by about 17,000 litres and reduced Tuvalu's carbon footprint by about 50 tonnes, according to the e8. The Tuvalu government intends to expand solar power to the outer islands with help from the U.S. and Italian governments.

"We look forward to the day when our nation offers an example to all - powered entirely by natural resources, such as the sun and the wind," said Kausea Natano, Tuvalu's minister for public utilities and industries, in a recent statement.

Johane Meagher, executive director of the e8 and based in Montreal, said Tuvalu's main challenge will be to find a way to have enough backup energy to use when there is no sunlight.

"We're talking about a battery system," she said. "I'm sure if (Tuvalu) wants to get 100 per cent energy from renewable sources they will be able to look at various options that will evolve in the next few years."

Tuvalu officials hope the move toward sustainable power will prompt action by countries at upcoming climate talks in Copenhagen.

"It is a message to the world about the urgent need to promote sustainable energy development and reduce greenhouse gas emissions on a massive scale," said Meagher.

Though Canada may not be in danger of being wiped out by climate change, Marshall said rising sea levels would cause serious damage to areas on the world's longest coastline, which stretches 243,000 kilometres from the Atlantic to the Far North to the Pacific.

"Delta, B. C.? Not a good place to buy land, for example," he said.

"There are many places - like the north shore of the Gulf of St. Lawrence - that are already talking about the rise and losing beaches."

Scientists believe some low-lying areas of British Columbia like Delta and Richmond could be washed out by rising sea levels.

However, Canada and other coastal countries that would be affected, such as the Netherlands, have the resources to manage the problem, whereas poorer nations will suffer the most, said Marshall.

"It's nothing compared to Bangladesh, where a one metre rise will mean 30 million people losing their homes or in the South Pacific Islands, where we will lose entire nations."

At the G8 summit in L'Aquila, Italy, earlier this month, members of the industrialized countries promised an ambitious plan to cut greenhouse-gas emissions over the next four decades.

The countries acknowledged for the first time that humankind faces catastrophic consequences if average global temperatures, already 0.8 C above levels during the pre-industrial age, rise more than two degrees above levels from the pre-industrial age.

United Nations-sponsored climate talks will take place in Copenhagen in December and will focus on a post-2012 plan to deal with the global warming crisis.

"There's a lot happening in world in terms of clean energy, and there is very little happening in Canada," said Marshall.

"With wind power we just got over the 1,000-megawatt limit last year and Germany is about the size of Ontario and it has over 20,000 megawatts, which is 20 times what Canada has just because it has the right policies."

© Copyright (c) Canwest News Service