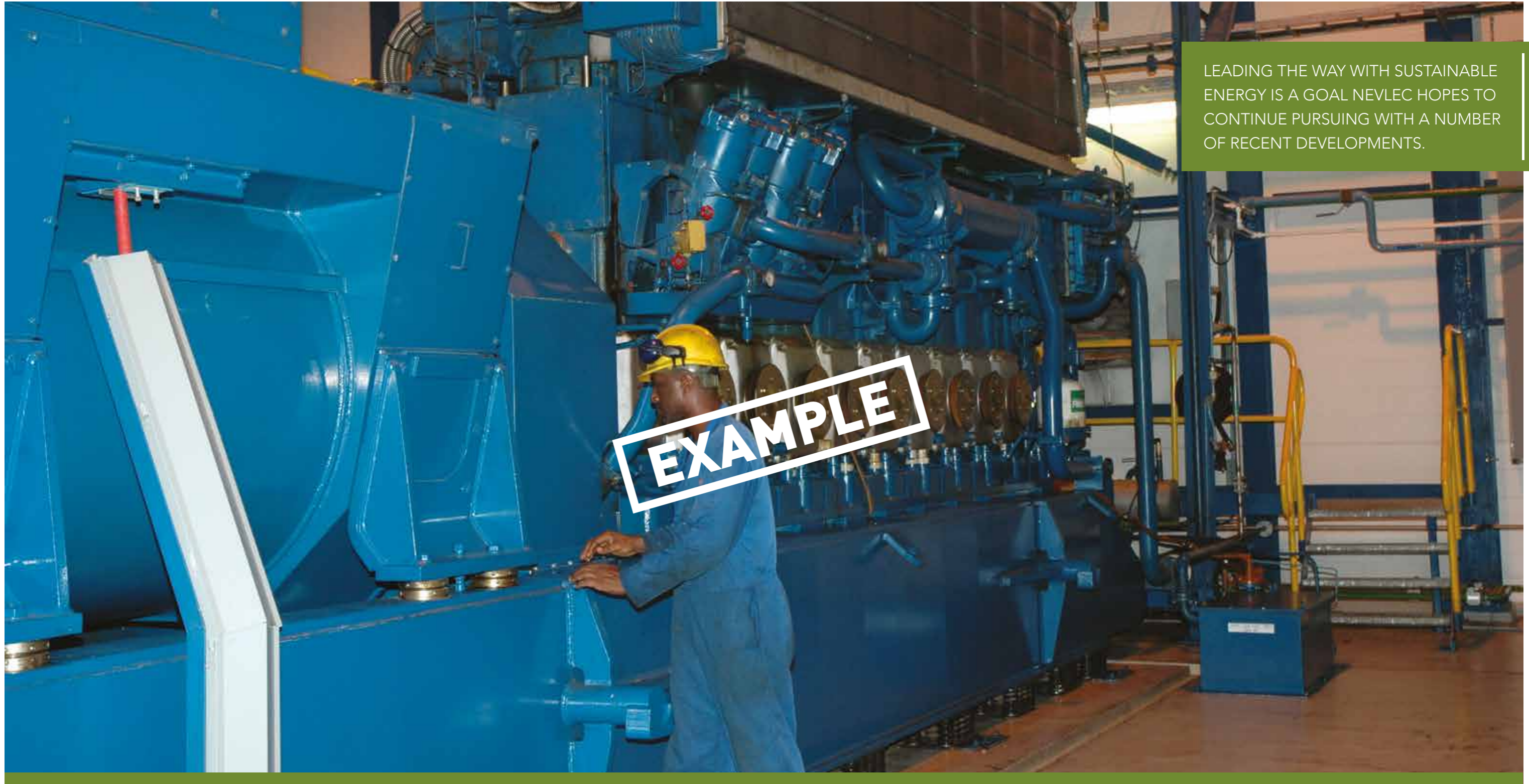


# POWER UP

Sustainable Business Magazine speaks to Jervan Swanston, General Manager at Nevis Electricity Company (NEVLEC), who reveals the big strides they have made in renewables over the last 15 years. ▶

EXAMPLE





LEADING THE WAY WITH SUSTAINABLE ENERGY IS A GOAL NEVLEC HOPES TO CONTINUE PURSUING WITH A NUMBER OF RECENT DEVELOPMENTS.

EXAMPLE

**Nevis Electricity Company (NEVLEC)** is the sole provider of electricity to the Caribbean island of Nevis. Formerly a department of the Nevis Island Administration (NIA), in September 2000 the company became an independent subsidiary. Though it remains a subsidiary of NIA, it now has complete control over its financial and operational infrastructure. Today its primary energy source is diesel, with the

company having 14.14 megawatts (mW) installed capacity but NEVLEC is making great headway in transforming its infrastructure into one based on renewable energy. It hopes to be drawing 100% of its electricity from renewable resources within 10 years.

There is no doubt that NEVLEC is on the right path to achieving this goal. When it broke away from NIA operation 15 years ago, the company gained an opportunity to

take full control of its finances. Whereas it had previously been tied to the finances of other Government departments, NEVLEC was now able to reinvest every cent it makes back into development and production of its own operation. Steady, long-term plans became possible, with personnel training in particular becoming a focal point of the company's practice. Jervan Swanston, General Manager at NEVLEC, explains why this

mattered: "We are better able to cater to the needs of individual staff, to train them in ways that utilities need them to be trained. The training offered under government wasn't as specialized as what we are now able to offer as an independent body."

#### PIONEERS

One example of how successful NEVLEC has become is its windfarm. Commissioned in

2009, it was the first in the entire Organization of Eastern Caribbean States (OECS) - an economic group that comprises Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Lucia, Saint Vincent and the Grenadines, and Saint Kitts and Nevis. The 8 turbine farm consistently delivers 1.6mW, though at full capacity it can produce 2.2mW.

Mr. Swanston explains that the windfarm has been important for NEVLEC.

"Over the past 15 years our proudest moment has been that we were the first in the OECS to have a windfarm attached to our grid and to steadily gain power from it. Others are now catching up with us but NEVLEC was the first. The company is now looking at ways of expanding the utility."

Leading the way with sustainable energy is a goal NEVLEC hopes to continue pursuing with a number of recent developments. ▶

"OUR PLAN FOR THE NEXT DECADE IS TO BECOME ENTIRELY RENEWABLE, TO BE THE FIRST ENERGY GREEN ISLAND."

EXAMPLE



The highlight of these is the development of geothermal wells on the island of Nevis, a project designed by NEVLEC in conjunction with NIA and engineered by newly established Nevis Renewable Energy International (NREI). Three exploration wells have already been dug and the construction of production wells is set to begin in the near future. NIA has provided a lot of support for this project by making significant concessions such as duty free import on machinery and by making available the land on which the plants will be built. The power purchase agreement (PPA) between NEVLEC and NREI is currently in its final stages and, with continued support from the Government, will help NEVLEC reach its goal of becoming fully renewable within a decade.

#### WASTE-TO-ENERGY

Another significant development has been the recent signing off on a Power Purchase Agreement (PPA) between NEVLEC and USA-based Omni Alpha for a waste-to-energy plant. "This plant will be coming online very shortly," says Mr. Swanston. "It will do two things for us. First, it will help Nevis with its garbage problems. There is only so much that can be put into landfill so being able to transform that waste into energy will be a big step in tackling the garbage problems on the island. Secondly, its construction is really going to help with the difficult economic times experienced by people here. It will provide an upsurge in labor opportunities and offer many people employment."

The plant itself is to be coupled with a solar array, taking advantage of one of the Caribbean's most abundant natural resources, and once it comes online the combined waste converted and solar energy output will total 2mW. Though it will not be the first OECS island to make use of the region's sunlight, Nevis' waste-to-energy plant will be the first of its kind in the area. Support from NIA will once again play an important part as it will source and provide much of the intelligence and manpower required to complete the plant. The strong links between NEVLEC and its owner illustrate how cooperation plays an important part in developing a better energy infrastructure for all.

#### STANDING ON SHOULDERS

However, NIA has not been the only important partner in these considerable achievements. NEVLEC made a concerted effort during the past few years to gain knowledge

from experts throughout the international renewables industry.

"We have had representatives at a number of different symposiums such as trade and energy conferences, CEO conferences, renewables conferences, and so on," explains Mr. Swanston. "Sometimes we are called to make presentations and as a result of these we have had a number of nominations. I returned just recently, for example, from Washington DC and Vermont, USA, where I attended the International Visitor Leadership Program sponsored by the United States Department of State Bureau of Educational & Cultural Affairs. This came about after President Obama's April 2015 statement emphasizing the need for U.S. involvement in the Caribbean's developing renewables industry."

"The U.S. embassy in Barbados nominated persons from different utilities throughout the region for training and I was very fortunate to get a nomination. I travelled to Washington DC to attend this program in Caribbean renewable energy regulation and development, and was able to meet with many of the people involved with regulation and legislation of renewables in the U.S. including stakeholders, lawyers, legislators, and so on. We also visited Burlington, Vermont, a city that is on track to become 100% sustainable energy powered by 2022. NEVLEC is part of a growing network and we feel it is important to meet these people that have been there and done that so that we can tap into their resources in an effort to move ourselves forward."

#### ALLIANCES FOR A GREENER FUTURE

NEVLEC is keen to help fellow industry organizations and companies by sharing its own knowledge with those a step or two behind where NEVLEC is today. One way it is doing this is by working with the Caribbean Electrical Utility Services Corporation (CARILEC) who offers utility industry-specific training courses to other nations. Close to home, it is also looking at teaming up with neighboring island Saint Kitts to offer its utility professionals training under its own schemes. In this way it aims to forge strong, useful alliances across borders and throughout the industry.

"Our plan for the next decade is to become entirely renewable, to be the first energy green island in the OECS through wind, solar, and geothermal energy," says Mr. Swanston. "To be able to look back at the last 15 years and see how far we have come is important. We are very proud of the advances that NEVLEC has achieved." □