SUNDAY FOCUS





RESIDENTS in Bom Jesus, Angola, draw water from a newly installed Aquatap Community Drinking Water Station, designed by North Vancouver company Quest Water Solutions. Based on the success of the inaugural unit, Quest hopes to supply thousands more to the African country, filling a tremendous need.

NORTH VAN COMPANY AIMS TO OFFER CLEAN WATER ANYWHERE IN THE WORLD

In quest of water

Erin McPhee

emcphee@nsnews.com

IT was a day they'll never forget.

Following years of hard work, the efforts of two North Shorebased entrepreneurs to provide clean water to communities around the world that need it most finally came to fruition March 16 as drinkable water ran from two taps in Bom Jesus, Angola.

John Balanko and Peter Miele are the founders of Quest Water

Solutions, an innovative water technology company providing sustainable and environmentally sound solutions to water-scarce regions. The company has developed a unique solar-powered water purification and distribution system, dubbed the Aquatap Community Drinking Water Station, based on what they have learned from an ongoing working relationship with the Angolan government and its Water For All Program.

Bom Jesus is a rural community that's home to approximately 500 residents primarily active in the sugar cane industry. It's located 55 kilometres east of Luanda, Angola's capital. After spending two and a half months in a settlement there, Balanko and Miele knew first-hand their project would make a difference in the lives of residents who previously were forced to draw water

from a nearby river that was unfit for consumption.

"The first day, it was the most amazing feeling," says Balanko.

"It was phenomenal for us, after two years of designing and negotiating, to see this," he adds.

The two offer story upon story of the people they came to

know through their time spent on the ground in the community: a local father's gratitude as his two children had always been ill; the smiles on young children's faces as they tried to balance buckets on their heads; a man who decided to build a house next to the unit, viewing it as prime real estate; people who travelled from 20 miles away to draw water; and, a local bottling plant employee

who preferred Quest's water over that of his employer.

"We've created something that can be run as a business, but as well, be very much a humanitarian effort," says Miele. "So it feels good because a lot of times you're wearing both hats."

"It's almost like if the company wasn't successful businesswise, we're still very much successful in the giving," he adds.

Their first system operational, Balanko and Miele are currently

back in Angola negotiating the next phase of their relationship. They have a second Aquatap unit ready to be implemented once a location is determined. In addition, they're looking to the future in hopes of continuing to supply stations to Angola providing free, clean water, as well as expand into other African countries.

Their goal is to have each of the countries they do business with take ownership of the units, and to see them create jobs for local residents. As well, Quest plans to set up a charitable foundation in each nation, devoting a percentage of their sales to the country's specific water-related needs.

Quest Water Solutions was incorporated in 2008 and officially launched in 2009. Based out of an office in North Vancouver, partners Balanko and Miele, both West Vancouver residents, serve as co-directors — Balanko as CEO and Miele as executive vice-president. The company has been public since January.

The duo met through their professional life, both having worked in a variety of capacities in the North American bottled water industry. Becoming friends, they realized they were both interested in doing something that would contribute positively to the world's water crisis and help others. They decided to go into business together.

"You want to be a philanthropist, you've got to make money. We have no qualms about it. Yes, we're for profit, but at the same

time, we're giving back," says Balanko, 52.

Quest's Aquatap Community Drinking Water Station is selfcontained, housed in a retrofitted shipping container, and purifies and distributes water all in one. The current unit in Bom Jesus has the ability to produce 20,000 litres of clean water a day and requires no electricity, fuel or chemicals of any kind and produces

no waste or harmful byproducts.

The system collects solar energy from 16 rooftop photovoltaic panels, charging the unit's batteries, which power the entire system. A pump brings in freshwater, in the case of Bom Jesus, from the nearby Kwanza River, 35 metres away. The river water is put through a series of self-cleaning filters followed by ultraviolet disinfection, before going into one of two 2,000-litre holding tanks. When community members draw the water, at one of two taps, it's again run through further ultraviolet disinfection. The drawn water is approximately 27 C, kept cool by insulation and

"When we say environmentally sound we're talking about a small carbon footprint, not reliant on fossil fuels, not reliant on grid power. We want to be completely off the grid," says

"The system can go anywhere in the world. We designed it for

the Angolan market, but it can go anywhere."

The key to the Aquatap design is its portability and ease of deployment. "Within 24 hours, we can get it up and running, says Miele, 54.

A system can supply up to 1,000 people with clean water from a variety of sources. It's also been designed to be affordable and low-maintenance. Quest includes the first two years of maintenance in their sale price, but the annual cost thereafter is estimated at \$700 a year.

The technology and cleanliness of the water coming from the product has been assessed by the Angolan Ministry of Industry.

"We've passed all of that with flying colours. In fact our water was analyzed versus the river water. The river water came back as not fit for human consumption, which these people have been drinking for eons. They defecate in it, they wash their dishes in ' savs Balanko.

Quest's water has tested positively in both public and private labs and has been deemed as greatly exceeding World Health Organization standards.

Initially, Balanko and Miele thought Quest would be focused on bottled water, potentially setting up small-scale bottling plants around the world. However, a meeting with an Angolan national living in Canada, Afonso Calala, set them on a new course.

Calala, who now serves as Quest's Angola operations manager, took them to Angola and the relationship opened a number of doors. Through the resulting connections forged, Balanko and Miele were able to begin meeting with various representatives of the Angolan government. They were well-received in the country and now have strong relationships within the Angolan Ministry of Industry, Ministry of Agriculture and Rural Development, Ministry of Health, and Ministry of Energy and Water.

See Power page 10



your favourite read with more great sections on Sundays your favourite read wathletics





photo submittor

ANGOLA'S first Aquatap is delivered earlier this year. Strong partnerships between Quest and the government expedited activation of the unit.

Power, pump, purification comes in one container

From page 3

In 2009, they were made aware of Angola's Water For All Program (Agua para Todos), a \$650-million initiative of President Jose Eduardo dos Santos, that's managed by the four above ministries, in addition to the Ministry of Environment. According to Quest, under the program, Angola, which was in a state of civil war from 1975 to 2002, is aiming to provide clean water to 80 per cent of its rural population and 50 per cent of its urban residents by 2015 and 100 and 80 per cent, respectively, by 2020. The initiative also speaks to one of the targets of the United Nation Millennium Development Goals, which is to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. It's also hoped that by providing clean water, Angola will be able to lower its high infant mortality rate.

"The secretary of state (for industry Kiala Ngone Gabriel) said, 'What we really need is help with our Water For All initiative.' He opened up a folder and threw out hundreds of pictures and said, 'Here's the millions of dollars that we've wasted on technology. People sell us one product and leave, and the thing just falls apart,'" says Balanko.

The secretary asked whether Quest could design a water purification and distribution

system that could be used in rural Angola in areas rich in fresh water, albeit undrinkable, and lacking in infrastructure, including electricity. With that goal in mind, Balanko and Miele worked to design a product, drawing on existing "best of breed" technology, including Canadian and Swiss. The Aquatap Community Drinking Water Station was born.

Their proposal was accepted and the first unit, a demonstration, is the one currently in operation in Bom Jesus.

Balanko and Miele are grateful for the collaborative partnership they've built with the Angolan government, which has greatly expedited opening up a clean water source to a community that truly was in need.

"A huge part of our success was having the government backing us," says Miele.

"We can pick up the phone and call anyone of these people at home on a Saturday. That says a lot," adds Balanko.

With two Aquatap units in Angola, one operational since March 1, followed by the official opening on March 16, and the second to be up and running shortly, Balanko and Miele are currently back in Angola, meeting with government representatives in the hope of

See Angola page 11



Let's clear up some misconceptions about laser vision correction.

Not all vision correction procedures are the same. Some clinics still offer LASIK, which is an older procedure that uses a blade to cut your eye. There is no need to do that anymore. London Eye Centre specializes in the most advanced, all-laser techniques that provide the best possible personal vision.

Clinics that advertise vision correction for \$500 an eye, rarely charge \$500. Their actual procedure fees are often much higher. London Eye Centre charges one all-inclusive fee. There are no surprises. No wonder British Columbians have trusted their vision to London Eye Centre for more than 25 years.

Call today to book your free consultation in North Vancouver and get all the facts about laser vision correction.

Free Information Session

Call today to reserve your seat. **Tuesday, June 19 - 7:00pm**#306-126 East 15th St. North Vancouver



www.lasereye.com 604.526.2020 / 1.800.395.7483



QUEST Water Solutions co-directors Peter Miele (left) and John Balanko, both West Vancouver residents, are currently in Angola firming up the next phase of their involvement in Angola's Water For All Program.

ngola assembly is the pla

supplying further units to the country.

"We're going down to negotiate a memorandum of understanding contract with the government under the Water For All Program on what that's going to look like over the next sort of five years," says

"We're hoping that we become the de facto system for the entire Water For All Program for rural populations," he adds.

If the partnership goes forward, Quest hopes to build Aquatap assembly plants in Angola, as that would cut costs immensely, and make use of Angolan labour. The sale price for a system manufactured outside of Angola is \$150,000 and produced in Angola would be between \$120,000 to \$125,000. Quest's cost is approximately half to build.

The current plan is to make the water free to community members.

Units sold to the government will include the first two years of maintenance provided by Quest's representatives in Angola. During that time they'll train locals and then hand operation over to the

"Initially we forecasted 275 units over three years. They're now talking thousands

In addition to employing local workers at the hoped-for production plants, there are already two Bom Jesus residents employed as local operators, responsible for cleaning, monitoring, educating the public, and opening and closing the inaugural unit daily. More locals are expected to be hired to fulfill this role in subsequent communities.

Aided by their Angolan contacts, Balanko and Miele hope to expand into the other 14 member states of the Southern African Development Community, inter-governmental organization promoting sustainable and equitable economic growth and socio-economic

development.
"There's a huge need. We've had interest out of Tanzania (and) Mozambique," says Balanko.

They're also beginning to discuss possible partnerships with various First Nations communities in Canada and Australia and are working to develop additional products.

Quest plans to raise awareness of the world's water crisis and what people can do at home and to that end, are developing educational videos.

They also plan to set up a charitable

foundation in each of the countries they work in.

"We said this way back from Day 1. We said: 'Anything we do, whether we go to India, Africa, wherever we go, we're going to set up a foundation in that country and give back,'" says Balanko.

The two are creating the Cuilo Foundation in Angola, where a percentage of their sales will be donated to a find

of their sales will be donated to a fund. They will seek added support from their partners, including the government and banks they're working with. The intent is for the Cuilo Foundation to provide emergency relief via small, portable water purification and distribution systems (approximately a metre-cubed in size), towable by trucks, to serve communities during Angola's rainy season when water sources become contaminated and spread diseases like cholera.

As Quest expands into other countries, they plan to launch additional foundations.

That's our way of giving back to the country that we do business in," says Balanko.

For more information on Quest Water Solutions, visit www.questwatersolutions.

Never miss another collection



Download North Shore Recycling Program's free MY-WASTE app to get instant access to your garbage, recycling and yard trimmings collection schedule.

Never miss another collection day by setting up reminders.

Learn what is collected in the curbside collection program and how to prepare it, get links to recycling/disposal options for what you can't put out at the curb and much more.

Download the app by visiting app.northshorerecycling.ca, by going to any app store and searching for "my-waste" or by scanning the QR code below with your smartphone:









■ NorthShore







northshorerecycling.ca



COMMITTED TO EXCELLENCE

Quality Collision Repair and Paint Since 1975





- Replacement Vehicles
- Lifetime Guarantee
- Free Estimates
- Providing service for ICBC, Private Insurance claims, or private repairs

1172 West 3rd Street (at Pemberton) North Vancouver

Book your appointment online!

from this

"We now do online estimates! Save some time and log on to our website for details."