Water to power future cars, homes

Amitabh Sharma

Contributor

TOKYO, Japan:

MAGINE NEEDING to refuel your car, but instead of popping the tank open to a petrol pump, you are doing so to a generator that produces energy from water.

Yes, you read correctly; the universal thirst quencher is the new fuel in town.

In Minato-ku, Tokyo, Honda Motor Co Ltd is showcasing their hydrogen fuel cell-powered car, standing next to a hydro generator.

The generator produces energy from water, breaking the molecules to release hydrogen as fuel with the byproduct oxygen, which is released into the atmosphere emissions do not get cleaner than this.

RAW ENERGY

"We are using water as raw material to produce energy," said Yukihiko Kakutani, assistant manager of corporate public relations at the company. "This is the future, not only (for) powering cars,



PHOTOS BY AMITABH SHARMA

A generator connected to the Honda Clarity, which, when fully charged, can power a home for almost a week.

but (also) creating smart and sustainable communities," he added.

The hydro cell-powered Honda Clarity, Kakutani informed, can run 700 kilometres on seven kilogrammes of hydrogen fuel, making it energy efficient. Also, when connected to an electric generator, the

Honda Clarity can power one household for almost a week a step towards reducing dependency on fossil fuels and a move to renewable fuels, which is being researched by automobile manufacturers worldwide.

The technology, according to the Honda executive, will be

apt for island states, which will help to decrease reliance on the electricity grid. Further, should a natural disaster strike, it would ensure uninterrupted power supply for the residents, essential services and educational institutions.

"Hydrogen technology is beneficial in many aspects - it requires less space, can retain charge longer and there is less drainage of energy," noted Kakutani.

vehicle. The by-product — oxygen — is released in the air.

The hydropowered Honda Clarity stands beside the Smart Hydro Station.

which breaks down hydrogen molecules from water and powers the

This pioneering technology is not a distant dream; Honda plans to roll out the Clarity in select markets in 2017.

Though the cost to the customer of this Star Trek-ish,

hydropowered technology would be prohibitive for mass roll-out, car manufacturers are researching how to rationalise the prices.

"Our goal is to keep the skies blue for the next generation," Kakutani said.

amitabh.sharma@hotmail.com



Dr Homero Silva and UnaMay Gordon, principal director for the Climate Change Division, thumb through the pages of Jamaica's Climate Change Policy Framework recently.

New climate change board holds first meeting

JAMAICA'S NEW Climate Change Advisory Board tasked to advise the Minister of Economic Growth and Job Creation Prime Minister Andrew Holness on climate issues – has had its first meeting.

"This was a meeting to look at the terms of reference, to underscore the relevance and role of the board as well as to set the frequency of the meeting which we agreed would be every quarter – unless there are emerging issues," UnaMay Gordon, principal director of the Climate Change Division (CCD), told The Gleaner.

The meeting, held on November 23, was convened post the recent climate change talks, held in Marrakech, Morocco, from November 7 to November 18.

Chaired by Pro Vice-Chancellor for Graduate Studies at the University of the West Indies, Dr Dale Webber, the board draws its membership from not only academia, but also the private and public sectors and civil society.

Members include celebrated climate scientist Nobel Peace Prize-winner Professor Anthony Chen and former international climate change negotiator and retired head of the Meteorological Service, Jeffrey Spooner.

Other members include: ■ Professor Anthony

Clayton, University of the West Indies;

■ Dr Livingston White, Caribbean Institute of Media and Communication; ■ Professor Homero Silva,

University of Technology; ■ Dr Delano Lewis,

Northern Caribbean University; ■ Energy consultant David Barrett, ENBAR Consulting; and

■ Dr Susan Otuokon, Jamaica Conservation and

Development Trust. **BOARD MEMBERS**

Peter Knight, head of the National Environment and Planning Agency; Marilyn Headley, head of the Forestry Department; and Claire Bernard, deputy director general and director of sustainable development and regional planning at the Planning Institute of Jamaica, also sit

on the board. In addition to Gordon, other Ministry of Economic Growth and Job Creation representatives include permanent secretary Audrey Sewell, Dr Sharon Crooks and chief technical director Oral Khan.

For Barrett, it was a productive meeting that identified key issues and gaps, including the absence of a legal mind and an economist from among their numbers.

"I felt that a number of critical issues, which should be on the table were put on the table. I think what is important now is the execution, that is, addressing those things that were considered important," he noted.

Ultimately, the energy consultant said, "I think it (the board) should achieve what it intends."

pwr.gleaner@gmail.com



CONTRIBUTED

Youth comprised the majority of those who participated in Climate Walk 2016.

walk to secure water

WITH THE stress of the recent drought still fresh in a lot of minds, it was little wonder that water was made the focus of Climate Walk 2016, and 1,000 Jamaicans, the majority of them young people, supported it.

With the benefit of banners and posters, and in a carnivallike atmosphere, walkers made the journey from Emancipation Park in Kingston to Half-Way Tree and back on December 3.

With the theme 'Secure Water for All', the goal was to raise awareness about climate change a clear and present danger to water security, given, among other things, the prospect of warmer temperatures, more severe

droughts and rising sea levels. While the consensus is that greater numbers would have been welcomed, organisers are

satisfied. "We would always prefer a larger number as the aim of the walk is to sensitise and increase awareness," noted Nalini Jagnarine, environmental analyst and business development coordinator at Environmental Solutions Limited.

"Many events took place that day, but regardless, the turnout was great and the aim of the walk was accomplished," she

Colonel Oral Khan, chief technical director in the Ministry of Economic Growth and Job Creation, said, too, that there was room for greater public support.

However, he maintained that the Climate Change Awareness Week of activities – which concluded with the Climate Walk, a concert involving Panos Caribbean's Voices for Climate Change



A carnival-like atmosphere typified Climate Walk 2016.

Education artistes and a climate smart expo – was a positive step.

WEEK OF AWARENESS

"The walk culminated the activities around Climate Change Awareness Week. Much of the earlier activities did not really engage the (general) public and so we were happy for this event. The public's attention was drawn to the fact that climate change is a reality. We attracted a lot of onlookers along the way and I hope they could appreciate the message," he said.

The Climate Week of activities included a visit from the Intergovernmental Panel on Climate Change (IPCC), which "assesses the scientific, technical and socio-economic information relevant for the understanding of the risk of human-

induced climate change". That visit saw the hosting of a media-training workshop organised by Panos Caribbean; engagement between government actors and IPCC scientists as well as with students and members of the local academic

community. The University of the West Indies also launched its supercomputer SPARKS. SPARKS the Scientific Platform for Applied Research and Knowledge Sharing – was financed to the tune of US\$750,000 by the Inter-American Development Bank under the Regional Track of the Pilot Programme for Climate

Resilience.

"Climate change is affecting us all and will continue to affect us and future generations. It is everyone's business," said Jagnarine.

"The time to act is now. Be a part of a movement to increase awareness of climate change ad its impacts on Jamaica and how we as Jamaican business owners, youth, teachers, etc, can learn to mitigate and adapt to climate change," she added.

Proceeds from this year's climate walk – the tally for which is still ongoing – will go to the installation of rainwater harvesting systems in select vulnerable schools.

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