

Baldeosingh's vision

ENTREPRENEUR Donald Baldeosingh, former chairman of State energy company Petrotrin in the days of Basdeo Pandey's United National Congress (UNC) administration, unrelentingly continues to pursue his vision of hydro power as the best source of renewable energy (RE) for Trinidad and Tobago and the rest of the Caribbean.

Out of eight possible RE substitutes for oil, he ranks hydro at the top of the list as "the lowest hanging fruit for us in the region."

Interested to know what the others are?

1. Geothermal in the Caribbean volcanic islands.
2. Landfill gas.
3. Biomass co-firing.
4. Wind.
5. Natural gas.
6. Biomass combustion.
7. Solar.

"Energy efficiency measures" are included as an eighth option, though those, of course, are not substitutes for existing fuels but the more economical use of them.

It's noticeable that Baldeosingh ranks natural gas, which fuels all the power stations in Trinidad and Tobago, so low down on the totem pole but he explains this by noting that its limited, though existing, CO2 emissions, disqualify it for a higher position.

Hydro power comes out on top in Baldeosingh's view because it will not only offer a "clean" source of energy but has a host of other advantages too.

Among these are "creation of new investment opportunities, energy security, participation in the new energy developments of the region, economic integration and private sector led growth, using private/public partnerships for sustainable infrastructure development."

Of course, the hydro power he is talking about will not be established in Trinidad and Tobago but rather in the two Caricom states that have the rivers with enough water flow to accommodate it—Guyana and Suriname.

Baldeosingh says the three governments involved, which, of course, include Trinidad and Tobago, have all "given positive responses to the project and have all shown varying degrees of readiness to engage at the next level."

That "next level" is "the completion of a pre-feasibility report" on the cable that will first take natural gas from Trinidad and Tobago down to Guyana as an interim measure, then to bring the hydro power back at a later date.

He seems to think the 20 per cent injection of RE into Trinidad and Tobago's system by 2020, as noted by Finance Minister Colm Imbert in his 2015-2016

ENERGY Insider

David Renwick



Budget address, which he calculates amounts to about 300MW, could easily be covered by hydro-generated electricity from Guyana.

Hydro power seems to be catching-on rapidly in the rest of the world, Baldeosingh points out.

Over 620 hydro-electric dams are currently under construction and as many as 3,000 in all are planned, mainly in Latin America and Asia.

At the moment, 20 per cent of power worldwide is generated by hydro.

Norway is the most advanced in this respect, with 99 per cent of its electricity emanating from hydro.

In the case of New Zealand, it's about 75 per cent.

The United States currently uses hydro for about ten per cent of its power, so it still has a long way to go.

Potential for Caricom

Some small hydro power plants in Jamaica provide about 24MW of power, so the potential in Caricom's largest English-speaking territory is enormous.

Of course, the cost of hydro power, certainly in the short to medium term, is going to be high, particularly when compared with today's oil and gas prices, which are forecast to remain down for some time to come.

Current gas and even oil prices, for example, make the "price case" for RE substitution, especially in the case of hydro, very weak. The "emissions case" gives it some traction but not much.

Then there is the "dry season" factor. If this is prolonged, and most of the Caribbean is feeling the effects of that right now, then rivers dry up and there's not enough water to activate the power plants. That happened in nearby Venezuela a few years ago and caused some havoc, since our Latin neighbour obtains most of its power from hydro.

As *The Economist* magazine noted the other day about the East African country of Tanzania: "Tanzania has about 1,500 MW of installed electricity-generation capacity – about as much as a small American city. More than a third comes from hydroelectric power stations. Because of drought in recent years, these rarely run at full capacity. In early October, 2015, at the end of the dry season, the country had to shut down all its hydroelectric plants. Tanzania is not alone in relying heavily on hydropower. In

Malawi and Zambia almost all power comes from water, when it flows."

That being the case, Baldeosingh is on a tricky wicket in wanting the region to rely so heavily on hydro.

And he is already up against still competition in this regard.

The promoters of gas as the natural substitute for oil, are very active in the Caribbean, both in the case of the Eastern Caribbean Gas Pipeline Co. (ECGPC), which is targeting Barbados and the Caribbean LNG Co., which has its eye set initially on the French departments of Martinique and Guadeloupe and then the rest of the region.

If gas-fired power gets a headstart, hydro-fired power is unlikely to find much of a market. The infrastructure for gas exporting is already well in place in Trinidad and will soon be in Tobago too. That for hydro-power is not.

So is Baldeosingh's project, while well-meaning, in reality all pie in the sky?

He would hotly deny this.

In fact, he is actively "in discussion with representatives of potential investors/financiers to support the remaining development work to get to financial close."

He will be looking for at least US\$700



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million for the 400km cable and convertor stations, which will be handled by Siemens.

The cost of this electricity to consumers in Guyana itself and the rest of the region will have to be such as to ensure payback of that tidy sum.

Best of luck to you, Donald.

David Renwick was awarded the Hummingbird Medal (Gold) in 2008 for the development of energy journalism in Trinidad and Tobago.

NOTICE OF MEETING

In the matter of
ArcelorMittal Point Lisas Limited
and In the matter of the Companies Act Chapter 81:01

NOTICE IS HEREBY GIVEN pursuant to Section 418(1) the Companies Act, Chap. 81:01 ("the Companies Act") that a meeting of the creditors of the above named Company will be held at Century Ballroom, Queen's Park Cricket Club, 94 Tragarete Road, Port of Spain on the 5th day of April, 2016 at 2.00 p.m. for the purposes set out in Sections 418, 419 and 420 of the Companies Act.

[Signature]
Secretary