

Minister of Energy and Energy Affairs
Speech to the IBC
Energy Caribbean Conference
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Salutations

Ladies and Gentlemen I am particularly pleased to be here to address you at this important annual conference with its theme:

“Ensuring energy security through diversification, optimization and transportation.”

This is my first opportunity to address a major international conference and I thank the organizers for inviting me to deliver this address. This conference assumes more relevance given that it comes on the cusp of the 2011/2012 national budget for Trinidad and Tobago. It should be noted that there is an inextricable link between the energy sector and the finances of the Trinidad and Tobago. Our national budget is pegged to the price of both oil and natural gas. Over the last month, I have worked closely with the Minister of Finance on preparations for the budget.

The budget comes at a time when crude oil prices remain high on account of strong demand for oil in the emerging economies, particularly China, and on continued instability in the Middle East, particularly in Libya where production remains largely offline. The spread between Brent oil prices and West Texas oil prices have not gone un-noticed. There is currently an almost \$33 gap between the two. This delta is driven in the main by the production of oil from Canada’s prolific Athabasca tar sands.

We are also at time when the Global Economic Outlook continues to be bleak with growth projections for all the major advanced economies weaker than previously forecasted by the leading rating agencies and institutions.

In fact only yesterday the rating Agency, Fitch, reported that growth rates in the more advanced economies had stalled to rates not seen since 2009 when as we know, there was a recession in the advanced economies.

Two weeks ago the IMF in its “World Economic Outlook” report of September 2011 said - and I quote:

“The global economy is in a dangerous new phase. Global activity has weakened and become more uneven, confidence has fallen sharply recently, and downside risks are growing”

That is the state of play of the world economy. We indeed live in interesting times. This is the reality that we in the Caribbean and here in Trinidad and Tobago must accept and deal with. Thus far we have weathered the storm in Trinidad and Tobago. There was however some casualties such as the country’s largest conglomerate CL Financial which incidentally held significant assets in the Trinidad and Tobago energy sector.

The overall health of the global economy is therefore particularly important to Trinidad and Tobago since the weakness in the advanced economies and the slowing of growth in the emerging economies could lead to the real risk of a reduction in demand for crude oil that could place downward pressure on energy prices. This is coupled with a glut of natural gas in the United States as a consequence of shale gas production. It also puts at risk the economies of the Caribbean which depend so much on tourists arrivals from the United States and Europe.

The picture of the world economy is therefore not a happy one.

My speech today is not an inward looking one. It is one that stands at a point in time and looks outward at the changing landscape and tries to understand the destiny of Trinidad and Tobago in the context of change and opportunity.

The anthropologist Jared Diamond in his book “Collapse” tells us that all civilizations require three things – water, food and energy. With the exception of Trinidad and Tobago, Suriname, Belize and Barbados, none of the other Caricom member states produce any hydrocarbons even though we think that can change if the present exploration efforts bear fruit particularly in Guyana.

I will expand on Guyana later.

So what is our relationship with energy in the Caribbean? Historically, the Caribbean has had to import energy for everything from power generation to powering of cars and farm equipment. This has placed an additional burden on regional governments and undermined their balance of payments and fiscal positions.

It is clear then, that in a region so energy dependent and one in which there are significant environmental risks there needs to be a system in which there is a balanced energy mix that is sustainable and that can overtime reduce the overall cost of energy to the average consumer.

While there has been some traction as regards renewable energy projects – their impact will only be small and many related projects are capital intensive. In the foreseeable future for both the Caribbean and the world hydrocarbons will continue to dominate. We will continue to live in the age of what Daniel Yergin calls “hydrocarbon man” for a long time to come.

As for the wider Caribbean, Trinidad and Tobago stands ready to continue to assist in its energy development. It is clear too that there are economic advantages to be had from the regional integration of energy systems. This is an idea that seems to have fallen off the Caricom radar. It is however being currently considered by OLADE the Latin American Energy Organization.

Small Scale LNG

Natural gas availability may have constrained Caribbean investment in natural gas power plants in the past, but the world of LNG technology is changing rapidly. At the last Gastech conference in Amsterdam it was noted that the world of LNG was moving towards smaller markets and smaller LNG carriers – hence the emergence of the small scale LNG chain. This is in contrast to the more dominant trend of larger trains and larger LNG tankers which fits into the period 2000 to 2010.

In nearby Colombia, Small Scale LNG is a concept that is already taking wings. In May of this year Exmar LNG of Belgium announced that it had teamed up with Pacific Rubiales to build a small scale LNG export project in Northern Colombia. Front-end engineering and design has started on the project that consists of a small liquefaction barge and a pipeline from the La Creciente field to the Caribbean coast for shipping. Gas from the field will be expected to target the Caribbean and Central American markets.

The LNG market in the Caribbean region will grow due to many factors which make it a more attractive energy fuel than traditional oil-based resources. Oil-based fuels account for 95 per cent of energy in the Caribbean, but countries and power companies are quickly realising that LNG is less expensive than both fuel oil and diesel.

Some Caribbean islands have already started increasing natural gas consumption. Puerto Rico began importing LNG in 2000 to fuel a 540-megawatt (MW) combined cycle power plant, while the Andres LNG LNG regasification terminal in the Dominican Republic feeds that nation’s 304

MW gas-fired combined cycle power plant. The president of AES Dominicana, the company that operates this plant, says that using this electricity produced from natural gas rather than oil has saved the country US \$800 million since 2003. LNG to these two countries is supplied by Trinidad and Tobago.

LNG provides Caribbean countries an option cleaner than burning petroleum. LNG could be an additional part of a winning energy strategy for the Caribbean with supplies coming from a small scale LNG project in Trinidad and Tobago.

It is with this in mind that I say Trinidad and Tobago stands ready and able to provide any kind of technical support that the region needs in seeking to develop their emerging energy sector or to develop a new energy matrix and that includes LNG to Jamaica or the development of the oil industry in Guyana. In Jamaica LNG is rightfully seen as the solution to that country's high power cost.

So the idea is that LNG is the future fuel of the Caribbean power sector and by extension its energy security and Trinidad and Tobago with its developed LNG industry should be prepared to play a leadership role in this context. We should therefore not rule out the possible expansion of the LNG industry in Trinidad and Tobago with such an expansion being dependent on ensuring we have domestic energy security.

The idea and vision

As Minister of Energy I have proposed another simple yet far reaching idea that again looks outward. The time has come for brand Trinidad and Tobago to go global and in so doing flip the traditional and historical plantation economy model on its head. Instead of only seeking to attract investment to this country we must become investors in energy projects around the region and in Africa. That is the idea and that is the vision. It is an idea whose time has come.

Guyana – Suriname basin

In June 2000, the United States Geological Survey's World Petroleum Assessment 2000 estimated that the resource potential for the Suriname -Guyana Basin is 15.2 billion barrels of oil. This estimate indicates that the Suriname- Guyana Basin is the second most important unexplored region in the world in terms of oil potential. If the potential is reached, it would be the twelfth most productive site in the world. A boundary dispute between the two countries was resolved in 2007 and this has paved the way for exploration.

Over the years there have been a number of attempts to find oil in commercial quantities in Guyana and all have ended in disappointed. In the early 1970's Shell's Abary 1 offshore well encountered oil in waters off Guyana but the discovery was never tested.

The most significant of these efforts will commence before the end of the year when Repsol together with Tullow and CGX will drill the Jaguar -1 well in Guyanese waters. This is arguably the most exciting well to be drilled in the Caribbean since the Deep Ibis in Trinidad in 2006.

Tullow, a company with an apparent Midas touch, discovered the prolific Jubilee field in Ghana in 2007 and only a few weeks ago together with Royal Dutch Shell and Total they announced a major discovery off the coast of French Guiana, opening up a potentially massive new frontier of petroleum development along the northern coast of South America. According to analyst Francisco Bello (who is well known to Trinidad and Tobago)

"This is opening a whole new frontier, turning a region that currently lacks significant oil production into one of the world's hottest spots."

Guyana however lacks one of the most basic pieces of infrastructure required for international trade. I speak of course of a deep water port. The shallow draft of the Demerara River makes Georgetown inaccessible to large vessel. I however understand that there are plans for a deep water port at the mouth of the Berbice River.

In the event that oil is discovered such a facility will become critical as a logistics base and as a port of entry for oil tankers. There is also always the FPSO (Floating Production Storage Offloading) option that can be explored.

Here in Trinidad and Tobago we have developed expertise in the project management of port construction and management through the National Energy Corporation. Is there therefore a role for the NEC in the development of the infrastructure to support a Guyanese oil and gas industry? I find that to be an extremely exciting proposition and one that I am prepared to discuss with my Guyanese counterpart.

We here in Trinidad and Tobago will be monitoring the situation in Guyana closely as the drilling of the Jaguar 1 draws closer.

What of Suriname? Suriname is another member of the Caricom. Suriname has a well developed oil industry that produces a modest 16,000 barrels of oil per day from land. Offshore Suriname is virtually un-explored, with only 22 exploration wells drilled in an area of

approximately 150,000 square km. Many of our service companies are working in Suriname as we extend our expertise to the region. There are opportunities here too that we will explore.

Two weeks ago, the Grenadian Minister of Energy visited the Ministry of Energy to discuss our possible partnering with Grenada in exploration. We have said we are willing to help and there may be the possibility of coordination around Block 21 which is to the North of Trinidad.

As you may be also aware Trinidad and Tobago also has three cross border gas fields with Venezuela. The largest of these is Loran Manatee which it is estimated to contain 10 trillion cubic feet of natural gas (GIIP) of which approximately 2.7 tcf is on the Trinidad and Tobago side.

Ladies and gentlemen the share scale of the field is enough to support LNG expansion in Trinidad and Tobago. Of course no decision has been taken on where the gas will be produced. Both parties have been working on it and during the last year two committees were formed to undertake the work of taking forward the mandate of the Framework Treaty. The two committees are a Joint Steering Committee, formed to oversee the unitization of cross border fields and a Multidisciplinary Committee formed to advise the two Governments on energy cooperation between the States.

The Ministry is currently attempting to facilitate a visit by the Venezuelan Vice Minister of Energy to discuss the disposition of the Loran Manatee Gas and any other areas of potential cooperation with Venezuela.

The future of Trinidad and Tobago's energy sector is therefore to be found by looking outward and lies in the wider region and as far as Ghana, Tanzania and Mozambique. On Monday we welcome a delegation from Kenya who will come here to have a look at our energy sector. Last week a delegation from Mozambique came to Trinidad and Tobago for the same reason. Africa is looking to Trinidad and Tobago for help and guidance in establishing its own oil and gas industry. This presents an opportunity to actualize on South – South cooperation and transfer of technology.

Ladies and Gentlemen, we live in exciting times. Let me again thank the organizers for the opportunity to speak at this conference and to assure you that Trinidad and Tobago stands ready to assist in the development of the energy matrix of the Caribbean and to invest in commercially viable projects in the region when they become available.

I thank you and enjoy the rest of the conference.