



**ADDRESS BY THE HONOURABLE MINISTER
OF
PLANNING, HOUSING AND THE ENVIRONMENT**

**PUBLIC-PRIVATE PARTNERSHIPS TO MEET THE CLIMATE
CHANGE CHALLENGE**

On The Occasion Of

**TRINIDAD & TOBAGO ENERGY CONFERENCE
ENERGY AND ENTREPRENEURSHIP**

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Salutations

Ladies and gentlemen we are just one decade out of the 20th century. A century that could very well be characterized as a “carbon economy”. That characterization is fitting because energy sources were dominated by the use of oil, coal and gas, which use contributed significantly to the growth of the global economy. However, the carbon economy of the last century based on the dominant usage of fossil fuels, is facing significant challenges due to the rising cost of energy, fossil fuel availability and environmental damages in terms of climatic changes as a result of carbon emissions. This characterization of the past decade, juxtaposed against a growing climate consciousness, and an emerging shift by large corporations, including energy conglomerates, to reduce their carbon footprints, opens up tremendous opportunities for public private partnerships, largely within the vein of corporate social responsibility. In my address this morning these areas for partnerships shall be explored within the context of the government’s plan to pursue a low carbon economy.

During the past one and a half centuries the global availability of fossil fuels and energy was controlled largely by the energy-rich nations, who determined the level of oil production and its deliverability in economic terms. However, a new energy era of alignment of sustainability indicators for energy, environment and economy, seems to be emerging at the beginning of 21st century.

This trend is driven in large part by issues related to global warming and climate change, energy costs, the increasing realization of the finite resources that may be available, and more recently by the emerging global financial crisis. Indeed, the Millennium Development Goals (MDGs) is premised on the triple baseline concept of energy, economy and environment towards sustainable development objectives in the 21st Century.

Therefore, while the 20th century can be characterized as the era of the carbon economy, there is growing consensus that the economy of the 21st century will be defined on the basis of renewable energy, energy efficiency and clean technology. This millennium began with unprecedented optimism for green energy usage, resulting in significant contributions of gas, solar and wind power, renewable and nuclear produced hydrogen, in the global energy mix. It is very likely therefore that the major thrust in technological developments in the 21st century on new and renewable energy will be guided by the need for energy security, addressing climate change, and encouraged by the ecological advantages of their use over conventional fuels.

Permit me therefore to elaborate a bit on what the future may hold for energy use and climate change. Such an elaboration can provide a guide to opportunities for new product development, entrepreneurship, and most importantly, corporate-led change

that taps into the practice of corporate social and environmental responsibility.

According to the World energy Outlook for 2009 of the International Energy Agency, fossil fuels remain the dominant sources of energy worldwide, accounting for 77% of the demand increase in 2007-2030. The world's energy resources are adequate to meet the projected demand increase through to 2030 and well beyond. But these trends have profound implications for environmental protection, energy security and sustained economic development. The continuation of current trends could have dire consequences for climate change. Such trends could also place stress on ambient air quality, with the related consequences.

Without a change in international policy, or a change to the business as usual scenario, the science suggests that the world could be on a path for a rise in global temperature of up to 6°C, with catastrophic consequences for our climate. The Copenhagen climate conference resulted in the noting of the Copenhagen Accord. The Accord seeks, among other things, a global approach to restricting the increase in average global temperatures by 2 degrees Celcius above pre-industrial times. The long term goals of the Accord include a consideration of limiting temperature increases to 1.5 degrees Celcius.

According to the Intergovernmental Panel on Climate Change (IPCC), in order to avoid the most severe weather and sea-level rise, and limit the temperature increase to about 2°C, the greenhouse-gas concentration needs to be stabilised at around 450 ppm CO₂-equivalent. In the medium term therefore, what are the global energy implications for a 450 ppm scenario?

The demand for natural gas worldwide is set to resume its long-term upwards trend, though the pace of demand growth hinges critically on the strength of international climate policy action as well as on the rate of economic growth. In the 450 ppm scenario, in which governments are assumed to take strong action to cut CO₂ emissions, world gas demand is expected to grow by 17% between 2007 and 2030. Gas being the cleaner fuel alternative to coal and oil.

The 450 ppm scenario assumes a hybrid policy approach, comprising a plausible combination of cap-and-trade systems, sectoral agreements and national measures, with countries subject to common but differentiated responsibilities. End-use efficiency offers the greatest opportunity for CO₂ emissions abatement, and early retirement of old, inefficient industrial plants and their replacement by more efficient and cleaner

technology will make major contributions to the achievement of the 450 ppm scenario.

The increased deployment of renewable energy, the increased use of alternative fuels in the transport sector, and carbon capture and storage (CCS) all have significant roles to take in the achievement of major reductions in the atmospheric concentration of ghg emissions..

Any discourse on energy consumption and economic growth would be incomplete without reference to the impact of the global financial crisis. Despite the impact of the financial crisis, world greenhouse-gas emissions, including non-energy related CO₂ and all other gases, are projected to grow from 42.4 Gigitons CO₂-equivalent in 2005 to 56.5 Gt CO₂-eq in 2030 – an increase of one-third.

All of the foregoing therefore points to a very different 21st century in the global context. Trinidad and Tobago as a major energy producer and consumer stands to be impacted on, as a result of measures taken, not only globally, but also domestically. Being a small island developing state, we are not immune to exogenous economic shocks and adapting to this picture for the future will require sound research and analysis, wise decisions and firm action.

Preliminary analysis of research into our emissions experience indicates that carbon dioxide emissions from the energy sector, which accounts for total emissions arising as a result of direct combustion of fossil fuels and includes emissions from power generation and transport, increased from 16 806 gigagrams to 63 456 gigagrams, which represents an increase of 278 % over the period 1990-2006.

Carbon dioxide emissions from the transport sector are estimated to have doubled from 1990 levels to 2006. It is no coincidence that this increase correlates directly with the number of vehicles increasing by almost 100% over the same period.

Carbon dioxide emissions from power generation increased by 43.3 % over the period 1990-2006, while carbon dioxide emissions from the industrial processes sector increased by 86.7% over the same period.

Already, it is estimated that the average ambient temperature of Trinidad and Tobago has risen by about 1.7 degrees Celcius over the past forty years based on meteorological records. Future projected impacts of climate change are likely to affect the agriculture sector through possible increased aridity of soils, decreased crop yields due to intolerance of crop varieties, salinisation of productive soils in the event of an increase in sea levels and inundation and flooding of coastal areas.

Impacts in the water resources sector are expected to arise as a result of increase in temperatures with the attendant loss of available surface water and decreased rainfall resulting in reduced percolation and recharge of groundwater reserves in aquifers; reduced availability of surface water and potable water. These are but some of the pressing climate change issues that can be experienced in Trinidad and Tobago.

Ladies and gentlemen, you would agree that a business as usual development pathway is no longer sustainable and is at odds with the shifting global paradigm and that action is needed and it is needed now. What role, you may ask, can each of us take?

As this government strives to diversify the economy to maximize and at the same time balance its revenue sources, we also recognize our responsibility to promote a low carbon economy. This is despite the fact that Trinidad and Tobago produces less than 1% of the total greenhouse gas emissions worldwide. To this end, the Cabinet has approved a draft climate change policy that is aimed at addressing climate change in Trinidad and Tobago, both in terms of mitigation or the avoidance and reduction of greenhouse gas emissions, and adaptation or coping with the adverse impacts of climate change. The draft climate change policy will be soon out for public consultation.

The climate change policy aims at putting Trinidad and Tobago on the pathway to a low carbon development future, and seeks to integrate development plans to build climate resilience toward enhancing adaptation. I should like to make a point here in order to clarify some misconceptions as to what a low carbon development path means.

There are those of us who are inclined to interpret this to mean that all development must halt and there should be no further emissions of greenhouse gases. There are others who insist that a low carbon development pathway means that development should not involve industrial development that can result in the emission of greenhouse gases. There are others also who claim that a low carbon development pathway means that greenhouse gas emissions must be matched with greenhouse gas reductions.

Surely these interpretations can be neither reasonable nor practical manifestations of such a plan. By contrast, the stated objective of the UNFCCC is aimed explicitly at the stabilisation of atmospheric concentrations of greenhouse gases at a level that will not interfere with the climate system, not hamper food production and that would allow economic development to continue sustainably. This means that economic development must continue, and it must continue in a manner that balances emissions associated with economic growth with the avoidance, reduction or sequestration of those emissions.

Industrial development and addressing climate change are therefore not mutually exclusive or contradictory. The challenge is clearly managing emissions. Technological advances toward emissions reduction at source, and emissions capture and storage, must be amongst the leading issues in the research and development agenda of academic institutions, corporations and governments.

The question therefore arises: how can we do this as a country with all of our stakeholders and their varied interests?

The objectives of the national draft climate change policy are:

- i. reducing or avoiding greenhouse gas emissions from all emitting sectors
- ii. enhancing carbon sinks
- iii. conserving and building resilience of human and natural systems to adapt to the adverse impacts of climate change, including through capacity building and the application of cleaner and energy efficient technologies
- iv. protection of the natural environment and human health
- v. enhanced agricultural production and food security

and is premised on various principles, namely that:

- The response to the climate change challenge must be sustainable;

- The response to climate change will require a consultative and multi-partite approach;
- The response to climate change must follow the precautionary approach;
- The response to climate change must be multisectoral and include mitigation and adaptation actions; and
- The response to climate change must be evidence-based.

It is indeed the intention of the government of Trinidad and Tobago to engage all stakeholders in meaningful dialogue and participation in the implementation of the policy. The industrial sector is a key player in this regard and the government will be looking to partnerships to this end.

It is no longer the case that to address climate change there must be a loss of businesses and reduced profitability. Recent experiences indicate that there can be nothing further from the truth. The government is of the view that mitigating climate change offers enormous business opportunities for the private sector and is ready to engage with business and industry to maximise these opportunities. Opportunities include renewable energy technology research and development, employing cleaner production technology, thereby minimising waste management costs and increasing profits, energy efficiency technology research and

development, employing energy efficiency and minimising energy costs as well as research into carbon capture and storage.

On this latter technology, the IPCC has identified it as a critical technology to be employed if the world is to aspire to restricting temperature increases to a maximum of 2 degrees Celcius. Trinidad and Tobago has a long history of enhanced oil production employing carbon dioxide injection and therefore considerable experience in the technology. There are a few outstanding issues that need to be resolved before the technology is fully commercialised, but in order to maximise the full potential of this technology Trinidad and Tobago must be in a state of readiness. The full development of this technology provides the business and industry sector in Trinidad and Tobago with a unique opportunity to capitalise on the potential benefits, including on carbon trading at the international level, given the experience already resident in the sector. The government has supported this technology at the international climate change negotiations and in order to facilitate the engagement by business and industry, the Cabinet has agreed to participate in the Australian Global Carbon Capture and Storage Initiative. This initiative seeks to exchange experiences and build capacity for the deployment of the technology. You should be hearing more on this initiative as it progresses.

Of course opportunities abound for public sector and private sector to partner in this research and development within our nation. The responsibility and commitment of this Government to promote and facilitate a low carbon economy, must be matched equally by a responsible energy sector (multinationals, national and public sector corporations) to explore ways to make CCS fully operational.

There also exists business opportunities under the Clean Development Mechanism (CDM) of the Kyoto Protocol which offers the private sector a chance to participate in the international carbon market through emissions reductions activities. The government has designated a national authority for the CDM and it appears that some outreach activities and collaboration with the business community is needed in order to maximise opportunities under this mechanism.

The draft national climate change policy also envisages the exploration of the feasibility of a local carbon market through a cap and trade system and the business sector will be fully consulted at the appropriate time.

There are opportunities here also for the corporate sector to engage in, or increase their involvement in vulnerability and adaptation activities at the community level. There is therefore no shortage of opportunities for the business and industry sector to partner with the government as we take Trinidad and Tobago toward a low carbon, climate resilient economy.

There has always been a role for corporate involvement in the economic development of nations since the late 1800s when the corporate form of business emerged. This role expanded to include a concern by corporation to engage in philanthropic, then deep social and community altruism. Strategic CSR replaced adhoc or even sectoral giving. Subsequently, the extending of CSR to include environmental issues became well accepted over two decades ago. The latest frontier for CSR is corporate engagement with the climate challenge at the internal and external levels- concerned about their own carbon footprint and contributing also to the national climate agenda. Here in Trinidad and Tobago we continue to applaud the ways in which our business community continues to push the boundaries of CSR and to partner meaningfully with the government towards achieving sustainable development.

I take this opportunity to thank the STCIC the conference organisers and this attentive audience for allowing me to share with you some of the ideas and intents of the government in addressing climate change. We look forward to engaging business and industry in a meaningful way that can maximise opportunities and result in outputs that will redound to the benefit of the country, as Trinidad and Tobago pushes ahead with our climate change and development agendas.

Thank you for listening.