



GOVERNMENT OF THE REPUBLIC OF TRINIDAD AND TOBAGO
MINISTRY OF TRADE AND INDUSTRY

*Association of Professional Engineers
of Trinidad and Tobago
Technical Conference 2018
“Engineering for
Competitiveness: Rebooting
our Economy”*

REMARKS

SENATOR THE HONOURABLE PAULA GOPEE-SCOON
MINISTER OF TRADE AND INDUSTRY

12TH SEPTEMBER, 2018

Good morning to you all.

I am indeed honoured to represent the Minister of Trade and Industry Senator the Honourable Paula Gopee-Scoon, who is unable to attend owing to Parliamentary obligations. She extends her regards to APETT's President, other the Executive and the wider membership and anticipates successful conference. The members of the Association of Professional Engineers of Trinidad and Tobago (APETT) are commended for hosting the 2018 Technical Conference, aptly titled "*Engineering for Competitiveness: Rebooting our Economy*".

History of Engineering in Trinidad and Tobago

Historically, engineers have played an instrumental role in the development and advancement of all societies. When reflecting on the word "*engineer*" one instinctively thinks of the versatile minds bridging the gap between scientific knowledge and society engineers are largely responsible for industrial progress of economies improvements in renewable energy technologies and solutions to global health challenges and music.

This has been truly exemplified in the development of the engineering field right here in our twin-island nation. Developments in this field date back to pre-independence

The country's first education plan which came even before our Independence propelled by the late Dr. Eric Williams is perhaps responsible for the many engineers here today.

From a modest beginning of 28 students in the Academic Year 1961/62, the Faculty of Engineering at the University of the West Indies has produced it is estimated over 9000 graduates to date in a variety of engineering fields.

It is also important to highlight the advent of our own University – the University of Trinidad and Tobago which, when initially established, focused solely on programmes in engineering and technology. I also note that an agency of the Ministry of Education, the MIC Institute of Technology, offers technical and vocational training designed specifically for engineering students through its two year Manufacturing Engineering Programme.

Economic Outlook – Importance of Engineering

But what does the economic climate look like for today's engineers? Over the past few years, Trinidad and Tobago's economy has endured the inevitable consequences of external shocks because of its energy dependence.

Plummeting oil prices resulted in the decline in real Gross Domestic Product (GDP) and increases in the unemployment rate. Today, through decisive policy action by Government, we have made strong and encouraging progress back to a place of economic stability and on our way back to growth. Overall economic growth for 2018 is forecast to be 1.9% (IMF), 1.6% (S&P) and 1.5-1.8% (Ministry of Finance). Additionally, growth projections for 2019 and 2020 are 2.2% and 2.9% respectively.

Looking more closely at sector specific data, it should be noted that many of the areas which contribute directly to our country's GDP are heavily dependent on your work, the work of engineers. According to the 2017 Review of the Economy, these sectors are:

- Manufacturing, including the manufacture of petroleum and chemical products – 18%
- Mining and quarrying – 10.7%
- Construction – 6%
- Electricity/Gas and Water supply – 3.6%
- Information and communications – 3.2%

Engineering and Diversification

Our economy over time has gone through several periods of booms and busts however, given the value and the growth potential of these previously mentioned sectors as well as the wider services sector, Trinidad and Tobago stands poised to further boost our economic expansion and reboot our economy, particularly through the intellectual capabilities of professionals such as yourselves.

The question posed to you today is: *Which industries and sectors require your talents to increase competitiveness and expand through reengineering?*

1. Energy Industry

Recently we witnessed the signing of the terms of the development of cross-border natural gas from the Venezuela Dragon Field between the National Gas Company, Venezuela's state oil company PDVSA and multinational Shell allowing Trinidad and Tobago to process and monetize natural gas from Venezuela's Dragon field. This follows from improved gas production from the Juniper development and also looks to the Angelin development and other cross border gas projects.

This represents Government's intention to sustain the petrochemical sector and open up opportunities in the sector for process engineers, mechanical engineers, production engineers, and petroleum engineers just to name a few.

In the case of Petrotrin, there is still opportunity for a range of activities, growth and employment. A new exploration and production company will reactivate and reenergize new initiatives and prospects. Notwithstanding the opportunities in the energy sector, we must be mindful that oil and gas are finite resources and sole dependence on these commodities will only increase the nation's susceptibility to exogenous shocks.

Therefore we must be serious about harnessing the opportunities in other sectors in an effort to expand our productive base, enhance our export capacity, increase our foreign exchange earnings and employment levels. This is distinctly mapped out in the Government's as Vision 2030 which is the blueprint for the economy.

2. Manufacturing

The fourth industrial revolution is upon us. Many countries have been riding the technology wave, in an effort to expedite development. While we can boast to some extent of automation, involving advanced technology and robotics, to increase our competitive edge in terms of quality and price in the regional and international landscape, we must perfect, innovate and distinguish our products and services through among other things, an improved talent pool.

Here I must draw to your attention that the Ministry of Trade and Industry through exporTT has launched a research and development facility and as engineers there are opportunities for innovation among your businesses. Our local manufacturing sector is considered the second largest non-energy sector, it recorded a significant 3.2% contraction in 2017.

Whilst output in the food and beverage industry continues to increase through the expansion and regional market dominance of several large companies like Bermudez, Kiss and KC Confectionery, there are other industries such as wood and wood products; textile, garments and footwear; and chemicals and non-metallic minerals, which need to find technological and innovative production solutions to expand growth of the sector. This therefore creates an opportunity for engineers to harness their talents to contribute to the manufacturing sector. If we are to compete

internationally, we must not just trade, we must meet the demand for new, indigenous products and here lies an opportunity to contribute to our national development and long-term economic growth.

The Government is preparing the way with the creation of economic spaces, by example, the Phoenix Park Industrial Estate - a new state-of-the-art Industrial Park covering some 133 acres and targeting firms in the areas of high-value and light manufacturing in emerging industries (such as electronic technology, information technology, energy-saving ecological building materials and biotechnology). Ten Chinese firms are to be located on the Park. Already, there is interest by Chinese companies in populating the Park with facilities for the manufacturing of glass powder, air conditioner, ceramics and integrated housing; paper converting, wood processing, communication equipment, building materials and food processing. While there is international participation there is much space for local enterprise.

3. Maritime Sector

The Maritime sector has enormous potential for revenue generation, employment creation and foreign exchange earnings. The domestic maritime sector is poised for growth in the areas of port operations and logistics, dry-docking and yacht/ship repair, and transshipment. It therefore has the potential to be a significant employer.

In the area of **Ship Repair and Dry Docking**, the government has embarked on the development of dry-docking facilities at La Brea. The project is estimated to take four (4) years to complete, it will generate 5,000 jobs, increase the country's GDP by 7% and generate much needed foreign exchange.

The University of Trinidad and Tobago (UTT) will also through an agreement, train citizens to satisfy the demand for engineers during the construction and operational phases. In the areas of **Port Operations, Maritime Logistics, Transshipment and Cold Stacking**, the support of engineers is also required. Along the way I am trying to point out the possibilities for engineers but participation is influenced by mindset and perspective.

4. Creative Industries

The Cultural and Creative Industry (CCI) is among the most rapidly growing sectors across the globe significantly influencing income generation, employment opportunities and export earnings. The industry generated revenues of ¹US\$2,250b in 2013 and employed 29.5 million people. The CCI is important to a country's development plans.

The Government has prioritized the Creative Industries as an area for diversification. The industry, which encompasses Film, Fashion and Music, contributes as it is some 5.15% to Trinidad and Tobago's GDP.

In order to maintain high standards and ensure demand for finished products, the local Creative Industry depends on engineers. The film industry² utilizes mechanical engineers to for props design and mechanical and structural devices. This industry is burgeoning and perhaps you can be a part of the industry's development.

¹ Study on the cultural and creative industry (CCI) by Ernst and Young, commissioned by the International Confederation of Authors and Composers Societies (CISAC),

² According to Glew Engineering, which is a Silicon Valley (United States based) consulting firm

In the area of Music which is intricately tied to Film there is also a need for various types of engineers including Acoustical Engineers and Mixing Engineers. Mechanical engineers are also critical to the operational efficiency in the local Fashion subsector. So that growth of the sector might be slow, but promising and tied to our country's development agenda.

5. Agricultural Sector

The Agricultural sector has also been given a place of priority in the diversification of the economy, in the first instance increase the country's food security, control the good import bill, and provide sustainable employment. In 2017 it was reported that agriculture contributes less than 0.5% to GDP and employs an estimated 4% of the population but the growth potential is enormous.

The Ministry, through the Urban Development Corporation of Trinidad and Tobago, is developing an Agro-Processing and Light Industrial Park in Moruga expected to be completed by June 2019 and will allow for:

- the processing of raw materials and intermediate products, food and beverage products; and
- canning, bottling and freezing of finished products among others

With Government's support, it is expected that agri-entrepreneurs will continue to build capacity, improve efficiencies and production levels, and expand their activities beyond traditional local and regional markets.

In addition to the opportunities provided by this Park, the Ministry of Agriculture, Land and Marine Resources also provides opportunities for engineers in the sector.

There is currently limited adoption of technology in the agriculture sector, however with the advent of the Fourth Industrial Revolution it is imperative that our local farmers utilize the advancements in technology to increase their competitiveness, productivity and sustainability. Engineers will therefore play a crucial role in addressing the challenges faced by the sector with respect to the adoption of new technologies.

Conclusion

Perhaps I should impress upon you the critical role you each play in the economic growth of our country. The Government's responsibility is to create an enabling environment, but equally important is your role as engineers in the expansion of the economy and ensuring the competitiveness in many sectors.

I thank the Association of Professional Engineers of Trinidad and Tobago and its members for the role that they have played in keeping this group of professionals together however, you are now challenged to consider the country's development agenda and recognise where you are required to contribute.

Thank you.