

# Creating a hybrid economy: oil and manufacturing in Trinidad and Tobago

BY KAREN DE MONTBRUN, PRESIDENT, TRINIDAD AND TOBAGO MANUFACTURERS' ASSOCIATION

The year that commercial oil production began in this country – 1908 – is perhaps the most significant one in Trinidad and Tobago's economic history.

For more than 100 years, oil has played a major role in transforming this country's economy.

Oil production peaked in the late 1960s, leading to an economic 'boom' between the years 1974 and 1981. High levels of domestic production and high oil prices resulted in expansion of the country's Gross Domestic Product (GDP), high levels of government revenue and expenditure, a strong foreign exchange reserve position, rapid growth of income, and a significant reduction in the level of unemployment.

Trinidad and Tobago's energy sector suffered a decline in production and reduced prices in the 1980s, but experienced a rebirth with the development and growth of a natural gas industry. Today, T&T is the largest exporter of LNG to the United States accounting for about 76 per cent of its LNG imports at the end of 2008.

## Oil and the Trinidad and Tobago manufacturing sector

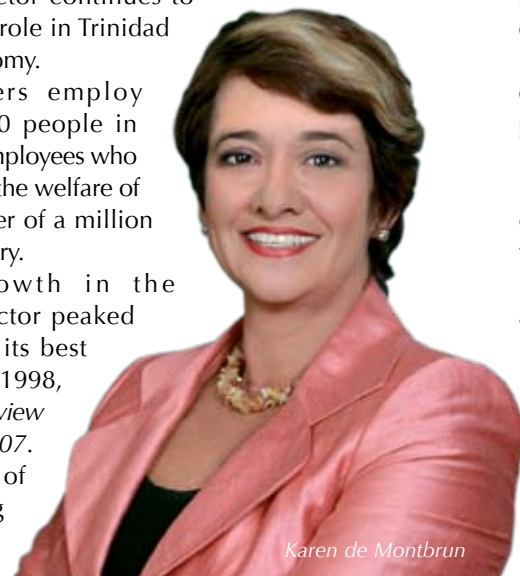
The discovery of oil in Trinidad and Tobago has had a major impact on the development of this country's manufacturing sector. The strong growth of the economy following the start of commercial oil production provided fertile breeding ground for new businesses, and spurred the progressive growth of the manufacturing sector.

When the Trinidad & Tobago Manufacturers' Association (TTMA) was created in 1956 we had exactly eight members. Today our membership stands at more than 300, and the manufacturing sector continues to play an important role in Trinidad and Tobago's economy.

TTMA members employ more than 55,000 people in sustainable jobs, employees who are responsible for the welfare of more than a quarter of a million people in this country.

In 2007, growth in the manufacturing sector peaked at 14.9 per cent, its best performance since 1998, according to *The Review of the Economy 2007*.

However, growth of the manufacturing sector is expected to slow to 4.2 per



Karen de Montbrun

cent in 2008, although the contribution of the sector to GDP is expected to remain stable at 8.2 per cent.

As an oil producing country, the Trinidad and Tobago manufacturing sector has benefited from the availability of cheap fuel, although other issues such as rising raw material costs, increases in freight rates, the unavailability of labour and inefficiencies at the country's major ports of entry pose significant challenges to growth. It is important to note here that the country's manufacturing sector played a critical role during the contraction of the economy in the mid-1980s, when more locally produced goods were consumed.

The shift from an oil-based economy to a gas-based one has opened up opportunities for local manufacturers, particularly with respect to downstream manufacturing.

Gas-based projects proposed over the next five years – including an aluminium smelter, steel, ethylene and polypropylene plants – will produce products that can be used by the local manufacturing sector. Other downstream, natural gas-based manufacturing opportunities would come with the establishment of facilities for the production of melamine, urea ammonium nitrate, a maleic anhydride processing facility and an acetic acid plant.

Manufacturers will be able to benefit from the competitive advantage of the energy sector through the establishment of linkages between the energy and manufacturing sectors.

In fact, the Trinidad and Tobago Manufacturers' Association believes there must be a transformation of the economy, with the understanding that the energy sector will continue, for some time, to provide the main thrust for growth and development. The ideology must not be 'diversification away from energy' but 'transformation through energy' – the creation of a hybrid economy – energy and non-energy.

The importance of a reduced dependence on oil and gas is even more apparent in light of the current global financial crisis, particularly since the prices of these commodities – and T&T's major source of income – remain volatile.

A sudden decline in energy prices would lead to a decline in this country's revenues, and therefore measures must be put in place to mitigate the effect that this will have on the local economy.

The manufacturing sector would be severely impacted by a slowdown in the global economy, particularly in our two largest markets – the United States and Caribbean Community (CARICOM). Reduced demand for this country's exports would negatively affect the domestic economy and the society.

## The way forward

The creation of a hybrid economy is one step in Trinidad and Tobago's economic transformation. Given that the country's

oil and natural gas resources are finite, expansion into alternate energy sources including solar, wind, and bio-mass/bio-fuel, will become necessary.

Trinidad and Tobago is blessed not only with oil and gas, but sun and wind, all of which are natural resources that can be harnessed for sustainable energy.

The Caribbean has several renewable energy options available – such as Solar Energy, which involves the conversion of sunlight into electricity, usually by solar cells, also known as 'Photovoltaics.' Research shows that the cost of producing finished solar panels can be reduced by as much as 80 per cent, if the photovoltaic component is 'printed' onto the aluminium backing sheets. The decreasing cost of Solar Photovoltaics has led to massive growth in its use, both for residential and commercial use worldwide since the year 2000.

Wind energy is another viable renewable energy alternative, which also has the advantage of convertibility into electricity without the deleterious effects of greenhouse gases being released into the atmosphere. The cost of wind energy is determined by the initial cost of the wind turbine installation, the interest rate on the money invested and the amount of energy produced.

While the costs of installing wind turbines and subsequently converting wind into electricity is higher per kilowatt than conventional forms of electricity, continued research into wind energy promises to lead to reductions in costs over time.

In addition to solar and wind energy, great potential lies in the production of ethanol fuel, which is fast becoming the leading choice as an alternative fuel.

Ethanol is produced by fermentation of sugars derived from wheat, corn, sugar beet and sugar cane, and therefore the opportunity is available to invest heavily into agriculture for the purposes of lowering regional transportation costs and thereby increasing efficiency.

The use of ethanol blended with automobile gasoline will also reduce carbon monoxide emissions, which is another incentive to using it as an energy source. A viable ethanol industry can also earn foreign exchange from exporting to viable markets such as the US and Europe.



Trinidad and Tobago has significant renewable energy potential

The TTMA recognises that local manufacturers must examine and take full advantage of the opportunities that lie in alternate energy, which will illustrate Trinidad and Tobago's capacity for excellence in innovation, 'cutting edge' technology, and efficient business solutions. In partnership with one of the country's top energy producers, the TTMA is embarking on the development of an alternate energy policy for T&T which will be presented to the government for its consideration.

Also, in its 2007-08 Budget recommendations to the government, the TTMA proposed that research and development studies be conducted to determine the competitiveness of alternate energy industries. New legislation, guided by government policy that recognises the importance of renewable energy, must come into effect to create the legal framework upon which renewable energy industries will be built.

There's no doubt that for many years to come, this country's economy will continue to rely heavily on income generated from its energy resources. It's important to note, however, that we must prepare now for a future in which fossil fuels are either depleted or economically inefficient, and would no longer be able to drive our industries and meet our economic activity requirements.

Local manufacturers must rise to the challenge and focus on innovation and entrepreneurship in an effort towards continuous diversification of the economy.

Our common vision should be one of Trinidad and Tobago's manufacturers excelling and growing in global markets. The TTMA stands ready to answer the challenge. □