

On Wednesday 22nd June, EUROCHAMTT hosted a 1-day workshop under the theme “**GREEN URBAN TRANSPORT SOLUTIONS FOR A REVITALISED POS AND HEALTHIER COMMUNITIES.**” The workshop took place at City Hall, Murchison Brown Auditorium, from 8.30 – 4.30 p.m. with the endorsement of His Worship, Mayor of Port of Spain, Councillor Keron Valentine.

The aim of the workshop was to sensitise communities about the feasible options for greener transport and promote dialogue on elements of a green transport policy and action plans for POS. Green transport examines the full mix of healthier and safer ways to be mobile in the town centre from greener buses, hybrid or electric cars, pedestrianizing streets, cycling, easier access for wheel chairs etc. and the design and infrastructure requirements to support these goals. The ultimate goal is a more sustainable and revitalised Port of Spain city. Elements of this drive are green spaces and water management, sustainable design and mobility, sustainable green services and sustainable urban character

CIVIL SOCIETY M.O.U.

EUROCHAMTT with five other civil society groups whose representatives participated in the workshop are moving towards an MOU to share information and work together given the challenges and the size of the task ahead in promoting POS as a sustainable city. Discussions are already underway with the POS Corporation on potential priority actions to incorporate green transport solutions and improve mobility subject to approval of the Councillors and Ministry of Works and Transport.

WORKSHOP ATTENDEES

- City engineering and communications staff
- Representatives of the UNDP, IADB
- Representatives from Government Ministries including: Ministry of Planning and Development - Town and Country Planning Division as well as the European Development Fund Unit and from the Office of the Prime Minister
- Representatives from other municipal corporations including: Arima Borough Corporation, Tunapuna/Piarco Regional Corporation and the Point Fortin Borough Corporation as well as the Commonwealth Local Government Forum (Caribbean representative)
- UTT, NGC CNG Company Limited a subsidiary of The National Gas Company of Trinidad and Tobago Limited (NGC) and Environmental Management Authority
- Private sector representatives: architectural firms, commercial banks, energy and environmental firms.

WHY GREEN URBAN TRANSPORT



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MAKE CITIES INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE



ELYX by YAK

The United Nations 2030 Sustainable Development agenda which Trinidad and Tobago supports has established 17 broad goals toward Sustainable Development. Among these are Goal 11: **Make cities and human settlements inclusive, safe, resilient and sustainable.** *Goal 11 includes 1 sub-goal for transport: ‘by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.’*



CLIMATE CHANGE

The recent Paris Climate Change Agreement has also highlighted the role of Cities as well as the transport sector in contributing to the long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels by 2020; and to continue to aim to limit the increase to 1.5°C by 2030.

Trinidad and Tobago's response has been a move to convert public transport buses from diesel to cleaner energy CNG buses and there is also an incentive to encourage maxi taxis to convert to CNG

HEALTH REASONS - EMA

Green transport is also about human health. According to the EMA booklet entitled: 'Health and Environmental Effects of Air Pollutants resulting from Vehicle Emissions, *'your vehicle may be the source of several gas emissions impacting on respiratory health including:*

- Oxides of Nitrogen
- Sulphur dioxide
- Carbon Monoxide
- Volatile Organic Compounds
- Ground Level Ozone
- Particulate Matter
- Lead.

QUALITY OF LIFE

Port of Spain as a living City is at risk with its declining population. However, other municipalities face similar problems affecting quality of life and especially traffic and air pollution.

KEY POINTS PRESENTED BY SPEAKERS

Presenters provided a significant amount information and advice for participants which will now be taken to the authorities for consideration and action. The following are extracts from these presentations.

Examples of Policy and Initiatives in the EU

Key points from the Presentation by Ms. Natasha-Helena Zoric; Environmental Programme, Delegation of the European Union to Trinidad and Tobago

- TT Government has in place an established Framework (policy and legislation) for implementing many improvements towards more sustainable cities. See examples below:
- EU will launch a programme under the 11th EDF in support of innovation. Alternative energy/fuels could be addressed.
- European Innovation Partnership (EIP) Smart Cities and Communities help cities and communities, business and civil society to implement smart city solutions at much greater scale and speed. It includes applied innovation, better planning, a more participatory approach, higher energy efficiency, better transport solutions, intelligent use ICT, etc.: <http://ec.europa.eu/eip/smartcities/>.
- Numerous references on EU policy, programmes and projects on what already exists and works may be found in the accompanying presentation.

Examples of existing Policy and Legislation to support Sustainable Cities

- Strategy for Reduction of Carbon Emissions in Trinidad and Tobago, 2014 - Action plan for the mitigation of GHG emissions in the electrical power generation, transport and industry sectors, August 2015
- The National Climate Change Policy; EMA; 2011
- Framework for Development of a Renewable Energy Policy for Trinidad and Tobago; Ministry of Energy, January 2011
- Fiscal incentives to promote RE and EE; included in the Finance Act No. 13 of 2010 and came into effect on January 1, 2011
- Environmental Management Act 3, 2000
- National Environmental Policy, copy edited, EMA, 2009
- EMA Air Pollution Rules
- Litter Act 27 of 1973
- National Waste Recycling Policy, February 2015.

The Transport challenges to be addressed in POS and the City Centre

Key points from the Presentation by Dr. Trevor Townsend; Senior Lecturer (Transportation Engineering); The University of the West Indies and also Association of Professional Engineers of Trinidad and Tobago (APETT)

- Population decline in POS is among the largest of the cities (24.61% between 2000 and 2011) and POS is now considered a ‘commuter city,’ with 350,000 – 400,000 additional vehicles entering daily;
- There are numerous issues to address to improve mobility including the lack of intra city transport, no carpooling, parking constraints/curb side parking, street vending, difficult walking experience with uneven sidewalks for pedestrians as well as all persons with disabilities, vagrants on pavements and flashing lights with no support for crossing.

Public Urban Transport and Public Private Partnership

Key points from the Presentation by Lalitha Bala Cetty Registered Engineer in Transportation from Board of Engineering of Trinidad and Tobago; Certified in Transportation & Logistics (CTL), APICS

- Green transport is a category of sustainable transport which uses human power, animal power, public transportation, smart design, and renewable energy (Ecoseed 2008). It can also contribute to the carbon reduction strategy.
- In the green transportation hierarchy, pedestrians followed by bicycles are at the top of the hierarchy and single occupant vehicles are at the bottom in terms of priorities which should be promoted. Public transport is in the middle.
- There are many different options to consider for public transport with bus and trams being among the best for Trinidad and Tobago provided they are supported with a dedicated lane.
- PPP approaches to financing public transport have been used in many cities but careful attention is needed on the

selection of the PPP partner and Government management structure for PPP.

Cycling

Key points from the Presentation by Gene Samuel Local Cycling Hero & Sports Legend and Geronimo Cycle & Sports Ltd.

- Cycling contributes to a cleaner environment and physical health in many ways.
- It is important to note that there are 2 types of cyclists: the enthusiasts and those who can’t afford any other means of transport.
- Surveys show that dedicated lanes, off track special facilities promote bicycle travel and such designs and facilities promote the value of properties in the area.
- To support cycling, consideration may be given to the following suggestions: showers at work; all new roads should be designed to support cycling; bike stands, locks, cameras and surveillance equipment would support security of bikes; consideration for promoting bike-to-work day.

Mobility Challenges and Infrastructure

Key points from the Presentation by Onika Morris- Alleyne, Transport Policy and Planning Professional

- We need to reject the idea that streets are for cars but rather adopt the thinking that streets are to allow people to move around and to facilitate public interaction with activity on either side.
- Priority for a street can change and not all streets need to serve all uses at the same time.
- Political will is required to rethink streets.
- Evidence shows that redesigned streets with people as the priority have had positive, commercial impact.
- Concept of economic value of streets needs to be considered in the redesign.



Exploring Waste to Energy/ Bio Gas

**Key points from the Presentation by Mr. Kamel Singh
Design and Lead Project Manager
Energy Dynamics Limited**

- It is technically feasible to convert gas from landfills and upgrade to CNG gas to power vehicles in Trinidad and Tobago.
- Gas based vehicles produce 95% less carbon dioxide than do vehicles powered by diesel or petrol. They also produce less particles and soot.
- Landfill gas release is a loss of a resource which could be used not just for CNG but also in the production of electricity.
- There is also lost opportunity in terms of potential jobs which could be generated from landfill gas production value chain: recycling, recovery, maintenance, electricity generation and synthetic fuel manufacture.

**Key points from the Presentation by Mr. Jimmy Mphelane,
Managing Director, Air Liquide Trinidad and Tobago**

- Biomethane is a clean, safe fuel producing lower emissions of CO² and is well suited to transportation.
- The Air Liquide Group's technologies, operations and services and retail experience could be leveraged to bring the opportunities to Trinidad and Tobago.
- Air Liquide uses a digester to process waste and can handle all kinds of waste including household, sewage, agricultural and industrial waste.
- Air Liquide has implemented a number of biogas to grid injection projects around the world.

Keeping the Environment Green

**Key points from the Presentation by Jean-Baptiste Guiard,
Managing Director, Trinidad & Tobago Tires Ltd (Michelin Tyres).**

- Tyres are built with rubber, steel, textiles and fillers and the average car tyre weighs around 7.57 kg, truck around 56.11 kg and large agricultural truck tyre around 92 kg. Trinidad and Tobago takes about 16 tonnes of tyres to the landfills. When

taken to the landfills, there is risk of chemical toxins and fire.

- One perspective is that an immediately banned on the importation of used tyres would reduce the pressure on the landfills. Used tyres are permitted duty free into this country and within 3 – 4 months they are no longer safe or needed and could end up at the dump and although recapping is promoted as the reason for duty free importation of used tyres, the service providers do not handle used imported tyres.
- In countries such as France, it is illegal to take tyres to the landfill and producers and importers must pay a fee for collection and handling. In Trinidad and Tobago SWMCO collects old tyres for a fee but does it have the systems in place to shred, export or recycle?

Improving Vehicles

Key points from the Presentation by Ian Smart, Renewable Energy Engineer, Smart Energy Limited

- Compared to gasoline based cars, electric cars have a much lower lifetime maintenance cost.
- Emissions are lower than gasoline, hybrid and even CNG powered vehicles.
- There are various means and types of facilities for charging electric cars including charge stations, solar technology and wireless charging.

PRESENTATIONS WERE DELIVERED BY:

- The Deputy Mayor of Port of Spain, Aasha Permanand
- Natasha-Helena Zoric, International Cooperation Advisor, Environment and Human Rights portfolios, Delegation of the European Union to Trinidad and Tobago
- Dr. Trevor Townsend, Senior Lecturer (Transportation Engineering), The University of the West Indies and also Association of Professional Engineers of Trinidad and Tobago (APETT)
- Lalitha Bala Cetty, Registered Engineer in Transportation from Board of Engineering of Trinidad and Tobago; Certified in Transportation & Logistics (CTL), APICS, and currently an Advisor to Public Transport Services Corporation (PTSC)
- Gene Samuel, Local Cycling Hero & Sports Legend and owner of Geronimo Cycle & Sports Ltd.
- Barry Edghill, Past President of Madonna Wheelers Cycling Club
- Onika Morris-Alleyne, Transport Policy and Planning Professional
- Jimmy Mphelane accompanied by Sergio Gutierrez, Managing Director, Air Liquide Trinidad and Tobago
- Kamel Singh, Design and Lead Project Manager, Energy Dynamics Limited
- Jean-Baptiste Guiard, Managing Director, Trinidad & Tobago Tires Ltd (Michelin Tyres).
- Ian Smart, Renewable Energy Engineer, Smart Energy Limited

Special thanks to our Moderators and Team Members for the workshop:

- Radha Rampersad, PhD in Humanities, Media and Communications Advisor- Office of The Mayor, Port of Spain Corporation - Chairperson of the morning proceedings;
- Margaret Mc Dowell, Urban Planner, Trinidad and Tobago Society of Planners - Moderator for Panel 2;
- Eric Kipps, Operations Director of the Jaric Group of Companies and
- Marie Louise Norton-Murray, Project Management Professional and Development Economist and President of EUROCHAMTT- Moderator for Wrap Up and Conclusions;
- Rebecca Cockburn, Founder of RMC Language Consultancy -Vote of Thanks.
- Donna Ghany, Corporate Secretary, EUROCHAMTT
- Camille Hernandez, Accounting Assistant, EUROCHAMTT.