



transport

Department:  
Transport  
REPUBLIC OF SOUTH AFRICA

# LOW-CARBON TRANSPORT SYSTEMS IN SOUTH AFRICA: THE BRT CASE

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# BACKGROUND

- Climate change and the depletion of global oil reserves are some of the most pressing challenges facing the transport sector this century.
- Transport is the second biggest emitter after energy
- Road transport is the fastest growing source of greenhouse gas emissions, accounting for around 19% of global energy consumption, and is said to be responsible for around 23% of fossil-fuel-related carbon dioxide (CO<sub>2</sub>) emissions, equivalent to 13% of global greenhouse gas (GHG) emissions.
- To address this, the Department of Transport is implementing a “Public Transport Strategy” of Integrated Public Transport Networks (IPTNs) in 13 municipalities, as one of the options aimed at promoting sustainable mobility, while also giving effect to the National Development Plan and the White Paper on National Climate Change Response.

# LEGISLATIVE MANDATE

- Legislative mandate for the implementation of sustainable transport systems such as the BRT, and the sector's transition to a low carbon economy and society in SA is derived primarily from the following, the list of which is not exhaustive:
  - ✓ White Paper on National Transport Policy (umbrella transport sector policy)
  - ✓ National Climate Change Response Strategy
  - ✓ Public Transport Strategy and Implementation Plan
  - ✓ White Paper on National Climate Change Response (transport sector climate change mitigation is one of the flagship programmes)
  - ✓ National Development Plan
  - ✓ Other interventions, such as the Presidential Infrastructure Coordinating Committee and SIP 7, which calls for “Integrated Urban Space and Public Transport System”. Public transport is one of the key components of the National Development Plan.

# BRT STATUS QUO

- One of the White Paper on National Climate Change Response's mitigation options under near-term Transport Flagship Programmes is facilitation of the development of an enhanced public transport programme, of which BRT is key, is the promotion of lower-carbon mobility in five (5) metros and in ten (10) smaller cities. To date, ongoing work is underway in the following metros and cities:
  - ✓ Cape Town: "My Citi" BRT programme - operational, network being expanded further.
  - ✓ City of Joburg: "Rea Vaya" BRT programme - operational, network being expanded further.
  - ✓ eThekweni: "Go Durban" BRT programme - network construction underway.
  - ✓ Nelson Mandela Bay: "Libhongo Lethu" BRT programme – network under construction.

# BRT STATUS QUO (CONTD.)

- ✓ Ekurhuleni BRT programme: network is being constructed.
- ✓ Tshwane: “A Re Yeng” BRT programme – Network is being constructed and the BRT service will be operational soon.
- ✓ Mangaung: Network planning underway.
- ✓ Rustenburg: “RRT” BRT programme: BRT construction underway.
- ✓ George: “Go George” BRT programme - construction underway.
- ✓ Mbombela: BRT network construction underway.
- ✓ Buffalo City BRT programme: Network planning underway.
- ✓ Msunduzi BRT programme: Network planning underway.
- ✓ Polokwane: BRT programme: Network planning underway.

# BRT BENEFITS

- Environmentally sound public transport system. The implementation of the BRT systems will lead to, among others:
  - ✓ Reduced GHG emissions from road transport
  - ✓ Reduced energy consumption, as the sector relies heavily on fossil based fuels
  - ✓ Less travel times and traffic congestion, which contributes to improved urban air quality and associated health benefits
  - ✓ Stimulation of modal shift, from private vehicles to clean, safe, affordable, financially viable, socially acceptable and environmentally-sound public transport system in the form of BRT.

# OTHER DOT CC-RELATED WORK UNDERWAY

- Implementation of the Marine Energy Efficiency Framework to address GHG emissions from shipping (in line with IMO Resolutions)
- Phasing out of Chapter 2 aircraft, in order to promote aviation fuel efficiency and noise pollution (to be implemented from June 2015)
- Preparation of SA's "ICAO State Action Plan" for the reduction of CO<sub>2</sub> emissions from aviation is currently underway, and the Action Plan will be submitted to ICAO for adoption once finalised
- Non-motorised Transport (NMT) Facility Guidelines are under review, in order to promote standardisation and access to these facilities throughout the country

# OTHER DOT CC-RELATED WORK UNDERWAY

- NMT Policy currently being finalised. The policy is aimed at, among others, prioritising walking and cycling over private car use, while also promoting NMT as an essential element of public transport and GHG emissions reduction from the sector
- Tier 2 Transport sector GHG Inventory currently under development, and will feed into DEA's National Communication to the UNFCCC and the National Biennial Report
- In order for the DOT to make targeted climate change mitigation interventions and contribute towards a low-carbon economy, a study to measure and reduce transport energy consumption in the road and rail sub-sector is underway, and will include an implementation plan

# OTHER DOT CC-RELATED WORK UNDERWAY

- In addition, the DOT, in collaboration with the German government, working through the Giz, has embarked on a project aimed at assessing the impact of passenger modal shift from road to rail (Gautrain Case Study), the results of which will be published soon, and we hope to ultimately register this project with the UNFCCC as a NAMA (Nationally Appropriate Mitigation Action).
- For the current MTSF, the DOT will formulate a Green Transport Strategy (GTS) and Implementation Plan by 2018, in collaboration with relevant stakeholders
- The GTS will consist of a basket of climate change mitigation measures geared towards achieving the ultimate objectives of sustainable development, transition to a low-carbon economy and the creation of green jobs in the sector, in line with the NDP.

# CONCLUSIONS & WAY FORWARD

- Most transport mitigation measures are long-term, and future DOT modal policies will incorporate climate change mitigation considerations
- Major shifts in the current transport system and other options, such as alternative fuels and shifting passengers and freight from road to rail and promotion of NMT also form part of the DOT's planned climate change mitigation interventions.
- There is considerable scope to develop mechanisms to both reduce and reward GHG emissions reduction efforts from the sector, including incentivising the uptake of BRTs) and putting in place measures to promote efficient and effective public transport systems, as well as NMT infrastructure.
- Successful implementation of climate change mitigation in the sector will further require collaboration with multiple stakeholders, and behavioural change is key in promoting public transport usage.

END

**THANK YOU**