



transport

Department:  
Transport  
REPUBLIC OF SOUTH AFRICA

# **AFRICA CLIMATE RESILIENT INFRASTRUCTURE SUMMIT CLIMATE CHANGE ADAPTAION**

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# BACKGROUND

- Transport sector is one of the fastest growing sources of greenhouse gas emissions.
- At the same time, the sector is also vulnerable to the impacts of projected climate change, particularly on infrastructure.
- Emissions in the sector are predominantly from road transport, including private, freight and public transport vehicles.
- However, the sector also offers a reasonably high climate change mitigation potential.
- The Department of Transport is determined to contribute its fair share to the national mitigation effort by implementing the White Paper on National Climate Change Response through implementing appropriate policies and flagship programmes.

## DOT POLICY DIRECTIVES

- The overarching DOT legislation is the 1996 White Paper on National Transport Policy, which, among others, calls for promotion of environmental protection and resource conservation.
- The strategic objectives for transport to achieve this include:
  - ✓ Integrated planning for the provision of transport infrastructure,
  - ✓ Integrated environmental management, including performance of environmental impact assessments (EIAs) and compliance with Environmental Implementation Plan as required under National Environmental Management Act (NEMA),
- In terms of the White Paper, issues to be considered in any subsequent policies, programmes and projects are environmental impacts, energy conservation and the conservation of scarce infrastructure construction materials.

## DOT POLICY DIRECTIVES (CONTD)

- In much broader terms, the policy calls for the country to adapt its economic growth policies to the requirements of environmentally-sustainable development, while balancing this with projected social and economic growth needs.
- This will be achieved through, *inter alia*:
  - ✓ Integrated infrastructure networks,
  - ✓ Integrated land planning,
  - ✓ Promotion of sustainable public transport,
  - ✓ Promotion of non-motorised transport (NMT), and
  - ✓ Movement of both freight and passengers from road to rail.

## **MITIGATION: PLANNING PROCESSES FOR EMISSIONS REDUCTION**

- DOT has developed a database for the analysis of emission trends, record keeping and has moved to Tier 2 analysis, which will offer more detailed information for road transport emissions,
- Currently updating Green House Gas Emissions Inventory, this is done under the 2006 IPCC guidelines,
- Inventory will assist the department in identifying additional areas for mitigation interventions across all modes of transport,
- DOT also in the process of developing an economic model that would assist with the reduction and monitoring of green house gases in the sector, e.g. freight transportation emissions along major corridors.

## MITIGATION: PLANNING PROCESSES FOR EMISSIONS REDUCTION (CONTD)

- Furthermore, the Department is currently in a process of implementing a number of practical measures in the form of projects and strategies that will have positive climate change co-benefits. These include:
  - ✓ Green Transport Strategy,
  - ✓ Green Government Motor Fleet Procurement Policy, future procurement government motor fleet, would be required to meet certain specifications, including energy efficiency, and air quality standards,
  - ✓ Energy Consumption and Reduction Strategy, which will be informed by the Climate Change Response White Paper, Long Term Mitigation Scenarios report, Energy Efficiency Strategy for the Republic, Public Transport Strategy, National Freight Logistics Strategy, and the DOT GHG inventory.

# **FLAGSHIP PROGRAMMES TO IMPLEMENT THE WHITE PAPER ON NATIONAL CLIMATE CHANGE RESPONSE (CONTD)**

- **Alternative fuels and Cleaner Technologies:**
  - ✓ **Conversion of public transport vehicles** for the dual use of conventional fuels and Compressed Natural Gas (CNG).
  - ✓ **Fuel switching:** the Department is looking at the uptake of broader fuel switching and upgrading. However, this requires collaboration with other Departments and stakeholders, including car manufacturers, oil refineries and, in particular, the Dept. of Energy (DOE), as the DOE has the main mandate on fuel specifications

## FLAGSHIP PROGRAMMES TO IMPLEMENT THE WHITE PAPER ON NATIONAL CLIMATE CHANGE RESPONSE

- The following climate change mitigation flagship programmes have been identified in order to give effect to the Climate Change Response White Paper:
  - ✓ **Bus Rapid Transit (BRT):** roll-out to twelve major cities/metros,
  - ✓ **Taxi Recapitalization Programme,** countrywide rollout,
  - ✓ **Integrated Transport Network Development,**
  - ✓ Shifting from **Road to Rail,** with an investment of R300 billion already ear-marked for rail infrastructure development and refurbishing, for passenger and freight transportation,
  - ✓ Promotion of **Non-Motorised Transport (NMT),** including the *Shova Kalula* (pedal easy) project and promotion of NMT-conducive transport infrastructure in city/town planning,
  - ✓ Proposed **High Speed Rail** on the Johannesburg-Durban (JHB-DBN) Corridor

## **CLIMATE CHANGE ADAPTATION**

- While transport contributes to climate change, this sector is also vulnerable to its adverse effects, including infrastructure damage.
- Technological advancement in the model vehicles (catalytic converters, and Air conditioners in the cars),
- Infrastructure development ( bridges and drainage systems),
- Public awareness and participation ( Logistic industry and other production industries), and
- Highway maintenance/upgrades or re-routing.

## **STAKEHOLDER ENGAGEMENT**

- The DOT is an active member of the following stakeholder committees:
  - ✓ Intergovernmental Committee on Climate Change,
  - ✓ National Committee on Climate Change,
  - ✓ Technical Working Group on Mitigation, and
  - ✓ National Committee for Sustainable Development.
- The DOT established the National Committee on Transport and Climate Change, which involves all transport stakeholders.
- In addition, the department is also involved in UNFCCC negotiations, under agenda items on finance, response measures, mitigation and sectoral approaches.

## **CONCLUSIONS AND WAY FORWARD**

- Most transport mitigation measures are long-term initiatives, and they require major capital investments and a paradigm shift within the current transport system.
- Short term mitigation interventions are being made to combat the effects of climate change in the transport sector, e.g. BRT rollout and the Gautrain project, including conversions of Taxis to use CNG;
- All future policies, programmes and projects will be aligned with the objectives of the “National Climate Change Response White Paper” (NCCRWP).

**THANK YOU**