DRAFT GREEN TRANSPORT STRATEGY

SUSTAINABILITY WEEK

TRANSPORT AND MOBILITY SEMINAR

07 JUNE 2018
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Carbon Footprint

Remember, "Objects in mirror are closer than they appear."
The GTS is a strategic document that INFORMS, and sets out the environmental directive of the DoT.

- **NATIONAL**
  - The Constitution of South Africa
  - National Environmental Management Act
  - *White Paper on National Climate Change Response Policy*
  - National Development Plan
  - The Public Transport Strategy
  - NATMAP 2050
  - National Strategy for Sustainable Development
  - Electric Vehicles Industry Roadmap

- **INTERNATIONAL**
  - UNFCCC / NDC’S & NAMA’s
Green Transport Strategy Development: GOVERNMENT’S POLICY DIRECTION

34% deviation below BAU emissions growth trajectory by 2020 and 42% by 2025
Transport has been identified as the fastest growing source of greenhouse gas emissions, accounting for around 10,8% of National GHG emissions.

Direct emissions from the transport sector from the road sector, account for 91,2% – mainly from the combustion of petrol and diesel.

The DOT is mandated to “maximize the contribution of transport to the economic and social development goals of our country by providing fully integrated transport operations and infrastructure”
GREENHOUSE GAS EMISSION PROFILE FOR TRANSPORT SECTOR

TRANSPORT SECTOR GHG EMISSIONS: CHART 1

- AVIATION
- MARITIME
- RAIL
- ROAD
GREEN TRANSPORT STRATEGY: THE CHALLENGE!!!
Green Transport Strategy:
VISION, MISSION, & GUIDING PRINCIPLES

VISION:
To substantially reduce GHG emissions and other environmental impacts from transportation with 5% by 2050

MISSION:
Support the contribution of the transport sector to the social and economic development of the country while incrementally initiating innovative green alternative transformations in the sector to assist with the reduction of harmful emissions and negative environmental impacts associated with transport systems.

PURPOSE:
The GTS will be the cornerstone of policy development within the transport sector regarding the lowering of GHG emissions, the contribution of transport into the green economy, the promotion of green sustainable mobility and the uptake of cleaner and more efficient technologies.

GUIDING PRINCIPLES:
The GTS is informed by the fundamental and substantive principles of sustainable development articulated in the National Strategy for Sustainable Development
Green Transport Strategy: STRATEGIC OBJECTIVES (1)

- Enabling the transport sector to contribute its fair share to the national effort to combat climate change in a balanced fashion, taking into account the DoT’s primary responsibility of promoting the development of an efficient integrated transport system, to enable socio-economic development;

- Engaging the low carbon transition of the sector, to assist with the aligning and developing policies which promote energy efficient and less carbon intensive mobility;

- Facilitating the sector’s just transition to a climate resilient and low carbon economy and society.
Green Transport Strategy: STRATEGIC OBJECTIVES (2)

To achieve **modal shifts** in the transport sector that reduce GHG, reduce congestion and improve temporal, spatial and economic efficiency - in particular, **by shifting passenger and freight transport from road to rail, and promoting public transport and non-motorised transport**.

To reduce fossil-fuel related emissions in the transport sector by promoting **norms and standards** and putting in place regulations that promote improved efficiency in fossil-fuel powered vehicles.

To promote the use of electric vehicles and environmentally sustainable low carbon fuels, including CNG, biogas, biofuels, and renewable energy to provide electricity for transport.

To promote strategies for delivering transport infrastructure and integrated transit planning that build climate resilience and minimize the environmental impact of transport infrastructure.
# Green Transport Strategy: INTERVENTIONS / INITIATIVES

<table>
<thead>
<tr>
<th>IMPLEMENTATION THEMES</th>
<th>STRATEGIC PILLARS</th>
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<tbody>
<tr>
<td>Climate Change Response Norms and Standards</td>
<td>1. Develop norms and standards for climate change response at National, Provincial and Local level to ensure that there is consistency in the way climate change responses are implemented across different jurisdiction.</td>
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<td>2. Shift car users from INDIVIDUAL private passenger cars to public transport, including rail</td>
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<td>3. Provide infrastructure to promote NMT and eco-mobility transport</td>
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<td>4. Provide transport infrastructure in a manner supportive of the eco-system, while not dearly compromising generations to come.</td>
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<td>Green Roads</td>
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<td>5. Extend the rail network to provide reliable, safe and affordable high-speed transport while switching to renewable energy trains</td>
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<td>Green Rail</td>
<td>6. Reduce the carbon footprint and over-reliance of petroleum based fuels, by decarbonizing the transport sector.</td>
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<td>7. Promote alternative fuels such as Compressed Natural Gas (CNG) or biogas, and liquid biofuels as transport fuels.</td>
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<td>8. Promote electric and hybrid-electric vehicles</td>
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<td>Green Transport Technologies</td>
<td>9. Develop “Green Procurement Guidelines” to promote efficient, and low carbon vehicle technologies.</td>
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<td>Green Fuel Economy Standards</td>
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GREEN TRANSPORT STRATEGY: SUSTAINABILITY INITIATIVES/ QUICK WINS

• A single ticketing system should be developed where the public can utilize a smart tag as the payment mechanism. The smart tag will be swiped on entry and exit of the public transport system.

• The planning and design of transport infrastructure expansion must consider future eco-mobility developments. Non-motorised transport infrastructure, namely the building of cycle lanes along key transport routes and improved pavements and sidewalks must be included in the maintenance mandates of SANRAL and local government where appropriate. These facilities require urgent expansion to provide for the majority of South Africans who utilize NMT as their primary mode of transport and to capitalize on the growing public desire for non-motorised ‘green’ transport.

• The government will work with the private sector to expand on the current number of electric charging stations powered by renewable energy sources. These stations will also be accessible to the general public.

• In consultation with the cities (local government), DoT will assist with the development of regulatory and policy framework for levying a congestion charge on vehicles that enter central business hubs. International best practice with regard to congestion zone taxing will be taken into account, however Congestion Zone Taxing will require supporting infrastructure – park and rides, integrated eco-mobility transport facilities, bike and car share scheme development.

• Incentivisation of Green Vehicles to further reduce the price to below the petrol or diesel cars.

• Enhance the regulatory regime to include a 3 yearly test on vehicles that covers roadworthiness and exhaust emissions. The test certificate with need to be produced every 3 years of car licensing renewal and the test scores will be used to adjudicate a price relative to safety and emissions performance.

• Introduce a car life cycle limits on the road, i.e. a car with an engine more than 400 000km must be banned from the road, or scrapped (e.g. propose a similar program such as the taxi recap).

• The viability of staggering work start times to relieve congestion in cities.

• Research will also be conducted on the viability of re-introducing “Road freight permits” in South Africa with permit pricing reflecting the emissions for tonne cargo of freight vehicles, as well as road-use charges to internalize the externalities of possible overloading from freight haulers and the development of regulations to ensure that freight vehicles may only enter urban hubs during off peak hours.
The GTS caters for the establishment of a Technical Support Unit (TSU) for the Sustainable Transport Programme (STP), as a vehicle of implementation and a tool of assistance for local government.

The national programme will support local governments in their actions towards an environmentally-friendly transport system. Therefore a comprehensive mechanism needs to be established to ensure successful implementation of the measures and the coordination among all stakeholders. One key intervention of the STP will be the coordination and distribution of lessons learnt and best practices among the cities/metros involved.

The STP is envisaged to:

- Organizing a knowledge-sharing platform among all spheres of the Government;
- Making improvements on the MRV capacity, aiming for a national harmonized approach;
- Supporting Metropolitan municipalities and Cities during design and implementation of sustainable mobility measures;
- Promoting the improvement of (national) legal framework in the context of STP; and
- Creating and coordinating access to financial resources to support implementation of sustainable mobility measures.
GREEN TRANSPORT STRATEGY: TRANSPORTATION PYRAMID

- Walking
- Cycling
- Public transit
- Carpooling (HOV)
- Automobiles (SOV)
GREEN TRANSPORT STRATEGY: CURRENT CHALLENGES

CLASSIFICATION OF TRANSPORTATION FUEL AND CURRENT ENERGY MIX REGULATIONS

TAX REGIMENT
1. ELECTRIC CARS (IMPORT TAX)
2. CARBON EMISSION TAX

CHANGE MANAGEMENT AND PUBLIC AWARENESS CAMPAIGN

FUNDING SOURCES FOR GREEN MOBILITY PROJECTS

CAPACITY BUILDING AND TRAINING
<table>
<thead>
<tr>
<th>Output Activity</th>
<th>Measures</th>
<th>Lead Department</th>
<th>Supporting Departments/institution</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td><strong>Integrated Transit Systems</strong></td>
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<tr>
<td>Intelligent Transport System</td>
<td>Develop an intelligent transport system for central control, monitoring and information provision. ICT National transport management System (integrated Transport Information),</td>
<td>DoT,</td>
<td>DPE, Public Transport Sector, all spheres of government</td>
<td>(SHORT)</td>
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<tr>
<td>Single ticketing system</td>
<td>Develop smart tag enabled single ticketing system for us in public transport and taxi industry</td>
<td>DoT,</td>
<td>DTI, DPE, Public Sector, Government, PRASA, Transnet, ReaVaya, Metrorail, Metros, All Taxis (mini bus and metered)</td>
<td>(SHORT)</td>
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<td>Revise ITP’s</td>
<td>Revise minimum requirements in ITP’s to facilitate integration between municipal transport systems, and also include sustainable transit plans for climate resilient cities</td>
<td>Provincial (enforcement) and Municipal (implementation)</td>
<td>DOT</td>
<td>(SHORT AND LONG)</td>
</tr>
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<td>Metro-bus fleets</td>
<td>Draft regulations requiring 10% of Metro-bus fleets converted to gas only vehicles per year.</td>
<td>DoT</td>
<td>Local Government</td>
<td>LONG</td>
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<tr>
<td>Emission standards</td>
<td>Develop regulatory regime with NT, and DEA for annual taxing of vehicles based on their emission standards through car licensing renewal system and new car sales</td>
<td>DoT,</td>
<td>NT, DOE, Private Sector, Local Government, DEA</td>
<td>MEDIUM</td>
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<tr>
<td>Non-Motorised Transport Infrastructure</td>
<td>Develop regulations, standards and best practice guidelines</td>
<td>DOT</td>
<td>LOCAL GOVERNMENT</td>
<td>SHORT</td>
</tr>
<tr>
<td></td>
<td>Develop and expand NMT Infrastructure</td>
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<tr>
<td>Travel Demand Management</td>
<td>Develop a regulatory policy on congestion charges</td>
<td>Local Government</td>
<td>LOCAL GOVERNMENT</td>
<td>MEDIUM</td>
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GREEN TRANSPORT STRATEGY: PROGRESS UPDATE

- PUBLIC PARTICIPATION PROCESS COMPLETED
- EISED CLUSTER PRESENTATION, APPROVAL GRANTED FOR CABINET
- CABINET MEMORANDUM COMPLETED
- SUBMISSION OF GTS TO CABINET FOR FINAL APPROVAL
Implementing green transport solutions is vital to a sustainable, healthy economy.

The GTS is envisaged, to minimise the negative effects of energy usage upon human health and the environment. This will be achieved by encouraging sustainable energy development and energy use through efficient practices and investing heavily in green transport in order to meet its global obligations and ensure that it’s people and environment are secure in the future.
SUSTAINABLE URBAN TRANSPORTATION CONCEPT...
THANK YOU...

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