

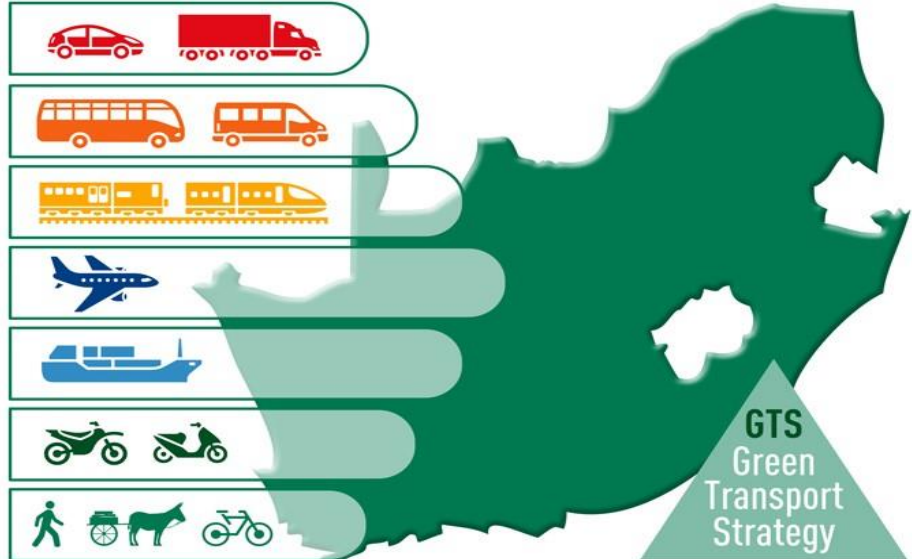
GREEN TRANSPORT STRATEGY: 2018 – 2050

G20 TRANSPORT TASK GROUP MEETING



transport
Department:
Transport
REPUBLIC OF SOUTH AFRICA

SOUTH AFRICA



MOVING SUSTAINABLY

CONTENTS

- 1. INTRODUCTION**
- 2. POLICY DIRECTIVE**
- 3. TRANSPORT SECTOR EMISSIONS PROFILE**
- 4. VISION, MISSION, & GUIDING PRINCIPLES**
- 5. STRATEGIC PILLARS**
- 6. SUSTAINABILITY INITIATIVES AND QUICK WINS**
- 7. SUSTAINABLE TRANSPORT PROGRAM OFFICE**
- 8. PROGRESS ON THE IMPLEMENTATION OF THE GTS**
- 9. CONCLUSION**



1. GREEN TRANSPORT STRATEGY (GTS): INTRODUCTION

The GTS is the first strategic document that informs, and sets out the POLICY DIRECTIVE of the transport sector.

The GTS is informed by the following policy documents:

- **NATIONAL**

- The Constitution of South Africa
- National Environmental Management Act
- ***White Paper on National Climate Change Response Policy***
- National Development Plan 2030
- The Public Transport Strategy
- The National Transport Master-Plan: 2050
- National Strategy for Sustainable Development
- Electric Vehicles Industry Roadmap

- **INTERNATIONAL**

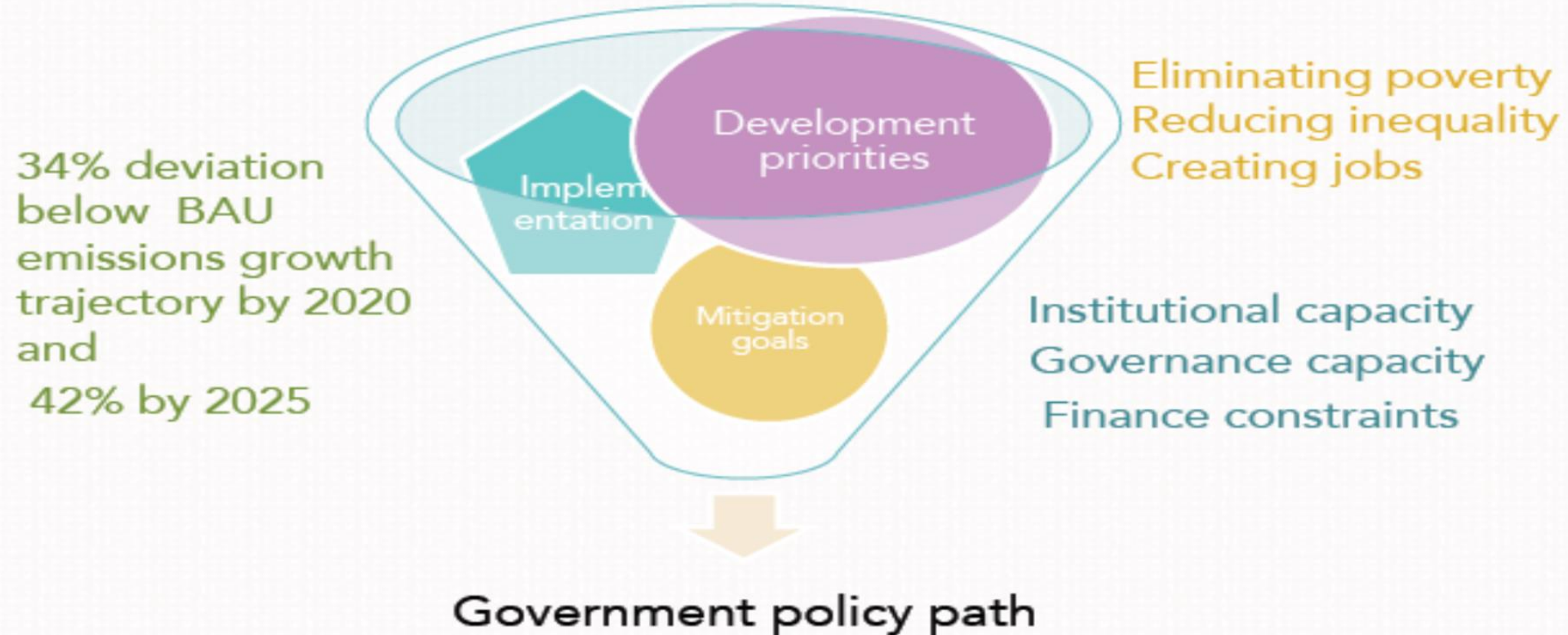
UNFCCC / NDC'S, NAMA's, & SDG'S



transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

2. GREEN TRANSPORT STRATEGY: GOVERNMENT POLICY DIRECTIVES



transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

3. GREEN TRANSPORT STRATEGY: EMISSION PROFILE OF THE TRANSPORT SECTOR

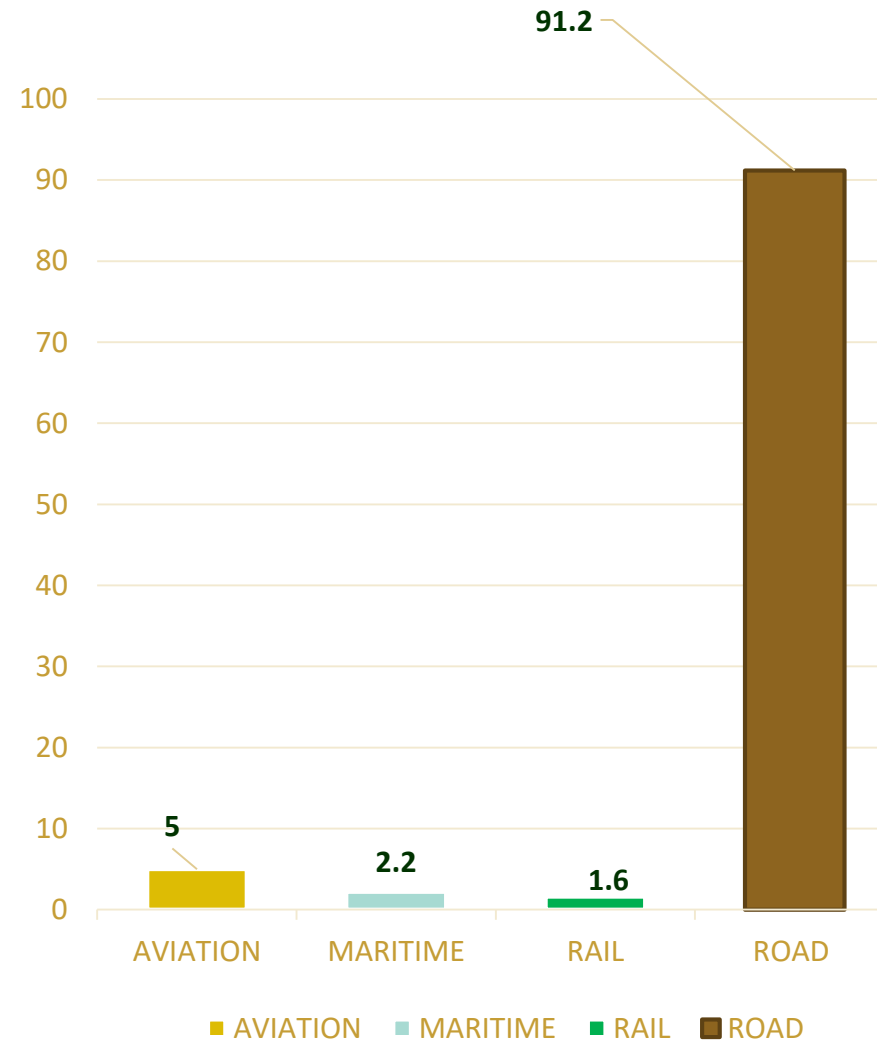
According to the South African National Greenhouse Gas Inventory (2018),

- 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.**
 - **Aviation emissions then account for 5%, followed by Maritime emissions at 2,2% and lastly Rail emissions at 1,6%.**



GREENHOUSE GAS EMISSION PROFILE FOR TRANSPORT SECTOR

TRANSPORT SECTOR GHG EMISSIONS: CHART 1



4. 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



5. GREEN TRANSPORT STRATEGY: STRATEGIC PILLARS

IMPLEMENTATION THEMES	STRATEGIC PILLARS
Climate Change Response Norms and Standards	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.
Green Roads	2. Shift car users from INDIVIDUAL private passenger cars to all forms of public transportation. 3. Provide infrastructure to promote NMT and eco-mobility transportation systems. 4. Provide transport infrastructure in a manner supportive of the eco-system.
Green Rail	5. Extend the rail network to provide reliable, safe and affordable high-speed systems while also switching to renewable energy trains.
Green Transport Technologies	6. Reduce the carbon footprint and over-reliance of petroleum based fuels, by decarbonizing the transport sector. 7. Promote the use of alternative fuels such as Compressed Natural Gas (CNG) or biogas, and liquid biofuels as transport fuels. 8. Promote and facilitate the UPTAKE of electric, hybrid-electric, and fuel cell powered vehicles.
Green Fuel Economy Standards	9. Develop “Green Procurement Guidelines” to promote efficient, and low carbon vehicle technologies. 10. Provide norms, standards and regulations that promote green fuel economy in vehicles and improve emission standards of fuel in South Africa.

6. 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 any form of the public transport system (whether bus, taxi or train).
- The **PLANNING AND DESIGN OF TRANSPORT INFRASTRUCTURE** expansion must consider future eco-mobility developments.
- The government will work with the private sector to expand on the current number of electric charging stations that should be powered by renewable energy sources.
- 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. 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** (Electric and Hybrid technologies, and alternative fuels e.g. CNG) 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 CHECKS**. The test certificate would 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 of the vehicle.
- Introduce a **car life cycle limits** on the road, i.e. a car with an engine more than 600 000km must be banned from the road, or scrapped (e.g. propose a similar program such as the taxi recapitalisation program).
- Research to be conducted on the **viability / feasibility 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.

7. GREEN TRANSPORT STRATEGY: SUSTAINABLE TRANSPORT PROGRAMME

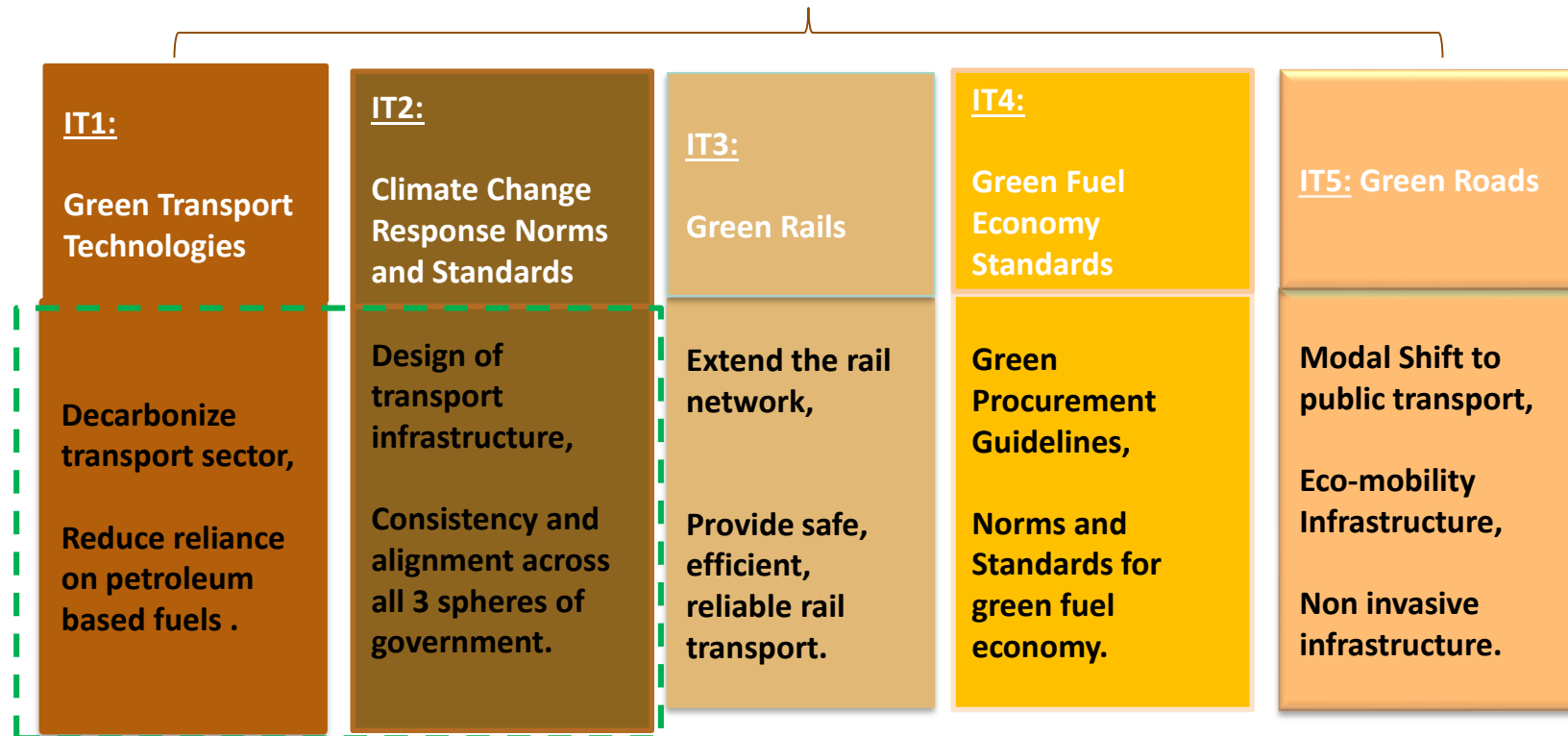
- The GTS caters for the establishment of a **Technical Support Unit (TSU) for the Sustainable Transport Programme (STP)**, as a vehicle of implementation and a tool of assistance for local government
- The national programme will support local governments in their actions towards an environmentally-friendly 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.

THE GTS HAS 5 MAIN IMPLEMENTATION THEMES (IT) TO ACHIEVE THE 5% EMISSIONS REDUCTION TARGET

A Technical Support Unit (TSU) will be established within DoT to oversee the GTS Implementation



SOUTH AFRICA



GTS
Green
Transport
Strategy

MOVING SUSTAINABLY



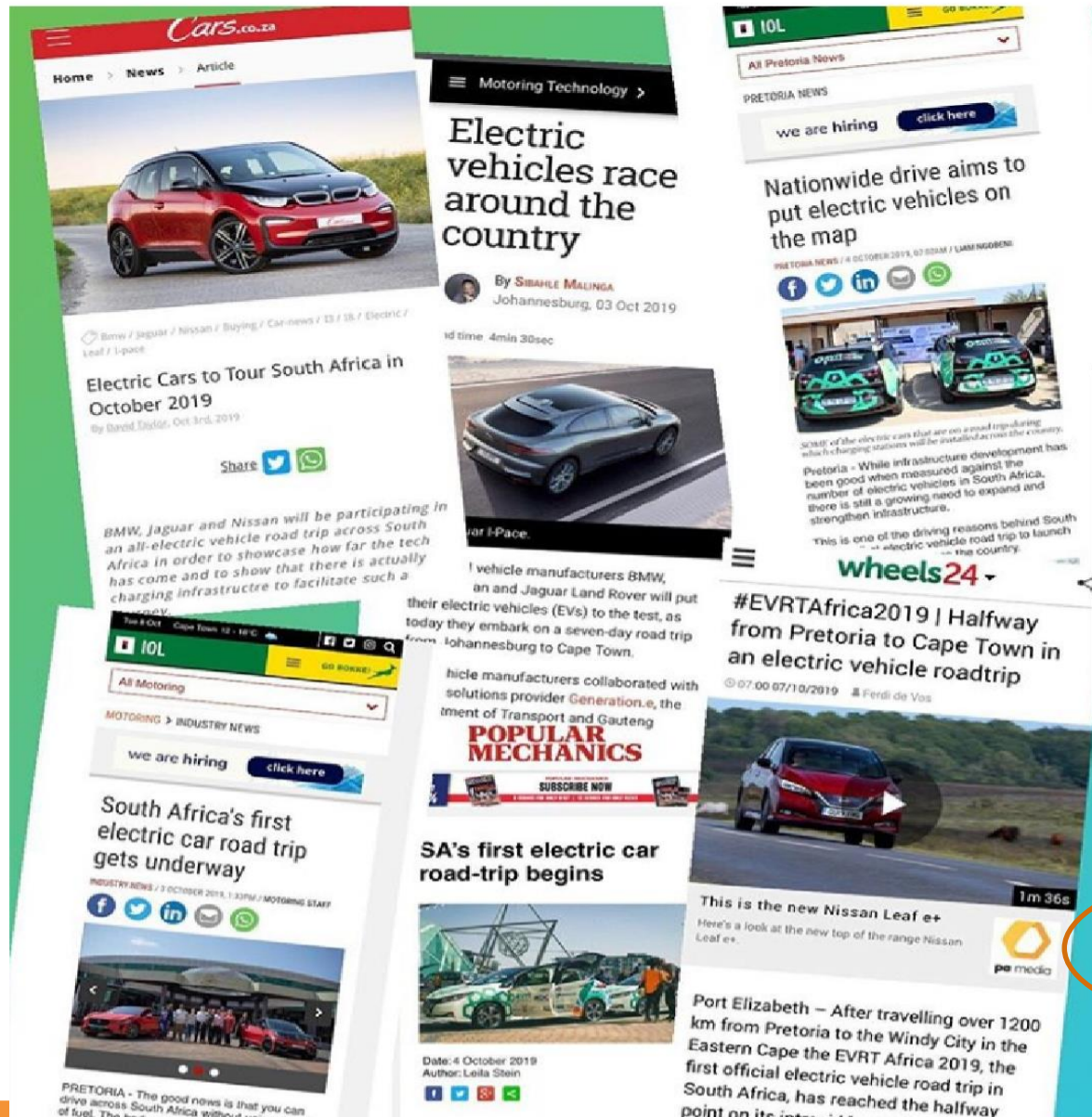
transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

GREEN TRANSPORT STRATEGY: IMPLEMENTATION PLAN

- **Please refer to the Implementation Plan in The Green Transport Strategy Document (page 52 – 56)**

8. GREEN TRANSPORT STRATEGY: PROGRESS ON IMPLEMENTATION OF THE GREEN TRANSPORT STRATEGY



**GTS
STRATEGIC PILLAR: 8**



GREEN TRANSPORT STRATEGY: PROGRESS ON IMPLEMENTATION OF THE GREEN TRANSPORT STRATEGY

New Vehicle Fuel Economy and CO₂ Emission Baseline Analysis for the South African Passenger Vehicle Market

August 22nd, 2016
Vehicle Fuel Economy Policy Meetings
Pretoria, South Africa

Dr. Francisco Posada



1225 I Street NW
Suite 900
Washington DC 20005
+1 202.534.1600
www.theicct.org

New vehicle fuel economy Standards for South Africa – Draft Baseline Study

Dr. Francisco Posada
Senior Researcher
ICCT

Oct 10, 2017

Background

According to the Organization of Motor Vehicle Manufacturers (OICA) the total vehicle fleet of South Africa, stands at 9,5 MM units in 2013, the largest in Africa, accounts for 23,6% of the vehicles in the continent, and is the 18th largest around the world (OICA, 2017). Vehicle motorization figures, 175 vehicles per 1000 people, place the RSA 3rd in Africa after Congo and Libya; motorization is 4.2 times larger than the total African value and twice the Chinese motorization rate (OICA, 2017).

Figure 1 illustrates the RSA's fleet composition and size from 1990s to 2010. The information presented comes from 2010 vehicle registration data provided by the Council for Scientific and Industrial research – CSIR (2015). As of 2010, about 66% of the fleet was composed of passenger vehicles (PV); this includes cars, fueled mostly by gasoline, and sport utility vehicles – SUVs (e.g., Toyota Fortuner) fueled by both gasoline and diesel. The average growth of the fleet during this period is about 3.2% per year and 4.0% excluding the global economic recession years (2008-2010). The second largest fleet, 22% of the total 2010 fleet, is the light-commercial vehicle (LCV) fleet; LCVs include bakkies, light pick-up trucks that are used for commercial applications including transport of people and goods. The share of Medium duty- and heavy-duty vehicles (MDVs and HDVs) is about 4%; delivery trucks and long haul trucks are included in this segment. Mini-bus taxis comprised 3% of the vehicle fleet in the RSA in 2010.

GTS
STRATEGIC PILLAR: 10



transport
Department:
Transport
REPUBLIC OF SOUTH AFRICA

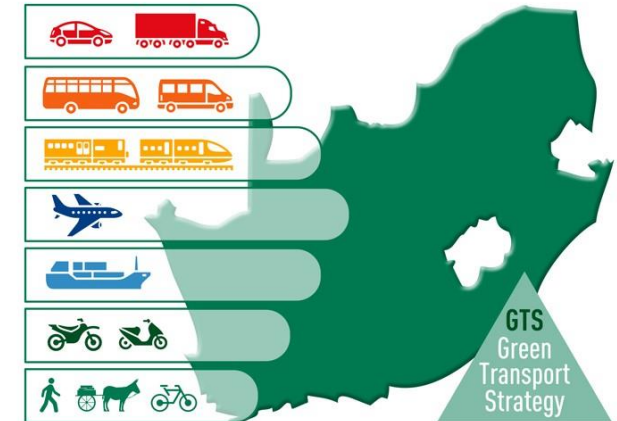
9. GREEN TRANSPORT STRATEGY: CONCLUSION

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.

END.....THANK YOU

SOUTH AFRICA



MOVING SUSTAINABLY

MS. BOPANG KHUTSOANE
DEPARTMENT OF TRANSPORT (SOUTH AFRICA)
PROJECT MANAGER: GREEN TRANSPORT STRATEGY

TEL: 012 309 3547

CELL: 079 470 9435

E-MAIL: KhutsoaB@dot.gov.za