



FIRST INPUT TOWARDS THE DEVELOPMENT OF THE

AUTO GREEN PAPER

ON THE ADVANCEMENT OF NEW ENERGY VEHICLES IN SOUTH AFRICA

THE SOUTH AFRICAN ROAD TO PRODUCTION OF ELECTRIC VEHICLES (THE ROADMAP):

“delivering for the people, for the planet and for our prosperity”.

PUBLIC CONSULTATION VERSION

18 MAY 2021

STATUS OF THE DOCUMENT: A Green Paper is normally a **government policy discussion paper** that details specific issues, and then points out possible courses of action in terms of policy and legislation. It articulates possible solutions that are yet to be adopted by government. A Green Paper is a precursor for a White Paper. The White Paper articulates a policy position of government that has been approved by Cabinet. This document has been drafted following initial consultation with industry and constitute **a first input into the development of a sector Masterplan discussion paper**, which is published for comment, following which it will be taken through further evidence-based analysis and policy development, before being formally considered by stakeholders and in Government processes. Dates for each key milestone will be added. To underline: it does not yet set out official policy and will be taken through a process of engagement with stakeholders.

Comments on this document may be submitted to the dtic by email to electricvehicle@thedtic.gov.za

PREFACE

The purpose of this New Energy Vehicle [NEV] paper is to establish a clear policy foundation that will enable the country to coordinate a long-term strategy that will position South Africa at the forefront of advanced vehicle and vehicle component manufacturing, complemented by a consumption leg, and increase our competitiveness in the global race to transition from the internal combustion engine era into electro-mobility solutions and technologies. In August 2019, the Minister of Trade, Industry and Competition set the large auto-makers in South Africa a challenge: to help develop a roadmap to the local production of electric vehicles. The various workstreams of the auto industry's Master Plan were launched shortly thereafter, which included one focussed on technology changes and on deeper localisation. During 2020, the importance of this work was emphasised and more recently, a number of developments in key export markets has helped to step up the pace of work.

This Draft Green Paper seeks to develop a framework upon which a comprehensive and long-term automotive industry transformation plan on new energy vehicles can emerge, with specific focus on:

- creation of a high-yielding business environment, including an appropriate fiscal and regulatory framework, that makes South Africa a leading and a highly competitive location, not only within the African continent but globally, for electric vehicle production;
- support and investment in the expansion and development of new and existing manufacturing plants to support the production of new energy vehicles and components within South Africa and to grow the level of employment in the sector;
- development and investment in new energy vehicle component technology and expansion of the fledgling electric supply chain, by increasing support and investment in a set of unique NEV components;
- reinvestment and support towards reskilling and upskilling of the workforce to ensure the right skills are available for the design, engineering and manufacturing of electric vehicles and related components and systems;
- the transition of South Africa towards cleaner fuel technologies available globally [CleanFuels2];
- adoption of new and sustainable manufacturing processes to significantly reduce greenhouse gas emissions and improve our environmental wealth; and
- ensuring that that Research and Development [R&D] investment is strategically targeted at activities that are likely to give South Africa a competitive advantage.

The Green Paper is released to invite substantive comments from all stakeholders including members of the public. This is the beginning of a crucial public discourse that will define electro-mobility in South Africa. The roadmap to implementing the new energy vehicle policy will entail the following steps:

- Gazetting the draft policy for public comments by the end of May 2021
- Submitting the policy proposals to Cabinet for consideration by October 2021

1. INTRODUCTION

1.1. Setting the playing field

The automotive industry plays a significant role in the economic life of South Africa. Approximately one-third of value addition within the domestic manufacturing sector is derived either directly or indirectly from vehicle assembly and automotive component manufacturing activity, positioning the industry and its broader value chain as a key player within South Africa's industrialisation landscape.

South Africa has invested in a world-class automotive manufacturing base with strong Government support and ongoing re-investment by global Original Equipment Manufacturers [OEMs] and a strong collaborative partnership with local components manufacturers and labour. The shift from internal combustion engine [ICE] vehicles to New Energy Vehicles [NEVs] is a disruptive trend for the automotive industry globally, and South Africa will also be impacted directly by this evolution.

The automotive sector and its public sector partners developed the South African Automotive Masterplan with the vision of becoming a globally competitive and transformed industry that actively contributes to the sustainable development of South Africa's productive economy, expands the industrial and localisation footprint and create prosperity for industry stakeholders and broader society. In order to bring this vision to life, the following key strategic objectives were agreed upon by the auto industry stakeholders to optimally develop the sector through to 2035. The long-term strategic objectives are to:

- grow South African vehicle production to 1% of global output;
- increase local content in South African assembled vehicles to up to 60%;
- double total employment in the automotive value chain;
- improve automotive industry competitiveness levels to that of leading international competitors;
- transform the South African automotive industry through the employment of black South Africans, upskilling of black employees, empowerment of dealerships and authorised repair facilities, and substantially increasing the contribution of black-owned automotive component manufacturers within the automotive supply chain; and
- deepen value addition within South African automotive value chain.

There are seven focus areas envisioned to actively support the realisation of the industry's vision and these are:

- local market optimisation;
- regional market development;
- localisation;
- automotive infrastructure development;
- industry transformation;
- technology and associated skills development; and
- institutionalising the SA Automotive Masterplan

1.2. The global pandemic and its impact on the South African automotive industry

2020 was a tumultuous year for the automotive sector globally and locally. Most obviously, COVID-19 impacted the industry unlike anything ever before. While that was also the case for many other sectors of the country's economy, the impact on automotive has been significant.

As the country's largest manufacturing sector, vehicle and automotive component manufacturing accounted for 18,7% of manufacturing output in 2020, down from the 27,6% in 2019. As an export-oriented industry, total automotive export revenue declined by a significant R26 billion, or 12,9% from the record R201,7 billion in 2019 to R175,7 billion in 2020.

Vehicle exports declined by 115,804 units from the record 387,092 units in 2019 to 271,288 units in 2020 with the export value consequently also declining from a high of R148 billion in 2019 to R121,2 billion in 2020. On the upside, automotive components increased from R53,7 billion in 2019 to its highest level yet at R54,5 billion in 2020, mainly due to record catalytic converter exports to the EU in view of stricter emissions legislation implemented in the region since the beginning of 2020.

The European Union, with exports of R105 billion, or 59,8% of the total export value of R175,7 billion, was the domestic industry's main export region last year. A total of 197,355 vehicles, or 72,8% of total vehicle exports were destined for Europe in 2020. Since three out of every four vehicles exported were destined for Europe, developments in the region have a direct and measurable impact on the South African automotive industry.

1.3. The growing trends of New Energy Vehicles globally

Global sales of NEVs accelerated in 2020, rising by 43% to 3,24 million units compared to the 2,26 million units sold in 2019, despite the overall fall in new vehicle sales in 2020 due to the COVID-19 global pandemic. Europe has superseded China as the centre of NEV growth. For the first time since 2015, NEV sales in Europe have outpaced NEV sales in China. It is clear that the rise of NEVs is an inevitability rather than a possibility.

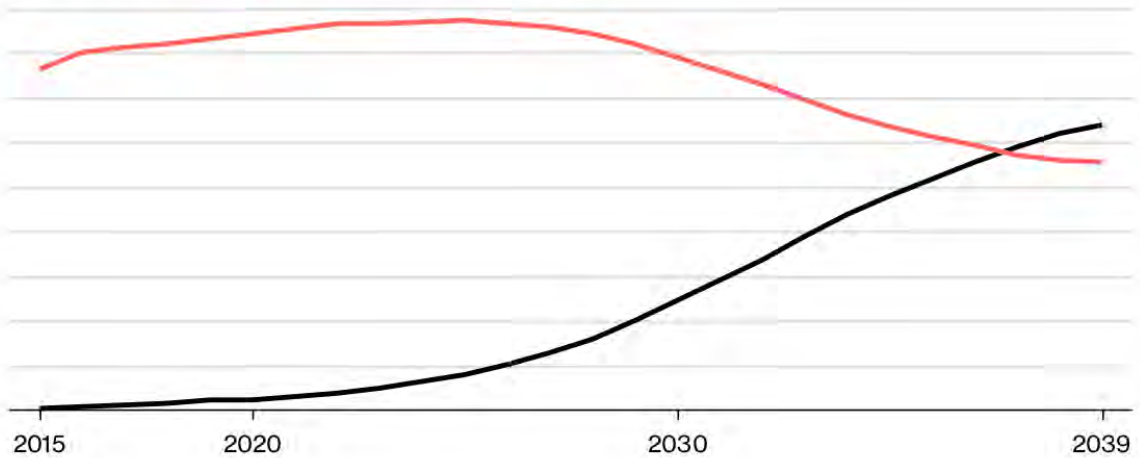
The forecast is for NEV passenger car sales to exceed those of passenger car internal combustion engine [ICE] sales by 2038 globally. In reality, it could reach this milestone even sooner, depending on the speed of regulation across the world, the impact of technological changes on prices and shifting consumer buying patterns. Of significance to the export-oriented South African automotive industry is the forecast that 40% of new vehicles sales in Europe would be electric vehicles by 2030 and for the number to increase to 80% by 2040.

In terms of a regulatory framework, policies are being refined in many countries for greater adoption of NEVs as a sustainable public and private mobility solution.

Overtaking Lane

Electric vehicle sales will surpass internal combustion engine sales by 2038

■ Electric vehicles ■ Internal combustion engine



Source: Bloomberg, New Energy Finance, 2019

In response, utilities, NEV manufacturers, operators and technology providers are working towards developing smart and efficient charging infrastructure in order to meet customer needs of security and convenience. An NEV is part of a huge ecosystem of power sources, involving smart grids, infrastructure, home charging stations, commercial charging station and regulatory environment, as illustrated below:

