

Nigerian Automotive Industry Development Plan

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Glossary

AAAM	African Association of Automotive Manufacturers
ADAS	Advanced Driving Assistance Systems
AI	Artificial Intelligence
AfCFTA	African Continental Free Trade Area
BEV	Battery Electric Vehicles
CAGR	Compound Annual Growth Rate
CBN	Central Bank of Nigeria
CBU	Completely Built Up
CET	Common External Tariff
CIF	Cost, Insurance, and Freight
CKD	Completely-Knocked-Down
COP26	Conference of the Parties
CVs	Commercial vehicles
DKD	Disassembled Knocked Down
DPD	Direct Port Delivery
ECOWAS	Economic Community of West African States
ETLS	ECOWAS Trade Liberalization Scheme
EVs	Electric Vehicles
FBU	Fully Built Unit
FIRS	Federal Inland Revenue Service
FMITI	Federal Ministry of Industry, Trade, and Investment
FRSC	Federal Road Safety Corps (Nigeria)
GDP	Gross Domestic Product

Glossary

ICE	Internal Combustion Engine
ID	Import Duty
IL	Import Levy
loT	Internet of Things
MAN	Manufacturers Association of Nigeria
NADDC	Nigerian Automotive Design and Development Council
NAC	National Automotive Council
NAIDP	Nigerian Automotive Industry Development Plan
NCS	Nigeria Custom Service
NESREA	National Environmental Standards and Regulations Enforcement Agency
NIPC	Nigerian Investment Promotion Commission
NIRP	Nigerian Industrial Revolution Plan
ОЕМ	Original Equipment Manufacturer
OICA	Organisation Internationale de Constructeurs d'Automobiles
PPP	Public Private Partnership
R&D	Research and Development
SKD	Semi-Knocked-Down
SON	Standards Organisation of Nigeria
SUV	Sport Utility Vehicle
TRIMS	Trade Related Investment Measures
VAT	Value Added Tax
WACIP	West Africa Common Industrial Policy

A Statement from the Honorable Minister



Otunba Adeniyi Adebayo, con Honorable Minister, Federal Ministry of Industry, Trade and Investment

Our Esteemed Investors and Stakeholders, It gives me great pleasure to present the revised Nigerian Automotive Industry Development Plan (NAIDP), an initiative which was originally launched in 2014. This underscores the commitment of the Federal Government and the administration of President Muhammadu Buhari, GCFR towards promoting industrialization.

The NAIDP 2014 focused efforts on revitalizing the Nigerian automotive industry, with wide-ranging initiatives to address some of the nuances within the industry. However, national and, indeed, global economic challenges, as well as issues with respect to implementation and monitoring significantly challenged the delivery of the objectives of the 2014 Plan.

The emergence of African Continental Free Trade Area (AfCFTA) Agreement and the need to position the country as a strong leading player within the regional automotive ecosystem necessitated the review of the NAIDP.

This was further reinforced by recent technological developments and new opportunities in the global automotive industry as well as requests from existing and potential investors in order to unlock the potential of the industry, maximise its value and promise of economic growth and development for the country.

The revised NAIDP 2023 presents the aspirational vision, objectives, key pillars, enablers, and strategic framework to optimally grow the Nigerian automotive industry through 2033. I am pleased to inform you that this plan addresses the challenges constraining effective delivery of the objectives. Specifically, I will like to express appreciation to President Muhammadu Buhari for his support and commitment towards concluding this task. Also, my esteemed appreciation goes to the Management of the Africa Export-Import Bank (AFREXIM) for the support towards completing the review.

This plan is intended to chart a course for the industry over the next ten years. More importantly, it seeks to set the industry on the journey of 'a thousand miles'. I, therefore, enjoin all stakeholders and industry actors to extend their commitment and support towards rebuilding the automotive industry.

Foreward



Jelani Aliyu, MFR
Director-General,
National Automotive Design and
Development Council

The Automotive Industry can have a catalytic effect on the industrialization of a country as it drives mass production, local content, localization of production techniques and job creation. It also stimulates growth of other sectors such as glass, rubber, asphalt, wood, gasoline, insurance and road construction. These are the kinds of benefits that we sought from the inclusion of the Automotive Sector in the Nigerian Industrial Revolution Plan (NIRP).

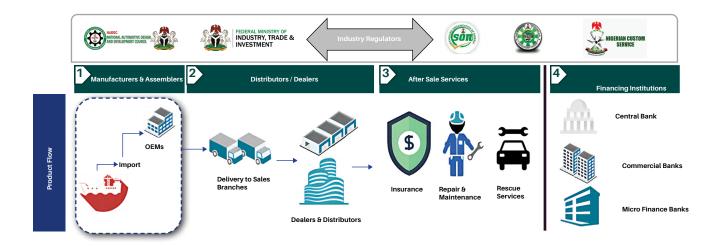
The review of the NAIDP was done to address existing challenges and include the right levers required for the Automotive Industry in a country like Nigeria: to enable exponential growth by providing the necessary enhanced fiscal and nonfiscal incentives, programmes and initiatives. Since the beginning of the implementation of the 2014 NAIDP to date, the Council has succeeded in driving an investment of over US \$1 billion by the private sector into the Nigerian Automotive Industry, setting up factories and assembly plants in a number of states, with a combined installed capacity of over 400,000 units per annum, and the creation of over 50,000 direct and indirect jobs. The Council has also implemented several programmes and initiatives including the nationwide development of twenty (20) Automotive Training Centres, the ongoing development of three (3) Automotive Industrial Parks and three (3) Automotive Testing Centres and Laboratories to enable infrastructure sharing between Producers/Assemblers for testing and certification of vehicles and automotive

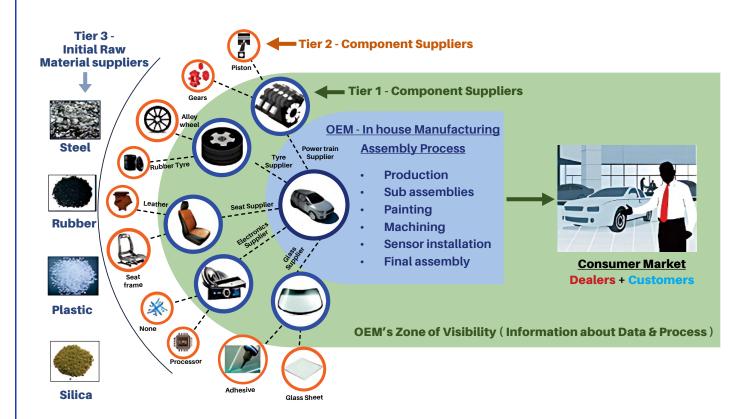
components. The Council has also enabled the start of assembly of Electric Vehicles, such as the Hyundai Kona EV, and has also developed four (4) Pilot Solar Powered Electric Vehicle Charging Stations.

The reviewed NAIDP is aimed at aggressively building on the successes achieved so far: to strategically address challenges and exponentially leverage on new local and global opportunities. I wish to express my deepest appreciation to the Honourable Minister and the Honourable Minister of State for supporting the review process of the NAIDP, as well as staff of the Federal Ministry of Industry, Trade and Investment (FMITI), Nigerian Investment Promotion Commission (NIPC), Automotive Assemblers, African Export-Import Bank (AFREXIM), African Association of Automotive Manufacturers (AAAM), Japan International Corporation Agency (JICA) and all other supporting stakeholders for making this a reality.

The development of a country's Automotive Industry is a marathon and not a sprint. The Council is pleased to present to you the revised NAIDP and request you support the Council in its implementation.

The Automotive Value Chain





Source: National Action Committee on AfCFTA

Original Equipment Manufacturers (OEMs):

OEMs design, assemble, and market the final automotive product, and, on occasion, manufacture equipment for it. OEMs are also the original producers of the vehicle's components and are often the direct client of a retail company or distributor that sells directly to consumers and corporations. Many of them are well-positioned within the automotive sector and include companies such as BMW, Ford, Mercedes Benz, Nissan, Toyota, and Volkswagen.

Tier 1 supplier:

Manufacture components and/or systems according to specified criteria, these firms supply OEMs directly. Tier 1 suppliers typically have strong relationships with OEMs and are the final step before a component reaches the OEMs. The components they supply are in a wide range and include items such as the vehicle's drive train, seats, pistons, keys, GPS, steering wheels, and car lights. Examples of tier 1 suppliers include Bosch and Continental.

Tier 2 supplier:

Produce parts throughout the automotive industry value chain. Importantly, these suppliers usually serve multiple industries and not exclusively the automotive industry. Tier 2 supplier's supply components such as computer chips, nuts, bolts, engine fans and fan belts. Examples of Tier 2 suppliers include computer chip manufacturers like Intel and Nvidia.

Tier 3 supplier:

Within the automotive industry, the term Tier 3 refers to suppliers of raw, or close-to-raw, materials like metal, plastic, steel, and rubber. OEMs, Tier 1, and Tier 2 companies all need raw materials to produce their specific components, so the Tier

3s supply all levels. Examples of Tier 3 suppliers include plastic, steel, and Petrochemicals industries.

Semi - Knocked Down Assembly

In this process, the manufacturer (OEM) partially strips down a vehicle at the origin and reassembles it in another country (Nigeria). However, the manufacturers (OEM) cannot sell them immediately as an SKD unit. So, it needs some more manufacturing or assembly once the vehicle reaches its destination country (Nigeria) as SKD unit.

SKD is defined by a list of parts and their assembly condition. The qualifying list for SKD kits and their assembly condition (foreign or local) permitted under this Policy are listed in the list below:

Completely Knocked Down Assembly

In this process, the manufacturer (OEM) completely strips down or disassembles a vehicle at the origin and reassembles it in another country (Nigeria). However, the manufacturers (OEM) cannot sell them immediately as a CKD unit. So, more manufacturing or assembly is required once the vehicle reaches its destination country (Nigeria) as CKD unit.

Completely Knocked Down (CKD) parts: In addition to the table above which classifies the assembly condition (local or foreign) of parts for CKD the floor panel, body sides and roof panel are separately supplied and assembled locally. This Body Shell and all other parts are welded and fitted locally.

Industrial Definitions

Body Type	Definiton
Passenger Vehicles	Vehicles constructed for passengers carrying with up to four to eight seats (excluding the driver).
Motorcycles	Vehicles with 2 wheels, including scooters and mopeds, as well as powerful electric bikes
Light goods vehicles (LGVs)	Vehicles for transporting goods and must have a gross weight of 3.5 tonnes or less.
Heavy goods vehi- cles (HGVs)	Vehicles for transporting goods and must have a gross weight over 3.5 tonnes. This includes vehicles that are not used for freight.
Buses and coaches	Vehicles for passengers carrying with nine seats or more (excluding the driver). This includes minibuses, which are usually similar in construction to vans.
Commercial Vehicles	A "commercial vehicle" is a vehicle which is used or maintained for the transportation of persons for hire, compensation, or profit or designed, used, or maintained primarily for the transportation of property (for example, trucks and pickups).
Motor Tricycle Vehicle	a vehicle with three symmetrically arranged wheels, having other technical characteristics than a motorcycle, fitted with an engine having a maximum design speed of more than 45 km/h e.g. "Keke Napep"
Antique Vehicles	defined as a car that was originally manufactured at least 39 years ago

Source: Vehicle licensing statistics: notes and definitions - GOV.UK (www.gov.uk), Vehicle Definitions - California DMV

Introduction

Introduction

The automotive industry holds significant potential to become a pivotal catalyst for Nigeria's economic growth and development. In its full glory, it incorporates a wide range of industrial processes including metals, plastics, rubber, glass and electronics, and is frequently perceived as being emblematic of national industrialisation. As a result, the sector has often received strong government support in economies across the world.

The importance of the industry to the Nigerian economy was highlighted in the Nigerian Industry Revolution Plan; with the Nigerian Automotive Industry Development Plan (NAIDP), launched in 2014 signalling government's efforts to ensure the take-off of the industry as a key sector with cross-cutting linkages across several industries and services, contributing to various economic development imperatives.

The NAIDP in 2014, the automotive industry has attracted over US\$1 billion in foreign direct investment and comprises about 30 assembly operators with an installed capacity to assemble 400,000 vehicles annually. This progress has however, been slow and performance, suboptimal as the Nigerian automotive industry remains dominated by importation of second-hand vehicles mainly from the EU, Japan, and the USA. In 2020, passenger cars constituted the largest export item from the United States to Nigeria (about US\$701 million) according to the U.S. Census Bureau.

This situation makes it difficult for Original Equipment Manufacturers (OEMs) to achieve the economies of scale that guarantee anticipated return on investment and profitability from their operations. The trend also affects the development of the auto component suppliers and related industries and subsequently, the ability to move to higher local value-added modes of manufacturing (CKD/CBU).

Other prevailing challenges include low income/ limited affordability, poor infrastructure and high logistics costs and a lack of viable and sustainable finance schemes to support the sector. The auto industry currently plays a disproportionately small manufacturing role in Nigeria while the economic benefits of having a fully-fledged integrated auto manufacturing sector are considerable. In South Africa, for example, 110,000 people are directly employed in the assembly of vehicles and manufacture of components whilst 900,000 people are employed in the full automotive value chain from mining/farming to retail, insurance, and finance. Nigeria has the potential to harness this sector, however, the inability to implement an effective National Automotive Plan is hampering its progress.

Consequently, the state of the current industry and the unique challenges highlighted have necessitated the review of the Nigerian Automotive Industry Development Plan (NAIDP). With the recently signed African Continental Free Trade Area (AfCFTA) Agreement in 2019, there exists an opportunity to position Nigeria as a hub for the manufacture of automobiles and automotive components for the African markets.

Therefore, in recognition of the central importance of the domestic automotive industry to the future growth of the Nigerian economy, the NADDC commissioned the revision of the Nigerian Automotive Industry Development Plan.

This NAIDP 2023 presents the aspirational vision, objectives, pillars, enablers, and strategic framework to reposition the industry. It is the outcome of multiple engagements with stakeholders across the value chain; and evaluation of the issues and trends within the domestic, regional and international auto value chain. The Plan, which also takes into consideration of existing studies and reports conducted by various groups such as JICA, Afrexim and AAAM, is aimed at setting up the Nigerian automotive industry for regional leadership.

The document is structured as follows:

· Chapter 1: Introduction

- Sets the context for the Revised Plan and provides general overview of the Plan.

· Chapter 2: Global Automotive Industry Review

- This section provides an overview of the global market, outlook and future trends shaping the industry. It also provides a snapshot of the African automotive industry, including a view on the implications of AfCFTA on the Nigerian auto industry. The section closes with a summary of key learnings from the review as imperatives for the development of the NAIDP 2023.

Chapter 3: Nigerian Automotive Industry Review

 This section delves into the Nigerian automotive sector to better understand its performance and current situation. It also provides an overview of the NAIDP 2014 and its performance; and the challenges within the Nigerian automotive industry today.

Chapter 4: Establishing a vision and associated objectives for the Nigerian Auto Industry

 Here, we define the vision and strategic direction of the NAIDP 2023 through to 2033.
 It expatiates on the key elements of the vision statement, to ensure clear understanding of the industry's aspirations; and outlines the key industry targets to 2033.

Chapter 5: Master Plan- Strategic Pillars & Enablers

- This section highlights the framework proposed to actualise the vision and its associated objectives. Here, seven (7) strategic pillars and three (3) enablers that will ensure coordination amongst players and necessary facilitation of the delivery of the vision and targets identified in Chapter 4, are presented.



2.1 Overview

In many jurisdictions, the automotive industry is a pillar of economic growth and stability. The industry supports a wide range of business segments and industries in the upstream (mining, steel, plastic, rubber, and glass production), downstream (transport, warehousing, finance, insurance, etc), and several adjacent industries and business segments. Contributing about three percent (3%) of global GDP, the industry is integral to generating jobs, accelerating technological advancement, building local skills, and expanding

local value chains, that altogether facilitate the overall improvement in the quality and standard of life of the citizenry.

In 2021, the global automotive industry generated an estimated US\$3.1trn in the sales of 80.1mn vehicles, providing an estimated 12 million direct jobs globally. Early projections estimate that the global market is expected to reach 122.83 million by 2030 and grow at a CAGR of about 3.7% between 2020-2030.3

Table 1: World automotive industry

Indicator	2019	2020	2021	2022f	2023f	2024f	2025f
Passenger car registration (millions)	60.7	50.7	57.2	61.4	63.5	64.6	65.3
% Change	-6.1	-16.5	12.9	7.4	3.3	1.8	1.1
Stock of passenger cars per 1,000 population	169.1	169.5	170.8	172.3	174.0	175.6	177.3
Commercial vehicle registrations (millions)	27.3	25.5	28.3	30.6	32.0	33.2	34.3
% Change	0.2	-6.7	11.0	8.2	4.7	3.6	3.3

Source: Economic Intelligence Unit estimates and forecast

Global Motorisation Rates

As of 2021, Global Motorisation rates were recorded at 180/1000 with an estimated 1.5 billion vehicles. The North American and European regions were in the clear lead with above average motorisation rates of 790/1000 and 580/1000 cars to people ratio respectively, the highest motorisation rates globally. Other leading automotive clusters like Japan and China also had significant motorisation rates. China with 170/1000 car parc, while slightly below the global average has a population of 1.4 billion. Conversely, Japan with a population of just about 125 million has

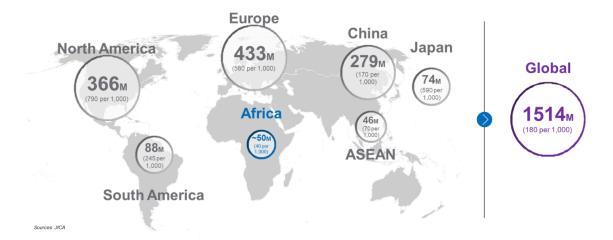
car parc rates 0f 590/1000. Regardless of any differences in population and demography, one thing these regions have in common is that they are major automotive producers, supplying most of the vehicles consumed globally.

In comparison, Africa, the third-largest continent by population has a car parc rate of just 40/1000 with a total of about 50 million vehicles across the continent while contributing less than 1% to global vehicle production or consumption.⁴

¹JICA

²JIC/

³ Global Automotive Market, Growth & Forecast, Impact of Coronavirus, Industry Trends, By Region, Opportunity Company Analysis, <u>Renub Research</u>



This low motorisation rates point to low GDP in the region which affects affordability of vehicles, significant underdevelopment in the automotive sector in terms of vehicle production capacity, as well as insufficient road network infrastructure to support the growth of automotive utilisation.

2.2 Global Automotive Market

Overview

The global automotive industry witnessed drastic market changes in the past 5 years that significantly affected production and sales. In 2015, projections for global production put estimates at over 110 million units by the year

2020. However, due to the global economic slowdown that was brought on by the COVID 19 pandemic, these estimates fell short with ~78 million vehicles produced.⁵

Indicator	PV per 1000 pop. (2020)	Volume of PV Registrations (million cars - 2020)	Volume of CV Registrations (million trucks - 2020)
North America	371.4	4.0	13.2
Western Europe	540.0	10.4	1.9
Easter Europe & CIS	335.1	2.7	0.4
Asia and Australasia	103.9	29.7	8.4
Latin America	190.2	2.6	1.1
Middle East and Africa	67.3	1.2	0.4
World	169.5	50.7	25.5

Source: Economist Intelligence Unit

⁵www.Statista.com

EUROPE AND AMERICA

In 2021, global production of new vehicles witnessed a 3% increase from the previous year, recording 80.1mn units with Asia-Oceania making up 58% of total global production. In the same period, 82.6mn new cars were registered, constituting a 9% decline in sales compared to the 91.2mn units sold in 2017. Europe accounted for 16.3mn units (20%) of Global Production, selling about 17mn units (20% of Global sale) while America accounted for 16.1mn units of vehicles produced globally (20%), with 22mn units sold (27%).

Even as one of the world's emerging economies, Brazil in 2021 was recorded to have produced 2.256 million units of motor vehicles including passenger cars, light commercial vehicles, trucks, and buses. About 1.56 million of new passenger vehicles were sold in that same year. Brazil is also the second-highest motor vehicle producer in Latin America and takes the lead in the production of passenger vehicles in the region. The growth of the industry has been attributed to foreign investments by large automobile manufacturers in the world, relatively low borrowing costs - the Selic rate or 'over Selic' (Brazilian federal funds rate) has been continuously decreasing from 14% in 2016 to 2% in August 2020 amongst other enabling factors.

In 2021, 3.1 million units of vehicles were produced in Germany compared to 3.5 million units in the preceding year. In 2009 Germany experienced a significant increase in the sale of passenger cars (3.8 million units) which was mainly attributed to a scrappage program called "Abwrackprämie" that was introduced by the government. This successful program was aimed at encouraging car owners to scrap their old vehicles – over the age of 9 years, to purchase new and environmentally friendly vehicles thereby promoting improved air quality.6

ASIA

South-East Asia has emerged as a major automotive hub, developing from an import dependent region to producing ~4 million vehicles annually. Thailand is a regional leader in the automotive industry, contributing about 48% of production in the ASEAN region (4.3million units in 2019) and contributing 12% to the nations GDP in 2021. However only ~50% of the vehicles produced in Thailand are sold in the local market. The rest of the vehicles are exported to other countries within the region. With regards to components manufacture and supply in the ASEAN region, majority of sales is intra-regional, with only 30% of components exported outside the region.

The successful growth of the industry in the ASEAN region over the past 20 years can be attributed to the gradual ramp up in production capacities with appropriate protectionism and governmental support where necessary. Thailand grew its local production five-fold, from 300k -1.6m between 1991-2010 with a government instituted phased approach.

An initial import substitution period characterised by high tariffs, fiscal incentives, and restrictions on CBU imports was implemented in the 1960s. This saw an increase in SKD/CKD assembly to meet local demand. Subsequently, the government was able to encourage transition to the next phase of local manufacturing by instituting and enforcing local content requirements through the 1970s to 1980s. By the 1990s Thailand was producing 300k units of vehicles and over time their budding industry began to attract interest from international OEMs and this influx of manufacturing giants enabled Thailand reach scale in vehicle manufacturing with growth in production to as high as 1.6m by the 2010s.8

In contrast to this small segment of Asia, despite housing about 16% of the world's population, production in Africa was just 931,056 units in 2021, less than 1% of the global production output.⁹

⁶www.statistica.com

⁷ Statista, South African Automotive Benchmarking Club database, Aditya Group -Start-up in Thailand 2020

⁸ JICA - Study for the promotion of the African Automotive Industry

Vehicle sales were also very low in the region, accounting for 1.1mn (less than 1% of global sales)¹⁰. These numbers were largely driven by the two major producing countries in the Region, South Africa, and Morocco.

AFRICA

South Africa is the African region's highest producer and consumer of new vehicles, contributing almost 50% of the region's production and about 40% of its sales. International OEMS like Volkswagen and Toyota lead the pack with significant sales of small Sedans and Hatchbacks as well as mid-range priced pick-up trucks. The automotive industry also plays a significant role in the nation's economy, contributing as much as 6.4% to GDP in 2019 (pre-Covid) and 4.9% in 2021. There exists a robust supply chain to support local production, with over 500 players supplying locally produced components to the market. However, despite their relatively impressive manufacturing capacity, South Africa still does not have a significant export footprint in the region. This can be attributed to the heterogenous and disparate nature of vehicle specifications within Africa (left hand versus right hand driving) as well as some automotive sector growth ambitions of major markets like Nigeria, Ghana and Kenya which have led to protectionist measures against other African vehicle manufacturers. 11

In Morocco, the sector started to experience significant growth in the 2000s, following the implementation of a series of deliberate policies to advance trade relations as well as the local infrastructure development to boost production. The development of the Tangier-Med port and subsequent construction of a 175,000-unit CBU plant by global OEM Renault in the area were significant touchpoints in the sectors' development, enabling major exports to the European market. These major infrastructure development projects enabled the rapid growth of the sector in Morocco. In 2021, following some recovery from the effects of the COVID 19 induced global shutdown, the sector contributed about 24% to the GDP. About 403,000 units of vehicles

were produced in Morocco, with over 70% of these destined for exports. The country also boasts a significant network of over 200 Tier 1 and Tier 2 auto component suppliers who provide the highest quality auto components that ensure that Morocco is able to meet global standards in their vehicle manufacturing.¹²

The developed Asian, European, and American markets currently dominate the automotive industry production as they continue to lead in terms of technology, safety, and environmental standards. The future growth of the industry is expected to be propelled by emerging automotive technology and its adoption within these markets.



⁹ Data Collection Survey on the Automotive Sector, JICA

¹⁰ International Organisation of Motor Vehicles Manufacturers, OICA

¹¹ OICA, JICA - Study for the promotion of the African Automotive Industry

¹² JICA - Study for the promotion of the African Automotive Industry

2.3 Future global trends

In a recent global automotive executive survey, ¹³ more than 1,100 automotive executives indicated that they expect to see a sweeping transformation of the sector in the next five to ten years.

The automotive industry is constantly evolving. From auto-component supply to product development; manufacturing to distribution and after-sales, the length and breadth of the automotive value chain is budding, and rapidly too. Key developments influencing this evolution include:

· Changing customer preferences

 increasing customer demand for convenience, functionality, affordability, and adaptability.

· Global environment and safety standards

 global climate attention and shift to cleaner energy.

· Technological advancements

 Consistent breakthroughs in microchip and automation technologies, as well as connectivity and the Internet of Things.

Business model

 Innovative and bespoke responses by auto industry players leveraging global delivery models to optimise their supply chains and maximise profits in dynamic operating environment.

This convergence of these factors has spurred the following key trends that are shaping the industry:

1. Electric Vehicles

Progressing environmental pressures and gradual implementation of emission legislations such as the COP26 (which has the objective to accelerate the transition to 100% zero emission vehicles and energy transition in general), have propelled the transition from internally combustible engines to electric or hybrid vehicles.

Table 3: Flectric Vehicles Sales across Countries

Countries where fully electric cars make up more than 5% of new vehicles

Country	EV Sales in Q1 2022	EV Share of New Cars	First Quarter to Cross 5%
Australia	7,772	14.8%	2018 Q3
Belgium	10,898	11.0	2020 Q4
China	924,530	16.7	2018 Q4
Denmark	5,945	17.4	2020 Q3
Finland	3,025	13.9	2020 Q4
France	44,774	12.3	2020 Q1
Germany	84,749	13.5	2020 Q3
Iceland	1,630	51.7	2017 Q3
Ireland	6,483	13.0	2019 Q4
Italy	14,263	4.2	2021 Q3
Netherlands	12,501	15.9	2018 Q4
New Zealand	2,896	6.2	2021 Q3
Norway	27,023	83.5	2013 Q3
Portugal	4,025	11.6	2020 Q1
South Korea	29,306	6.5	2021 Q2
Sweden	20,024	28.7	2020 Q1
Switzerland	8,898	16.4	2020 Q1
United Kingdom	68,954	16.5	2020 Q2
United States	172,748	5.3	2021 Q4

Sources: BloombergNEF, BI, ACEA, CATARC, OFV, New Zealand Ministry of Transport

Note: Italy's market share declined in Q1 after reaching 7.7% the prior quarter

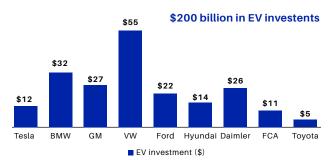
Regions such as the EU have set bold emission and electric vehicle targets, in the race to achieve zero carbon emission. By 2030, both the EU and US target reducing their carbon emission by 55% below its 1990 levels and 50% below 2005 levels respectively. China in turn aims at net-zero before

¹³ https://assets.kpmg/content/dam/kpmg/xx/pdf/2021/11/global-automotive-executive-summary-2021.pdf

2060, and to have its non-fossil fuels constitute up to 80% of its total energy consumption. With auto sector being a critical contributor to fossil fuel consumption, the world's major automotive markets—the United States, European Union, and China—are expected to sell only electric vehicles (EVs) by 2030; and by 2050, 80 percent of the world's vehicle sales are expected to be electric. Bloomberg projects that EVs will make up 35% of the automotive global share by 2040.¹⁴

As a result, investment in EVs has intensified across the industry value chain. Since 2020, automotive start-ups, established automakers, suppliers, and even tech companies have invested over \$200 billion on EVs.

Announced investments in EVs and FCVs - present (\$B)



Source: Statista Global inflation rate from 2018 to 2026

Notwithstanding the above, it is still difficult to say exactly when the era of ICE vehicles will come to an end, as analyst estimates of 2030 EV penetration range from as little as 24 percent to nearly 40 percent. What is however clear is that 'for the next 10 to 20 years, multiple fuel/powertrain combinations (including gasoline/ICE) will coexist, and innovation will continue on multiple fronts. So, instead of a monolith built around one dominant fuel/powertrain combination, the industry will look more like a mosaic.¹⁵

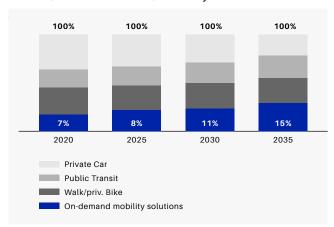
2. On-Demand Mobility & Mobility as a Service (MaaS)

In many markets and with the emerging generations z^{76} , there is a rising swing in the way consumers view mobility and vehicle ownership. Changes in customer behavior and preferences

have heralded a swelling demand for shared vehicles and more fit-for-purpose mobility solutions.

MaaS is the full integration of private and public mobility services in a seamless manner, designed to meet the objectives and requirements of a variety of stakeholders. In this sense, MaaS includes multi-modal aggregation of transport modes as well as on-demand mobility. With higher access to technology and data services, as well as higher road network, the demand for mobility solutions is higher than rural areas.

Leading to 2035, it is expected that the share of urban trips completed using on-demand mobility solutions would more than double from its 2020 share. Globally, the mobility as a service market is projected to grow by about 25.7% CAGR, from about \$48B in 2022 to \$379B by 2031.



3. Connectivity

Connected vehicles communicate several data attributes from multiple sensors, providing rich data about vehicles and their surroundings. Advancing technologies enable vehicles to communicate data directly with everything (i.e., V2X).

This connectivity trend is quickly gaining traction due to increased customer demand for safety, comfort, increasing regulatory requirements and technological developments like 5G and Al. It is expected that 98% of cars produced by 2030 will be connected in some fashion.¹⁷

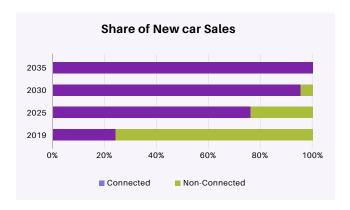
¹⁴ https://www.bloomberg.com/features/2016-ev-oil-crisis/

 $^{^{15} \,} https://assets.kpmg/content/dam/kpmg/be/pdf/2022/Automotive-place-your-billion-dollar-bets-wisely.pdf$

¹⁶ Generation Z - born between 1995 and 2009, also known as 'generation connected'

or 'dot com kids'; expected to make up 27% of the workforce by 2025

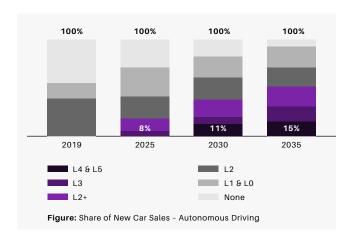
¹⁷ JICA Africa Automotive Study 2022



4. Autonomous Driving

Autonomous vehicles offer an opportunity to transform the world by fundamentally altering the way people and goods are moved. It could improve safety and congestion, while opening independent mobility to excluded people; increase productivity, bring a new travel experience, change the roles of future employees and free up valuable urban land like parking lots.

Fifteen OEMs in the UK alone have pledged to release Level 4 (see Appendix for AVs between 2019 and 2025. With more people warming up to the concept of autonomous driving and its safety, it is projected that over 90% of car sales in 2035 will have some level of automation.¹⁸



2.4 Emerging Trends and Africa

Africa's preparedness for Electric, Connected, Autonomous Vehicles and Mobility as a Service

Increasing availability of mobile connections and retrofitting capabilities within Africa, has facilitated the growth of connected cars within the region. Another key driver of connected vehicles within the region is the rise of cargo/ logistics solution companies- post-COVID-19, for which connected vehicles significantly aid their effectiveness and reach.

However, limited data penetration is likely to stem its prevalence. This is in addition to the fact that, due to the industry's relative nascency and affordability issues, there are little or no specific restrictions on car imports/ manufacturing without connectivity.

A prevalence of poor and unmapped road networks, particularly in the rural areas, in addition to a lack of coherent safety and liability regulations covering AVs, is likely to limit the penetration of AVs within the region. Autonomous vehicles also rely heavily on high-speed internet connectivity, which is the lowest in the world, at only 22% penetration¹⁹.

With respect to shared mobility however, the key enablers including a growing technology ecosystem, widespread availability of mobile payment solutions and mobile connections and an increasing urban population, have facilitated the growth of mobility as a service solutions.

With an estimated 44% of Africans living in urban areas which is projected to increase to 50% by 2030 and 60% by 2050, the region has witnessed a rise of mobility as a service start-up for both passengers and goods (cargo). Ridehailing service providers such as Uber, Taxify; and logistics companies such as Kobo360, continue to expand their operations across Africa.

¹⁸ JICA Africa Automotive Study 2022

¹⁹ hwww.ifc.org

On the other hand, electric vehicle penetration in Africa is challenged by infrastructural constraints particularly with regards to the availability of adequate and constant electricity. The comparative cost of EVs to ICE is also a significant obstacle that EVs would need to surmount within the region.

The Africa Continental Free Trade Agreement (AfCFTA)

Despite the presence of several Regional Economic Communities (RECs) within Africa, such as the ECOWAS and EAC, intra- African trade has continued to be sub-par and challenged by a number of factors, including insufficient transport infrastructure connecting markets, high tariffs, and operational difficulties among member countries.

The African Continental Free Trade Area (AfCFTA) Agreement which came into effect in January 2021, offers an opportunity for the continent to deepen market integration at both regional and continental levels, boost intra-African trade while promoting regional and continent-wide value chains.

This offers a significant growth opportunity for the African automotive sector, which has hitherto, played a limited role in the global automotive industry accounting for less than 1% of global auto and auto-component production.

Specifically, the AAAM, working with African countries and the AfCFTA Secretariat has developed a Pan-African Auto Pact to encourage specialisation and economies of scale across the continent with TRIMS arrangements enabling participant country industries to rebate duties on product imported from other participant countries. The 'hub and spoke' model developed by the African Association of Automotive Manufacturers (AAAM) argues that assembly in 'hub' economies could be supplied by 'spoke' economies i.e. surrounding countries. The advantage is that the gains of the automotive industry would be spread.

2.5. Key Takeaways

Following a review of the global automotive industry as well as the key trends shaping the global and African automotive sector, the following learning points are important to draw out, in the development of the NAIDP 2023:

- Turning around any industry takes time. The
 journey is a marathon and not a sprint. Phasing
 the industry plan to address key areas one at a
 time will help to accelerate sector development.
- An enabling auto policy environment that is predictable and consistent is key to unlocking and accelerating growth of the automotive sector. Without demonstratable government assurance of plan stability and consistency, attracting long term investors with patient capital; as well as securing the buy-in of local and international stakeholders will be all but impossible.
- Quality is crucial to maintaining and sustaining any real progress and plugging into the global value chains. Morocco and India would have been unable to serve the international markets without a strong focus on quality.
- A successful auto industry requires investment in strategic infrastructural development. From dedicated port lines to access to basic amenities like electricity and water, the performance of the industry is subject to access to enabling infrastructure. Morocco is able to compete in the European market due to its ability to deliver at cost competitive prices, which is enabled by its access to infrastructure.
- As Nigeria witnesses more adoption of the mobility as a service, linkages must be established with transport companies to ensure the safety and standardisation of passenger and commercial vehicles to enable easy adoption.
- Strong sector linkages between the auto industry and other adjacent industries such as steel, glass and rubber will be integral to the success of the industry.

Nigerian Automotive Industry Review

Nigerian Automotive Industry Review



3.1 Brief History of the Automotive Industry in Nigeria

The local automotive industry in Nigeria started in 1959 with the establishment of the first assembly plant. The era was characterised by state-led investment in areas of the economy such as automobiles and the Federal Government of Nigeria established six assembly plants with Government taking as much as 70% ownerships in assembly plants. Production grew in the 1960's and 1970's and auxiliary industries like the tyre and glass manufacturing also witnessed growth as the Government partnered with manufacturers to set up plants across the country.

However, in 1986 the military regime fully implemented the Structural Adjustment Policies (SAP) which was one of the International Monetary Fund's (IMF) conditions for granting loans to the Nigerian government. The SAP policies included privatisation of particularly national industrial assets among others which reversed virtually all the gains that had been previously made concerning industrialisation and decent work. The automotive sector experienced a significant downturn and other manufacturing sectors such as petrochemical and mining were negatively impacted too.

The prospect for the sector improved significantly after Nigeria returned to democratic governance in 1999 and benefitted from renewed confidence for investment and a high price of crude oil in the decade between 2005 and 2015. During this period, the National Automotive Council had developed policies to discourage importation of used vehicles, and the National Automotive Design and Development Council (NADDC) issued licenses to over 40 firms to set up vehicle assembly plants with a view to making Nigeria an automotive hub. In 2014, the Federal Government introduced the Nigerian Automotive Industry Development Plan.

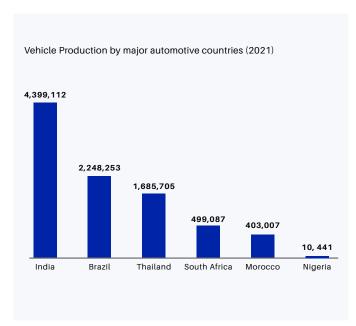
3.2 Current Status of the Industry and the NAIDP 2014

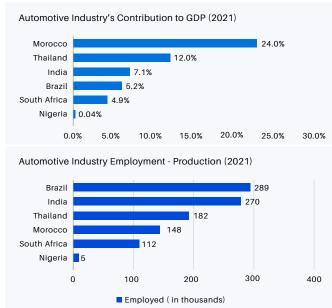
The present state of the Nigeria automotive industry appears to be performing suboptimally when compared with similar emerging economies and the myriads of previous interventions that have been employed to build and strengthen the industry.

In 2012, Nigeria's automotive sector was about \$3.2bn in size. Currently, the sector contributes only 0.04% of the nation's GDP and barely provides employment opportunity to only about 4,803 persons. This is quite an appalling state for an industry that has the capacity to contribute almost 25% to GDP and employ over 280,000 persons as seen in other jurisdictions in Africa. The amount of vehicle production is not left out of this menace as Nigeria produced about 10,441 vehicles in 2021 and in that same year imported over 30 times of that amount, signaling a slow progression on the NAIDP prime goal of significantly reducing Nigeria's huge dependence on automotive import and the aspiration to boost domestic production.

Despite the introduction of the NAIDP 2014 a host of challenges have continued to debilitate the industry stalling its potential.

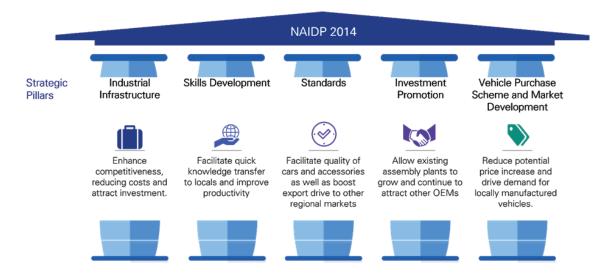
Nigerian automotive industry review





Source: OICA; CEIC data, JICA

The 10-year NAIDP, launched in 2013, was kicked off in 2014 as government's commitment towards developing the Nigerian automotive sector. The 2014 Plan was anchored on five pivotal pillars: Industrial Infrastructure, Skills Development, Standards, Investment Promotion, Vehicle Purchase Scheme and Market Development.



It is critical to note that although the NAIDP 2014 had focused pillars or components, there was an absence of an overarching vision and clarity in terms of enablers to drive the realisation of the pillars effectively. Albeit, the 2014 Plan still bagged some wins but not without challenges that impeded it.

Industrial Infrastructure

A relatively high annual capacity was attained, installing over 400,00 vehicles per annum. Progress on EV introduction was made with about 4 solar-powered EV charging stations built. About 3 centrally located automotive industrial parks with fully equipped infrastructures, collectively occupying over 500 hectares of land in Kaduna, Oshogbo and Nnewi were developed and set in motion.

Nigerian automotive industry review

Skills Development

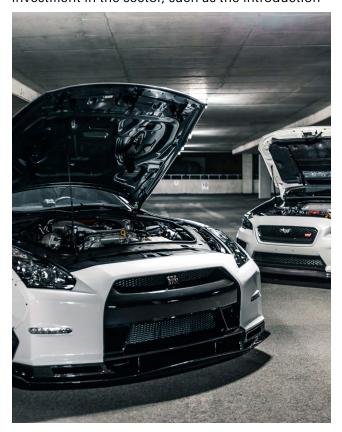
Developing the necessary skills and human resources for the offtake of the Nigerian automotive industry was significantly invested in with over 30,000 youths trained across the nation on vital automotive skills required to close and manage the skill/knowledge gap in the industry. Automotive training centers in locations such as Lagos, Jigawa, Ado-Ekiti, Lokoja etc. were also constructed to facilitate this upskilling process.

Standards

In a bid to build vehicles with optimal safety standards, component and emission testing centres in Zaria, Lagos, and Enugu were successfully built to augment efforts around this vital pillar.

Investment Promotion

Over US\$ 1 billion in foreign direct investment have been attracted by the NAIDP 2014. Various initiatives were introduced to encourage investment in the sector, such as the introduction



of a significant tariff scheme of about 70% on the importation of used vehicles, rebate mechanism for FBUs etc.

Vehicle Purchase Scheme and Market Development

Financial instruments to enable the purchase of vehicles by consumers were also made available, for example, PAN commenced a loan scheme provided by two financial institutions for the purchase of new Peugeot cars, "Peugeot Vehicle Acquisition Finance Scheme".

In a nutshell, the 2014 NAIDP seemed fairly successful, however, a significant portion of its potential has been left untapped due to myriads of leading challenges such as inadequate infrastructure development, ambiguous auto plan, uncontrolled used car imports, high incidences of vehicle smuggling, unattractive fiscal measures, sub-optimal implementation strategy and a list of other issues.

Nigeria remains primarily a used car market with new vehicle imports constituting just about 3% of total vehicle imports²⁰. According to the NBS, Nigerians spent ₩1.08 trillion (\$2.7 billion) to import used cars and motorcycles between October 2018 and September 2019. In 2021, the NADDC estimated that 356,182 used cars were imported into the country. Nigeria's total import bill in 2021 stood at US\$6.1 billion, excluding the costs of vehicle parts, making this sector the 2nd largest user of Nigerian foreign exchange²¹. The used car market in Nigeria is dominated by brands such as Toyota and Honda as they satisfy the criteria of price, durability, and resale value. Unlike new cars, used car dealers have no affiliations with OEMs and are not unorganised. The major source of import for Tokunbo used cars are countries in Europe and North America as well as Cotonou in Benin Republic and Lomé in Togo. Used car sales are concentrated in five key hotspots with Lagos accounting for 60% of sales. Other hubs include Kano, Kaduna, Abuja, and Port Harcourt.

²⁰ Nigerian Customs Data

¹⁹ NBS

Challenges in the Nigerian Industry

A review of the current state of the industry reveal the following challenges:

Insufficient controls to limit the importation of used vehicles and grey imports

- The number of used vehicles that are imported into the market is a significant hurdle to the development of the Nigerian automotive industry and directly contributes to the poor domestic production performance. Many emerging market countries, in developing their local auto sector, controlled the importation of used vehicles (while some other countries even banned such imports).

· Low level of local support

 Existing locally assembled automobiles are not adequately patronised by the public and private sector. Many countries with developed auto sectors have leveraged public procurement to push the industry to develop. This can be attributed to the lack of financial instruments that support purchase of new cars assembled in the country.

Absence of competent indigenous suppliers

- The level of local content within the industry is low which also impacts aggregate employment. Growing both local content and employment in the automotive industry are key government plan objectives and are at the very core of the underlying reason for government support for the industry. Support for auxiliary industries and the transition from SKD manufacturing to CKD manufacturing is also paramount to the progress of the automotive industry as more value, jobs and production units are more pronounced and its contribution to the economy is also higher. The existing auto assemblers in the country also need to expand their capacity to meet these goals.

Inadequate support infrastructure and lack of auto industry hubs

 Nigeria lacks adequately equipped auto clusters with the necessary facilities such as supplier parks and dedicated port infrastructure. Other structural barriers such as the lack of grid power and high cost of power, tough investment climate, inadequate skills, high cost of funding, low finished goods standards for exports, etc.

In addition to the above, interactions with stakeholders across the value chain revealed the following challenges being faced by the industry:

Policy inconsistency

- The regulatory environment lacks continuity in its policies. The lack of proper plan formulation, frequent reversals of government policies, lack of implementation of the provisions in national plan documents and regulatory lapses are key factors that have affected the automotive sector.

Security

 The current state of insecurity due to the banditry and terrorism in the country has raised operating costs and lowered production output. This has led to an erosion of investor confidence in the sector as industry operators are reluctant to do business in an unsafe environment.

Forex Instability

- There is increasing volatility & consumer pressure due to high inflation & exchange rate. Currently, significant FX shortages persist in the private sector with CBN focusing on increasing forex earnings to improve liquidity in the retail end of the market. Vehicle manufacturers are therefore faced with rising cost of production and significant reduction of margin as they are forced to source from the parallel markets at much higher rates.



4.1 Industry vision

Defining a vision statement for the industry is essential to ensuring uniformity of understanding across all stakeholder groups, of the overarching ambition and targets of the plan. It is also useful in inspiring the buy-in and cooperation of stakeholders in delivering the plan objectives.

In developing the NAIDP 2023, stakeholders across the industry value chain were engaged and a vision was crafted for the sector. The vision takes into account the aspirations of the various stakeholders and global themes and outlook for the global auto industry.

Consequently, the vision for the NAIDP 2023 has been defined as:

"A globally competitive automotive ecosystem that serves the domestic and export market, delivers sustainable value for the Nigerian Economy and all stakeholders while enabling the future of mobility."

The key elements of this vision include being:

Globally competitive

- ensuring access to affordable factors of production; water, electricity, good roads, waste management; efficient port management etc., with the objective of enabling a low-cost production environment to nurture the steady growth and development of our local industry. It also means we will be one to foster innovation as a driver for attaining a globally competitive market position

· An Ecosystem

 where all the players in the sector are well integrated, ensuring the industry's transformation and continued success for all stakeholders. The ecosystem includes OEMS and auto-component manufacturers and suppliers, after-sales service providers, Dealers & distributors, educational institutions, government & regulators, finance providers and users – individual consumers, companies & transporters.

· Domestic and export oriented

 aiming to serve the domestic and African market and beyond, particularly with regards to quality and affordability of automobiles and adaptability of automobiles, auto-components, auto skills and services.

A driver for sustainable value for the Nigerian Economy

 by building an automotive industry that makes a significant contribution to the nation's gross domestic product (GDP), job creation and improvement of the overall standard of living of every Nigerian.

· Enablers for the future of mobility

 creating a future-proof industry that is responsive to the industry trends and developments including the energy transition as well as ensuring strong sector linkages with interdependent sectors such as steel, rubber, and leather industries.

4.2 Key industry development objectives by 2032

To drive the realization of the Vision for the Nigerian automotive sector, five key development targets have been identified as imperative:

- 1. Growth of vehicle production to 200,000 units
- Transition from SKD to CKD/CBU mode of manufacturing
- 3. Increase in the local content of assembled vehicles to 40%

- 4. Increase in employment in the Automotive Value Chain
- 5. Attainment of Electric Vehicle Production of 30% of local production

4.2.1 Growth of vehicle production to 200,000 units

The Nigerian automotive sector is the 3rd largest vehicle manufacturing and assembly country in Africa. However, going by its 2021 output (about 10,400units²²), the local industry accounts for less than 1% of the total regional production.

In comparison, Nigeria's domestic demand has maintained a historical growth rate of about 2.3% over the last 10 years and is estimated to grow to about 503,000 units by 2032. This is a promising market for vehicle sales which should be maximised.

Consequently, one of the major objectives of the NAIDP 2023 is to boost the local Vehicle (including passenger vehicles for public transportation) production to 200,000 units by 2033. This will grow our share of regional vehicle production output by 25%, address some of the local demand for vehicles and be exported to meet the demand from other countries in the region and beyond.

4.2.2 Transition from SKD to CKD

The NAIDP 2023 seeks to transition the industry from one built on SKD mode of manufacturing, which is characterized by short production runs, to CKD manufacturing, which employs a longer production run, increases local content utilization and in turn, returns more value to the industry.

4.2.3 Increase local content of assembled vehicles to 40%

In implementing the NAIDP, one of the major focus areas will be to improve the local content addition to vehicles manufactured within the country.

Provisions of the Africa Continental Free Trade

Agreement (AfCFTA) state that a vehicle will be required to have "at least 40% regional content" in terms of its production components to be eligible for duty-free export within the AfCFTA region.

Consequently, in line with our vision to be "A globally competitive automotive ecosystem that serves the export market...", we will focus on growing the local feeder industries in order to develop local auto component manufacturing capacity towards the attainment of 40% local content in vehicle assembly. This will enable the reduction in cost of production and ultimately ensure new vehicle affordability, most especially within the African market.

4.2.4 Increase in employment in the automotive value chain

All over the world, industries are a major employer of labour and so the existence of thriving industries lead to an increase in employment levels. However, the current state of the Nigerian automotive sector, with its small-scale production activities, has significantly limited the sector's capacity to provide jobs for the unemployed as obtained in other jurisdictions.

One of the major objectives of the NAIDP 2023 is the rapid increase in the local production of vehicles. Apart from other benefits like increase in FX and improvement in the balance of trade, the increase in production will open employment opportunities for qualified candidates across the automotive value chain thereby increasing GDP and standard of living in the country. The industry target is to provide over 1,000,000 million jobs (both direct and indirect) to support the growing sector.

4.2.5 Attain Electric Vehicle Production of 30% of local production

In line with the changing terrain, it is imperative that the plan for the Nigerian automotive sector incorporate and drive development of the EV segment. To this end, the goal for production of EVs is to attain 30% of local production by 2033.

This target encompasses the production of 2, 3 and 4-Wheelers.

The EV segment of the sector is still in its nascent stage and as such, the full collaboration of all stakeholders, both Private and Government, will be necessary to successfully develop the necessary infrastructure to support its sustainable growth.

Summary of key objectives

The NAIDP 2023 objectives are integral to the attainment of the vision for the automotive sector in the next 10 years. These objectives must guide the approach to implementing identified initiatives to ensure optimal results.

Table 4: Targets Set for the NAIDP 2023

	Area	Description	Targets
	Production	Number of passenger and commercial vehices to be manufactured in-country	200,000
	Regional Market Share	Proportion of thr regional automotive indurty share	26%
P	Mode of Manufacturing	Manufacturing type i.e. CKD and CBU	CKD Manufacturing
X	Local Content	Amount of local content utilised in manufacturing	40%
T	Electric Vehicles	Ration of electric vehicles to combustion engine vehicles produced in country	30% of local production
	Employment	Number of people employed directly and indirectly by the automotive industry	 33,000 - 54,000 Direct 600,00 - 1,000,000 Indirect

4.3 Duration and Review of the NAIDP 2023

The vision of the NAIDP 2023 is set to be executed across a 10-year period, from 2023 to 2033. It is expected that this duration will provide the necessary assurance, stability, and certainty for investors and stakeholders within the Nigerian, regional and global automotive ecosystem. By the end of the decade, it is envisaged that the domestic industry would have not only transitioned to CKD mode of manufacturing space, but more importantly, would have contributed to the Nigerian economy while also emerging as a player in the regional value chain.

A review of the NAIDP will be done every two years to ensure effective monitoring, evaluation, and implementation.



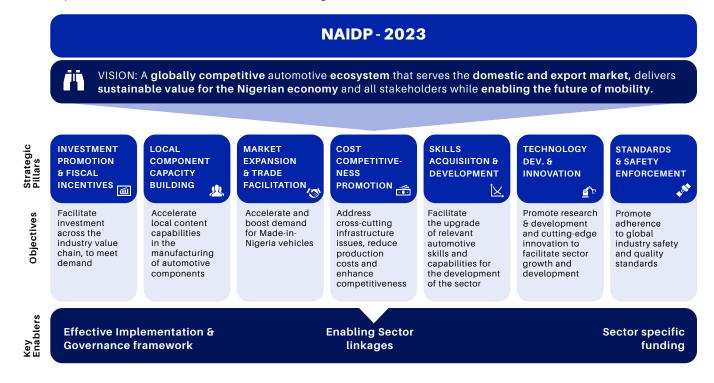
Master Plan - Strategic pillars & enablers

Master Plan - Strategic pillars & enablers

5.1 Strategic Pillars

The Nigerian Automotive Industry Development Plan 2023 shall be anchored on seven (7) pillars designed to address the various sectoral issues hindering the industry's growth and drive the attainment of the set vision and objectives. These pillars include investment promotion and fiscal incentives, local component capacity building, market expansion and trade facilitation, cost competitiveness promotion, skill acquisition and development, technology development and innovation, standards and safety enforcement. Success in the achievement of the objectives of these pillars is however, hinged on three critical enablers including an effective governance framework for intersectoral coordination and monitoring; enabling sector linkages to promote alignment across upstream and downstream adjacent industries; and sufficient sectoral funding to aid investment through affordable financing.

These pillars and enablers are outlined in the Figure below:



5.1.1 Investment promotion & Fiscal Incentives

Context

Achieving a production target of 200,000 units by 2033 will require significant investment – estimated in the range of \$6.3-\$15.8 billion across the industry value chain. The availability of value-adding investment promotion initiatives and fiscal incentives are therefore critical to attracting both local and foreign investors with patient capital to accelerate the growth and ultimate profitability of the sector.

The Nigerian government, through the NAIDP 2014 introduced several fiscal incentives to attract capital investments required to drive capacity development and industry backward integration that would ensure greater returns for all stakeholders. Some of these initiatives included a value-based rebate system, and tax holidays for auto and component manufacturers. These incentives were however insufficient to attract the desired level of investments.

Objectives

The investment promotion and fiscal incentives contained in the NAIDP 2014 have therefore been reviewed and revised to align with the vision of the NAIDP 2023. The specific objectives of these interventions are as follows:

- Stimulate the growth and development of the automotive sector.
- Facilitate the transition of SKD to CKD type of automotive manufacturing over the next 10 years.
- Ensure improved joint ventures between international OEMs and local companies through foreign direct investments, technology transfer and skills to local automotive players.
- Encourage automotive component investments in Nigeria.
- Reposition the automotive industry to ensure improved value-addition to the economy through employment opportunities, improved balance of trade, increased contribution to GDP, and access to Forex earnings.

Initiatives and Interventions

Tax holiday/ Pioneer Status:

Government will grant the following incentives:

Table 5: Pioneer Status and tax Holiday Incentives for the Automotive Industry

Incentive	Details	Eligibility
Pioneer Status	3 years, extendable by 1 or 2 years for auto assemblers	Registered manufacturers/ OEMs must demonstrate: • Investment in CKD/ CBU
Tax Holiday	Additional 5 years tax holiday for auto-component manufacturers and new vehicle, Tricycle and Motorcycle assemblers.	mode of manufacturing for vehicles Investment in CKD mode of manufacturing for Tricycle and Motorcycle assemblers Present business plan to begin exportation (minimum of 10% of total production) within a 5-year period

Import Duties and Levies:

Government will grant the following incentives for auto-components and kits:

Table 6: Tariff Structure for Auto-components and Kits

Tariffs								
			0 - 5 Years	s	6 - 10 Years			
		Import Duty	VAT	Import Levy	Import Duty	VAT	Import Levy	
	Pas- senger Vehicles	0	0	0	0	PR	0	
CKD	Com- mercial Vehicles	0	0	0	0	PR	0	
	EVs	0	0	0	0	PR	0	
	Trucks	0	0	0	0	PR	0	
	Pas- senger Vehicles	10	PR	0	20	PR	15	
SKD	Com- mercial Vehicles	10	PR	0	20	PR	15	
	EVs	0	PR	0	10	PR	10	
	Trucks	10	PR	0	20	PR	15	
Gas Powered Vehicle (Conversion kits)		0	0	0	0	0	0	

^{*}PR: Prevailing Rate

The following tariffs will apply for **Fully Built Units** (**FBUs**):

Table 7: Tariff Structure for Internal Combustion Engine Vehicles

	Tariffs								
			0 - 5 Yeaı	rs	6 - 10 Years				
		lm- port Duty	VAT	Import Levy	lm- port Duty	VAT	lm- port Levy		
Vehicles older than 4	Pas- senger Vehicles	20	PR	15	20	PR	30		
years (from the date of Manu- facture)	Com- mercial Vehicles	20	PR	0	20	PR	30		
	Passen- ger Cars	20	PR	50	20	PR	80		
Vehicles 4 years old or less (from the date of manu- facture)	New ehicles under the Value- Based Rebatev Scheme*	20	PR	15	20	PR	30		

^{*}Restricted to Licensed Automotive Assemblers/ OEMS, who purchase FBUs under the Value-based Rebate Scheme.

^{*}PR: Prevailing Rate

Table 8: Tariff Structure for Electric Vehicles and Concessionary Imports

Tariffs									
		0 - 5 Years	;	6	10 Years				
	Import Duty	VAT	VAT	lm- port Levy					
SKD EVs	0	PR	0	10	PR	0			
Used EVs	20	PR	15	20	PR	15			
New EVs	20	PR	0	20	PR	15			
New FBU - Concessionary Imports*	10	PR	0	20	PR	0			

Provided that where the import volume of electric vehicles into Nigeria reaches 40,000 units per annum, the rates of import duty and import levy on used electric vehicles shall be 20% and 80% respectively.

Eligibility shall be determined by the NADDC and shall include the following:

- Automotive assemblers/ OEMS who are registered and operating under the NAIDP
- Vehicle manufacturers that operate in the assembling of vehicles at SKD II and/ or CKD level.

Value-based Rebates:

The Value-based rebate is aimed at promoting local component manufacturing and facilitating rapid transition to CKD manufacturing by reducing the tax burden for manufacturers who patronize local component manufacturers.

This approach provides a higher tax discount rate to CKD manufacturers over SKD II and SKD I Assemblers based on their local content patronage.

Table 9: Value-Based Rebate Mechanism

Assembly Process	Multiplier	Local Content	Total Incentive
SKD	1.5	LC	1.0 * LC
CKD	2.0	LC	2.0 * LC

- For every two SKD units of vehicles assembled in Nigeria, the licensed automotive assembler/ manufacturer shall be granted allowance to import one FBU vehicle at an import levy rate of 15%.
- For every one CKD unit of vehicles assembled in Nigeria, the licensed automotive assembler/ manufacture shall be granted allowance to import one FBU vehicle at an import levy rate of 15%.

Rebate Mechanism

- The rebate will be based on a multiplier of the declared Customs Value of SKD or CKD kits:
- The rebates will be granted on a rolling quarter basis, with values in each quarter available for use from the following quarter for a 12-months period. These rebates are not transferable between entities.
- The Implementation Committee will conduct a review of the performance of these rebates in facilitating the CKD transition, every three years, and will propose new rates, based on its findings from the review.

(Check Appendix for illustration)

Eligibility:

Registered manufacturers/ OEMs must meet the following criteria:

- · Operate CKD mode of manufacturing
- Demonstrate collaboration and patronage with local component manufacturers e.g., supply agreements with local component manufacturers

Import volumes shall be subject to the volumes reached in previous year. The concession will not be applicable on models being manufactured in-country

^{*}PR: Prevailing Rate

Accelerated Capital Allowance:

Government will grant the following incentives with respect to capital allowances for assets purchased by automotive manufacturers:

Table 10: Incentive on Capital Allowance

Incentive	Regime	Eligibility
Capital Allowance	Acceleration of capital allowance on plant 6 machinery purchased by automotive manufacturers from 4 years to 2 years	Registered manufacturers/ OEMs must demonstrate: Investment in CKD/ CBU mode of manufacturing for vehicles Investment in CKD mode of manufacturing for Tricycle and Motorcycle assemblers Present business plan to begin exportation (minimum of 10% of total production) within a 5-year period

Asset Finance Scheme:

Government will grant the following incentives:

Table 11: Incentive on Asset Finance Scheme

Incentive	Regime	Eligibility
Asset Finance Scheme	Provide capital funds at single digits interest rates for Made-in- Nigeria automotive manufacturers and auto-component manufacturers (further details contained Chapter 6)	Demonstrated capacity for; CKD manufacturing Auto component manufacturing CKD manufacturing for Motorcycle and Tricycle manufacturing Evidence of 70%-80% of required funding Partnerships with OEMs/ global auto manufacturers an added advantage

Electric Vehicles

Electric Vehicles, for the purpose of this plan, will refer to vehicles powered via electrically rechargeable batteries.

The specific objectives of the interventions for Electric Vehicles are as follows:

- To facilitate production and adoption of electric motorcycles
- To facilitate investments in electric vehicle charging stations and other infrastructure

The following incentives will apply to Electric Vehicles under the revised NAIDP:

Table 12: Incentive on Electric Vehicle

Incentive	Regime	Eligibility
Fiscal Incentives for Assemblers	10 years tax holiday for assemblers Implement accelerated capital allowance for EV manufacturers and auto-suppliers from 5 years to 1 year Specific import duty for EVs (details under the tariff schedule) with the provision of reverting to the proposed tariff for ICE SKD/CKD and FBUs vehicles on meeting 40,000 units of production	Registered manufacturers/ OEMs must demonstrate: Investment in CKD mode of manufacturing for Tricycle and Motorcycle assemblers Investment in SKD/CKD mode of manufacturing for vehicles
Fiscal Incentives for Consumers	3-year tax holiday for cab and courier companies utilising electric vehicles Accelerated capital allowances, in conjunction with the state government, on Nigerian-made Vehicle purchases for companies; 2-years as opposed to the currently existing 4-years	Purchase of Electric Vehicles for use in business operations



License Requirements

Building on existing guidelines and stipulations, the updated licensing requirements for assemblers will be as follows:

- A duly endorsed technical agreement for assembling with a clearly defined local content clause or provision with Original Equipment Manufacturer (OEM) (direct investment by OEM as lead partner is preferred);
- The factory address to be provided at registration must include copies of title deed or lease document of the factory address
- Business Plan must clearly satisfy the minimum equipment requirement for SKD/ CKD operations
- Factory must show actual assembly and manufacturing capacity in line with approved plans
- An assembling process flow chart based on the space acquired with workstations clearly identified

- Clearly documented packing list of SKD/ CKD kit import
- · Certificate of Incorporation
- Tax clearance certificate; Registration with Nigerian Customs Service and Federal Inland Revenue Service

The Assemblers license will be up for renewal every Three (3) years, subject to results from the Annual assessments of their performance against targets. Assessment shall cover the below listed, and manufacturers/ assemblers shall be required to submit annually;

- Production data (including EVs)
- Sales data across various models and exports
- Employment data
- Evidence of transfer of expertise in production to local auto component manufacturers and service providers in the sector

Others

License renewal shall be initiated when the assembly plant undergoes remodeling/ upgrades in operations or mode of manufacturing. For instance, migration from SKD to CKD.

5.1.2 Local Auto-Component Capacity Building

Context

Progressive automotive industries have been built on the back of strong automotive component value chain. This competency not only enables the facilitation of CKD and CBU manufacturing but can also be a source of significant forex earnings, as seen in India, where automotive component export constitutes as high as 7.1% of its GDP and provides about 5 million direct and indirect employment opportunities. Globally, about 80% of the value addition from the automotive industry is driven by an efficient component manufacturing competency – in which Tier 2 and Tier 3 account for about 50% and Tier 1 account for 30%.

The Nigerian automotive industry is currently built on a weak local component supply chain, which is evident by the next-to-zero CKD manufacturing capabilities, low production runs and the low economic output/ value of the automotive industry. Such weak capabilities have largely been because of the high cost and unfavourable terms of funding, sub-optimal standards of finished goods or components and insufficient technical know-how. It is important to foster the attraction and retainment of global OEMs and automotive component manufacturers as their transfer of knowledge, technology, expertise, and collaborative efforts with local original equipment manufacturers can contribute remarkably to improving the local component capacity of the Nigerian automotive industry. On a regional scale, AfCFTA provides an opportunity for the Nigerian automotive industry, particularly through its Rules of Origin (RoO) which aims at promoting regional and continental-wide automotive value chains through market integration.

Objectives

The specific **objectives** of the interventions tailored at building the local auto-component capacity, are to:

- Create viable domestic enterprises with capabilities of meeting the domestic automotive industry demand and providing high-quality auto components for the global value chain.
- Ensure improved skills and technology transfer to local automotive component manufacturers and suppliers as they serve niche markets.
- Ensure a market environment that encourages ease of doing business and an economically viable market that will attract large global and regional component manufacturers to do business in the Nigerian automotive industry.
- Adequately leverage the resources and presence of the component manufacturers to ensure skill and technology transfer to the local suppliers and manufacturers.
- Create a base of component manufacturing that can service the current aftermarket/retail opportunities, principally in segments currently experiencing high import penetration levels.

Initiatives and Interventions

To deliver on its set targets, the government shall implement the following:

1. Supplier Development Programmes:

Roll out a comprehensive programme to enable the local supply chain upgrade across the following:

- Parts and Accessories
- Component manufacturing
- Equipment manufacturing
- Logistics
- Support services

The Plan will aim to develop automotive component manufacturing capacity in the following key areas:

0 - 5 Years

- Plastic and rubber parts: dashboard, interior panels, exterior panels, bumpers, containers, tyres, tubes, fan blades, fan belt, seat foam, upholstery, acoustic and thermal insulation, oil seals, hoses, radiator grills, engine seating, etc.
- · Lithium: Batteries for ICE and EVs
- Chemicals: lubricants, paints, metals surface treatment chemicals, seam sealants, anti-gravel
- Silica: Glass Manufacturing windshield, side and rear mirrors

6-10years

- · Leather: Seat and dashboard covers
- Welded parts: exhaust system, seat frames, etc.
- · Chassis-related components
- Engine Performance related components
- Others: cables (clutch, throttle, speed, choke, handbrake), filters, gaskets, brake pads/linings, etc.
- 2. Attraction of International / Regional Auto-Component Manufacturers

Government will grant the following incentives:

- Provide incentives, infrastructure, and strategic policy promotion to attract global and regional component manufacturers to invest in the sector.
- Engage and orchestrate partnerships that allow skills and technology migration from these large component investors to domestic companies.



- Identify key component segments with current high import penetration levels and target global and regional producers to invest accordingly.
- Develop government-to-government agreements with regional partners that leverage partner country private sector capabilities.
- 3. Fiscal Incentives for Auto-Component Manufacturers

Provide the following tax incentives for qualifying auto-component manufacturers:

- Accelerated capital allowance from 3 years to 5 years on Plant & Machinery purchased
- Pioneer Tax Status for auto component manufacturers (3 years and extendable by a maximum of 2 years per NIPC)
- Additional 5 years tax holiday for auto component manufacturers with track record of high performance.

4. Auto-Component Manufacturing Development Fund

Provide local automotive component manufacturers access to automotive component productivity/ intervention funds to facilitate the production of non-vehicle performance-based auto-components.

5.1.3 Market Expansion & Trade Facilitation

Context

Although the demand for vehicles in Nigeria is about 400,000 units²³, the demand for new made-in-Nigeria vehicles is only about 2.5% of this figure, and about 75% of this is attributable to the imported used cars market. Affordability has been a major factor influencing Nigerian's preference for the used car market with buyers able to access used cars at significantly cheaper prices – often between 40%- 50% of the new versions. In addition, loose restrictions and poor enforcements on the age and quality of the vehicles imported into the country have further increased the popularity of the used vehicle market, with buyers able to import accidented vehicles and aged vehicles into the country.

In order to transition to CKD manufacturing and achieve a local auto-component utilisation of 40%, significant investment would be required. Such investment is however only worthwhile when investors can achieve economies of scale in the shortest possible time. In addition, facilitating a sizeable demand for new made-in-Nigeria vehicles is fundamental to achieving the vehicle and local auto-component production targets of the NAIDP by 2033.

Objectives

The objectives of the market expansion and trade facilitation pillar within the NAIDP is therefore to:

 To accelerate and boost demand for made-in-Nigeria vehicles

- To improve border procedures to promote economic efficiency
- To expand the market for local registered Assemblers by committing the government to offtake from local manufacturers, in a bid to meet its requirements for new vehicles.
- To redirect government spending on vehicles towards value-adding activities in the country and limit capital flight in the form of importation.
- To make financing for the purchase of locally assembled vehicles easily accessible to consumers through affordable payments in order to;
 - Support transition from importing used cars to purchasing new cars
 - Enable development of the Nigerian automotive industry value chain
- Grow an export industry for the locally assembled cars

Initiatives and Interventions

1. Vehicle Imports Restrictions

The government will:

- Institute a 'Deletion List' of auto components and parts to be restricted from importation based on the recommendation of the Council which will be provided by the Minister.
- Enforce the restriction on all accidented vehicles
- Introduce strict and enhanced registration system for used vehicles including:
- Introduction of Central Vehicle Registration for unified registration of vehicles and Custom Registration certificates (digitally enabled) for used vehicles as a pre-requisite for obtaining

VIN.

2. Guaranteed Government Offtake

The government will:

- Ensure implementation of Executive Order 003

 enforce all federal MDAs with provisions for purchase in their approved budget to patronise locally assembled vehicles
 - In exceptional cases where specialised vehicles are required and are not locally assembled and available, the approval of the president must be sought before sure procurement is made
 - The names of such MDAs granted approval shall be published in National Dailies
 - Enforcement shall include all private companies working on government-funded projects to purchase project vehicles from Nigerian manufacturers
 - Ensure clarity in the BPP policy on the approved assemblers for vehicle purchase

Enforcement shall ensure that a minimum of

- 70% of vehicles procured will be locally assembled upon commencement of the implementation of the NAIDP.
- 100% of vehicles procured will be locally assembled by year 8 of the policy implementation.
- Secure commitment of Federal, State, and Local governments to drive and enforce made-in-Nigeria vehicle purchases
- Legislate strict punishment for non-compliance including jail terms without the option of fine for:
 - Erring Procurement Officers, Directors of Finance and Permanent Secretaries who approve purchase of vehicles outside the Registered Assemblers
 - Erring private individuals and directors of companies found guilty of engaging in smuggling or importation of banned



vehicles.

 Officers of the Nigerian Customs Service and other paramilitary officers or government officers found guilty of aiding and abetting smuggling or importation of banned vehicles

3. Commercial Transportation Revamp

The government will:

- Work with State governments and transport unions, through advocacy to introduce a Commercial Vehicle Replacement Programme for intra-city and intercity buses and government and private sector school buses and staff buses
 - 25% replacement within the first three years of the commencement of the Plan
 - 50% replacement by the first six years of the Plan
 - 80% replacement by year eight of the Plan
 - · 100% replacement by year ten of the Plan

Provide vehicle finance scheme to accelerate the commercial vehicles replacement through the provision of affordable funding for vehicle purchase (further details contained under enablers)

- Facilitate conversion of 20% of the commercial vehicle to electric commercial vehicles
- Work with State governments to dedicate select bus corridors for the provision of electric vehicles charging infrastructure
- Implement programme to convert ICE-powered delivery motorcycles to electric motorcycles; and three-wheeled automobiles to electric automobiles
- Work with Ministry of Transportation and Environment to enforce and accelerate implementation of end-of-life vehicle and other automotive recycling regulations to address old commercial vehicle replacement (See Chapter

5.1.7 for details)

4. Consumer Incentives

The government will:

- Launch a vehicle purchase financing scheme at single-digit interest rate to accelerate acquisition of new locally assembled vehicles
 - Liaise with the CBN on developing a fund for the vehicle financing scheme
 - Launch a nation-wide sensitization campaign on the availability of low-cost financing for locally assembled cars
- Establish partnerships with the most financial institutions to deliver other innovative financing schemes for consumers
- Implement accelerated capital allowances on Nigerian-made Vehicles, both ICEs and EVs, for companies and businesses; - from 4 years to 2 years in collaboration with the State governments.
- For EVs Introduce tax deductible interestpayments on loans taken by employees to purchase Nigerian-made electric vehicles

5. Trade Agreements

The government will:

- Secure and execute trade agreements with Nigerian trading partners to enable offtake of locally assembled cars and parts.
- Identify countries with high existing and latent demand within the global automotive value chain and secure trade agreements with them.
- Institute an export credit system to incentivise export of locally manufactured vehicles and components.
- Organize trade fairs and export promotion activities to facilitate partnerships and trade agreements with off takers.

5.1.4 Cost Competitiveness Promotion

Context

As previously established, addressing affordability of made-in-Nigeria vehicles is integral to stimulating demand and in turn the overall growth and success of the industry. While providing consumers with access to cheaper finance options is imperative, it is equally essential to address key factors that influence the cost of production, to enable manufacturers and stakeholders across other upstream and downstream deliver auto parts, vehicles, and services at more competitive prices.

The 2020 World Bank Ease of Doing Business report ranks Nigeria 131 out of 190 countries-highlighting the sheer difficulty in transacting business in Nigeria. Particularly crucial to the automotive industry is the unavailability of critical infrastructure- including good road network, efficient port access and electricity. The absence of a focused solution to address these infrastructural needs of the sector may be threatening.

The NAIDP 2014 attempted to address some of the issues through the set-up of industrial parks with access to potable water, waste disposal system, and electricity. However, poor coordination across government agencies, inability to secure required support from the states, lack of funding was some of the key factors that affected the recording of significant progress.

Objectives

- Enabling access to affordable and efficiently managed infrastructure to support vehicle and auto component manufacturing.
- Encourage investment in the automotive sector by boosting ease of doing business.
- Enable attainment of growth objectives for the development of the automobile industry.
- Address cross-cutting infrastructure issues, reduce production costs, and enhance

competitiveness

Initiatives and Interventions

1. Imports / Exports

- Provide dedicated port delivery (DPD) route to enable faster clearance of automotive component imports and faster processing for CKD/CBUs and component exports.
- Work with the NCS and NPA to implement periodic training and retraining of Customs officers at designated ports on the CET tariffs applicable to the industry.

2. Services

- · Secure partnerships with OEMs to:
- provide formal dealerships arrangements and adequate distribution across Nigeria with existing dealers & distributors.
- Incorporate existing informal mechanics into their after-sales service network.

3. Develop purpose-built industrial parks in the major automotive clusters across Nigeria

Determination of appropriate locations shall be based on proximity to;

- Ports
- · Automotive clusters
- Existing FTZs (e.g., Calabar FTZ, Lekki FTZ) to ensure ease in transportation of raw materials and finished goods

Incentives to encourage Private Sector Participation

- · Tax holiday for Industrial Park Developers
- · Accelerated capital allowances on the following:
 - · buildings from 10 years to 5 years; and
 - plant & machinery, from 5 years to 2 years

- Extend available tax reliefs to vehicle manufacturers and auto-component suppliers in the industrial parks:
 - RIDRITCS1 on investment in road infrastructure
 - Investment tax relief for investment in water, electricity and road infrastructure

5.1.5 Skills Acquisition & Development

Context

The automotive industry is a technologically advanced manufacturing industry with rapid technological changes occurring constantly, in areas like artificial intelligence, machine learning, robotics, nanotechnology, renewable energy technologies, Internet of Things (IoT), biotechnology, and big data, amongst others. Such innovations and technological developments require a highly skilled workforce across management and in low and mid-level skilled labour in disciplines such as engineering, electronics, mechatronics, calibration, advanced materials, etc., to drive emerging fields and disruptions.

To ensure the availability of indigenous skilled manpower for the industry as well as establish the provision of adequate technology, the NAIDP 2014 adopted key initiatives and was able to develop automotive courses for vocational/ technical and university education. Together with the NBTE and NUC, they sought to address skill and knowledge gaps of mechanics and develop requisite skills for the industry, effect collaborations with industry players to deliver automotive training programmes to mechanics, auto component suppliers, etc, and provide financial support/ grants to industry players through the introduction of initiatives like the Automotive Design Innovation Challenge. In spite of the aforementioned initiatives by the NAIDP, there, however, remains the need to address the dearth of available skills for the automotive industry and ensure continual development of competence in tandem with the



ever-evolving advancement of the industry. Automobile technology graduates are the foundation of automobile-related industries and educational institutions; however, statistics have shown that over 400,000 graduates are produced by Technical and Vocational Education and Training (TVET) institutions annually, and more than 70% cannot be employed because they do not possess the prerequisite technical skills to drive the 21st century workplace results.

Objectives

The set objectives for facilitating skill acquisition and development for the automotive industry are as follows:

- To build the necessary technological capacity for the development of local component manufacturers and suppliers.
- To increase the local skills base needed to facilitate modern vehicle assembly, trading, and repair.
- To encourage and inspire secondary school students to take up automotive-related courses and make their contributions to the sector.
- To facilitate relevant research and development needed to drive innovation and technological advancement in the automotive industry.

Initiatives and Interventions

 Collaborate with OEMs and educational institutions to develop and deploy more automotive curriculum

The government will:

Set up an Automotive Skill Development
Working Group comprising the NADDC, OEMs,
educational regulators (NUC and NBTE),
and educational institutions to oversee the
development and implementation of automotive
training courses and programs.

- Work collaboratively to develop 3 additional automotive curriculums in Nigerian universities and 10 in technical/vocational institutes, within the next 10 years. Suggestive courses include:
 - · Automotive Design
 - Automotive Technology / Automotive Service Technology
 - · Automotive Mechatronics
 - Provide sponsorship programmes for skills development of individuals in these courses
- Engage OEMs/ local assemblers to provide annual training calendars for the delivery of training courses.
- Engage State Governments and ITF to identify and secure possible locations within the auto clusters for the set-up of the automotive training centers.
- Identify possible partner institutions for the setup of the six (6) automotive centers to develop mutually beneficial PPP models.

2. Facilitate the provision of training programmes to SMEs

The government will:

- Provide training programmes and skills development workshops for SME, mechanics, and other service providers to build skills and capacity.
- Aid SMEs interested in participating in the NAIDP in the areas of investment planning, loan facilitation, and technology sourcing or upgrading.
- Set-up or revive the Automotive Development & Research Fund to:
 - Provide financial assistance to address crucial investment, technology upgrading, innovation, research, and product development needs of SMEs and academia.

- Provide scholarship programmes and innovation challenge programmes.
- Fund advanced manufacturing technology training and innovation centers in the automotive park, universities, polytechnics, and technical training institutes in conjunction with OEMs.
- 3. Certification of Auto workshops (mechanic) and service centers

The government will:

 Implement a structured approach for certification of auto workshops and service centers.

5.1.6 Technology Development & Innovation

Context

The impact of technology has disrupted numerous industries and the automotive industry has experienced its fair share of this disruption. The burgeoning of digital technology is revolutionising the automotive industry, making it possible to produce inventions such as autonomous and electric vehicles. Given the huge focus on cleaner energy, technology is also emerging as a bedrock for the seamless transition to environmentally friendly energy sources for vehicles.

The revised NAIDP will seek to promote the technological capacity across the automotive value chain, particularly auto-component manufacturers, and after-sales service (repair) providers to ensure their ability to plug into the global value chain. The NAIDP will also seek to promote cutting-edge African-centric innovation that ensures a future-ready auto industry.

Objectives:

· The primary objective of initiatives under the

Technology Development and Innovation pillar is to promote research & development alongside cutting-edge innovation to facilitate sector growth and development.

Initiatives

1. Develop PPP Models with OEMs to set-up technology hubs/automotive villages

The government will:

- Provide at least 10 locations for Automotive Technical Workshops and Facilities, across the auto clusters.
- Partner with OEMs and global auto component manufacturers to establish modern auto workshops and facilities.
- Provide access to Association-registered mechanics to use facilities in the delivery of their services.
- Partner with international OEMs and local suppliers to enable proper technology transfer both for present needs and future needs.
- 2. Provide financial and non-financial support for research & development

The government will:

- Through the revamped NAC Fund, provide research grants to SMEs and academia for relevant research and development. Criteria to include:
 - · Proven relevance to the automotive industry
 - · 50% counter-funding for SMEs
- Provide technical support in partnership with OEMs to researchers/ SMEs.

3. Expand scope of the Automotive Innovation challenge

The government will:

- · Wider spectrum of the value chain, including:
 - Select auto-component areas with identified local capacity including:
 - Glass (windscreens and mirrors)
 - · Leather (furniture)
- · Alternative/ clean energy

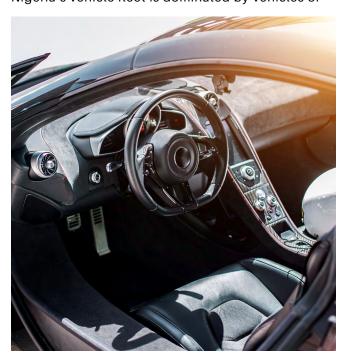
5.1.7 Standards & Safety Enforcement

Context

The enforcement of standards and safety in the auto industry provides the basis for ensuring driver and passenger safety (both on the road and against theft) while also controlling the environmental impact of vehicle emissions.

The development of a modern automotive manufacturing and trade system with vehicle identification and tracking capacity will result in a more efficient vehicle fleet with improved levels of safety and environmental protection.

Nigeria's vehicle fleet is dominated by vehicles of



differing and uncertified standards. An alarming number of passenger vehicles are imported into the country annually with a large number being older than 10 years. For further context, according to the Ministry of Transport, 10,644 commercial buses out of 26,442 (40%) failed the roadworthiness test in Lagos, the vast majority due to faulty brakes, in just January of 2022. This potentially translates to about 1.5 million vehicles that are unroadworthy, of the estimated 3.9 million commercial vehicles on the road.

In an attempt to curb and manage this problem, the NAIDP 2014 introduced some measures to transform Nigeria's vehicle fleet into a safe, contemporary and environmentally efficient vehicle fleet. Mandatory vehicle standards were required to ensure all vehicle components and parts meet the appropriate local and international standards. Despite these measures, the level of standard and safety in the Nigerian Automotive Industry has barely scratched the surface, hence the need for a re-evaluation of the current programmes.

Objectives

The objectives of the Standards and Safety pillar are therefore as follows:

- To ensure vehicles meet global industry safety and quality standards to ensure the protection of road users and vehicle owners.
- Reduce the emission of CO₂, in line with Nigeria's commitments to COP26, thereby creating an eco-friendly environment and curtailing the prevalence of over-aged vehicles on the roads.

Initiatives

The Council will:

- Enforce ISO/NIS certification of industry players as a condition for licensing.
- Implement a nationwide vehicle marking system for proper tracking and identification of

vehicles.

- Require all importers of used vehicles to submit an Emissions Test Report and Road Worthy Test Certification by a test facility, approved by SON, before shipment.
- 4. Develop the technical and equipment capacity of the Standards Organisation of Nigeria.
- Implement a comprehensive nationwide registration system for proper tracking and identification of Tricycles and Motorcycles, in conjunction with relevant unions.
- 6. Enforce Standards and Provisions for End-of-Life Vehicles (ELVs) (Recycling)
 - Partner with the private sector to set up designated vehicle recycling pathways including facilities for collection, dismantling, and shredding of old/ scrap vehicles
 - Work with the Ministry of Transport and its agencies (e.g., VIO, etc.) to refine the vehicle scrapping and recycling policy along levers
 - Provide fiscal incentives including 5-year tax holidays, for ELV operators and accelerated capital allowance from 5 years to 3 years on plant and machinery purchased by operators.

5.2 Enablers

The desired outcome of this revised plan will be hinged on the effective and successful implementation of the strategic pillars. Yielding the envisioned results will also require the creation of a propitious ecosystem that facilitates the effective collaboration and execution of all players towards the actualisation of the proposed initiatives and incentives.

Three critical enablers have been highlighted to ensure the successful execution of the NAIDP 2023 and they are as follows:

· Effective Implementation and Governance

Framework

- · Enabling Sector Linkages
- · Sector Specific Funding

5.2.1 Implementation & Governance Framework

The Governance structure encompasses the framework for managing the automotive industry development plan and ensure direction setting, policy implementation, and adequate monitoring to meet the established objectives within defined timelines. This is a vital building block for proper alliance and collaboration within the government parastatals, hence the compelling need for a robust implementation and governance framework.

The NAIDP Stakeholder Committee

To ensure effective collaboration, seamless communication, and inter-agency alignment, the NAIDP Advisory Committee should be set up. The Committee will ensure a robust performance monitoring and evaluation framework to track the progress of the Plan.

Role and Responsibilities

- The Committee will be responsible for:
 - Ensuring disciplined implementation of the revised NAIDP.
 - Proactively identifying implementation challenges and providing solutions to address them.
 - Ensuring periodic monitoring and evaluation of progress.
 - Securing the support of relevant agencies and government parastatals.
 - Developing monitoring and evaluation framework.
 - · Developing industry reporting framework,

industry supply chain, and integrating effective data management processes - the data management framework is critical to addressing the dearth of data in the Nigerian automotive ecosystem. The development will also facilitate contributions by relevant stakeholders to ensure an accurate, coherent, and up-to-date database of the Nigerian automotive industry.

Convening

The Committee will convene at least two (2) times a year to:

- Review the progress of the project implementation
- Provide strategic recommendations and support to accelerate

Membership

Members of the NAIDP Advisory Committee shall include:

- The Honorable Minister, Federal Ministry of Industry, Trade, and Investment (FMITI)
- 2. The Honorable Minister, Federal Ministry of Finance, Budget and National Planning
- 3. Honorable Minister of Transport
- 4. The Honorable Minister, Federal Ministry of Environment
- 5. Director General National Automotive Design and Development Council (NADDC)
- Comptroller General, Nigerian Customs Services
- 7. Executive Chairman, Federal Inland Revenue Service
- 8. Executive Secretary, Nigerian Investment Promotion Commission (NIPC)

Director General of Standards Organisation of Nigeria (SON)

Secretariat

The Committee shall also be supported by a Secretariat, which shall be coordinated by the NADDC. The functions of the secretariat shall include but not limited to:

- Generating progress and other relevant reports
- Keeping records of pertinent information and documents
- Communicating with key stakeholders on developments and
- Any additional responsibility assigned by the Advisory Committee.

5.2.2 Enable Sector linkages

To enable maximum utilisation of the ample opportunity the automotive industry projects, adequate collaboration is required across relevant sectors and players pertinent to the success of the automotive industry. Facilitating partnerships and collaborations will ensure strong ties between the automotive sector and adjacent industries.

To do this, through the NAIDP, the government will:

- Ensure collaboration with relevant ministries and agencies across relevant sectors. Sectors may include:
 - · Manufacturing Glass, Rubber, Steel, etc.
 - Power
 - Transportation
 - Education

Ministries may include:

- Defense partner to facilitate the supply of vehicles
- · Interior partner to provide security
- Communications and Digital Economy partner to facilitate data management and technology development e.g., Al
- Mines and Steel partner to facilitate the production of relevant auto components
- Raw Materials Research and Development Council - partner to facilitate research and development
- Petrochemicals partner to facilitate the production of applicable petrochemicals

5.2.3 Sector specific funding

Given the enormous financial implications of the NAIDP 2023 on relevant stakeholders, adequate funding interventions are required to boost both the supply and demand of made-in-Nigeria vehicles. Funding is a key enabler that requires adequate attention as it is pivotal to the overall success of the proposed NAIDP.

The specific objective of sector-specific funding is to implement financing schemes for consumers and producers & auto component manufacturers.

Funding for the NAIDP 2023

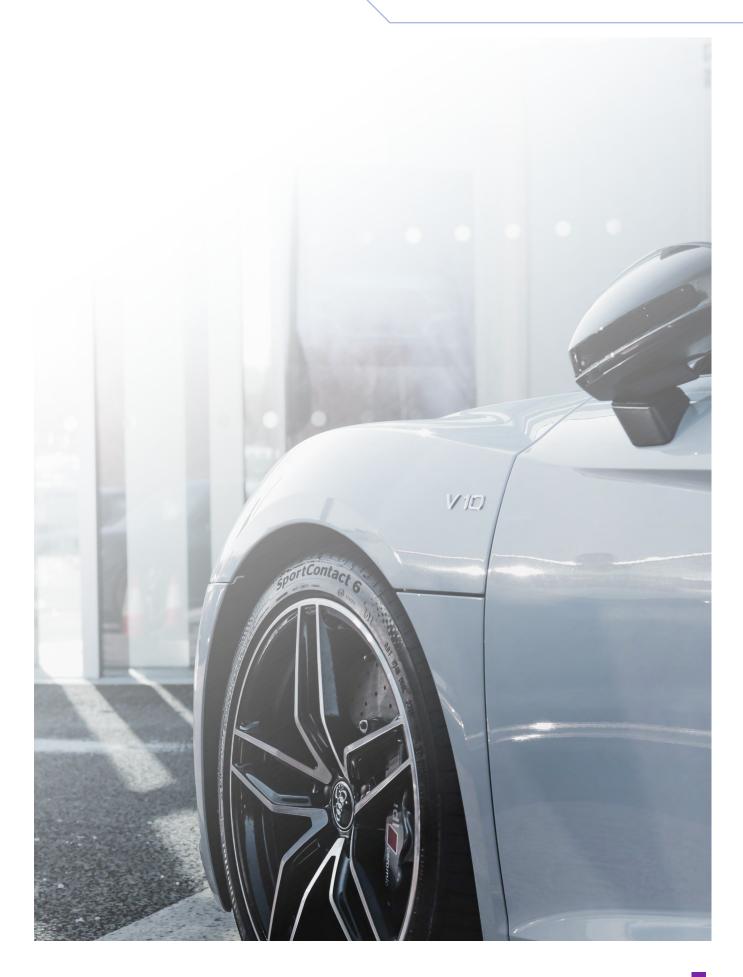
- 1. The funding of the NAIDP 2023 will be through:
- 50% of the import duty charged on all auto vehicles and components.
- · Budgetary allocation.
- · Donor funding.
- 2. Vehicle finance schemes finance to stimulate

demand

	Passenger Vehicles	Commercial Vehicles
Estimated Size of Fund: N950 Billion	~N10m/ passenger vehicles for an estimated 45,000 units a year	~N10m/ commercial vehicles for an estimated 50,000 units a year
Funding Options	The vehicle finance scheme can be financed through one or a combination of the following: Accessing a portion of the CBN's Cash Reserve Ratio (CRR) Accessing a portion of the Pension Fund or Issuing a long-term bond	
Loan Terms	 Single digit interest rates; maximum of 9% 5 years maximum Loan Tenor Down payment of 10 - 20% of vehicle cost. 	
Eligibility Criteria	Banked Individuals. Employed/self-employed, earns a monthly income and makes monthly contributions to the Nigerian Pension Fund. Ability to make at least 20% down payment.	Registered member of Transport Union. The Transport Union to guarantee the facility for their members Ability to make at least 20% down payment.

3. Vehicle finance schemes - finance to stimulate supply

	Vehicle & Auto Component Manufacturing
Funding Options	Revive the Nigerian Automotive Development Fund, to be funded by 15% of the import levy on New and Used Vehicles
Loan Terms	Single-digit interest rates Up to a maximum of N1billion per Vehicle manufacturer; N500 million per Auto Components manufacturer 5 years maximum Loan Tenor
Eligibility Criteria	CKD manufacturing of Vehicles Evidence of 70%-80% of required funding Partnerships with OEMs/ global auto manufacturers an added advantage Electric vehicle manufacturers with proven manufacturing capacity Tricycle and Motorcycle manufacturers with proven CBU manufacturing capacity



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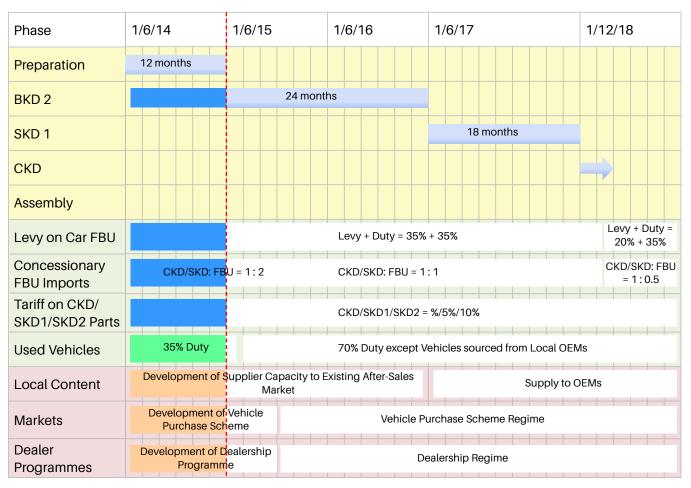
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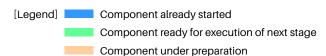
Appendix A. Key Fiscal Drivers of 10- Year NAIDP 2014

Year	Objective	Incentive	Remarks
2013-2015	Create an environment to allow existing assembly plants to survive and attract other OEMs	Cars: Levy of 35% charged on car FBU in addition to 35% duty. (ii) Commercial vehicles: Levy of 35% duty without levy. (iii) Tariff on CKD, SKD1 and SKD2 at 0%, 5% and 10% local assembly plants. (iv) Assembly plants to import FBU at 35% and 20% duty without levy for cars and commercial vehicles respectively in numbers equal to twice their imported CKD/SKD kits.	The levy to be used for the development of the automotive industry, including the creation of automotive supplier parks, an affordable vehicle financing scheme, and a credit guarantee scheme. Assembly plants and NAC to develop and implement a local content incorporation program
2016-2018	Create an environment to allow existing assembly plants to grow and continue to attract other OEMs, in particular, local content suppliers	(i) to (iv) as above (v) Concessionary FBU import by assembly plants to be equal to their CKD/SKD imports	As above. The assembly plants to intensify the implementation of local content programmes.
2019-2024	Institute incentive for local content incorporation	i) Levy on car FBU reduced to 20%. Tariff remains at 35%. (ii) Duty on CV FBU remains at 35% without levy. (iii) Tariff on CKD, SKD1 and SKD2 remain at 0, 5% and 10% respectively. (iv) Concessionary FBU import by Assembly plants to be up to half of their imported CKD/SKD kits.	

Appendix B. Summary of NAIDP 2014 with Implementation Schedule



As of May 2015



Appendix C. Illustration: Rebates for Manufacturers and Assemblers

	SKD	CKD Manufacturer
Import Duty	20%	20%
Rebate Multiplier	1.00	2.00
Local Component Value* (NGN)	500,000	2,500,000
Imported Components Value* (NGN)	6,000,000	4,000,000
Total Components Value* (NGN)	6,500,000	6,500,000
% Local Content (LC)	8%	38%
Discounted import duty	18%	5%

A. Multiplier * Local Content (LC)

	FORMULA	SKD Assembler	CKD Manufacturer
Import Duty		20%	20%
Rebate Multiplier		1.00	2.00
Local Component Value (NGN)		500,00	2,500,000
Imported Components Value (NGN)		6,000,000	4,000,000
Total Components Value (NGN)		6,500,000	6,500,000
% Local Content (LC)		8%	38%
Discount Factor	Multiplier * LC	8%	77%
Duty Discount	Current Import Duty * Discount Factor	2%	15%
Discounted import duty	Current import Duty - Duty Discount	18%	5%

Appendix D. Autonomous Driving

Over 15

OEMs in the UK have pledged to release Level 4 AVs between 2019-2025,

-971%

Forecasted growth in the global autonomous car market from 2018(\$5.6b) to 2030 (\$60b)

3 billion miles

No. of miles covered by self-driving Teslas worldwide, between 2014- 20194













What does the human in the driver's seat have to do?

You <u>are</u> driving whenever these driver support features are engaged - even if your feet are off the pedals and you are not steering

You must constantly supervise these support features; you must steer, brake or accelerate as needed to maintain safety

These are driver support features

acceleration support to

What do these features do?

Example Features

are limited to providing warnings and momentary

automatic emergency braking blind spot

warmng lane departure

centering OR adaptive

nese featu provide steering AND brake acceleration support to

AND adaptive cruise control at the

These are automated driving features

These features can drive the vehicle under limited conditions and will not operate unless all required conditions are met

Appendix E. CKD and Enhanced SKD Definition

SKD is defined by a list of parts and their assembly condition, a combination of local and foreign assembly. The applicable list for defining SKD is detailed in the table below:

Assembly Condition	CKD	Enhanced SKD
Vehicle cabin/body	Foreign Assembly	Foreign Assembly
E & base coat paint	Local Assembly	Foreign Assembly
Top & clear coat paint	Local Assembly	Foreign Assembly
Frt/RR and drop glass	Local Assembly	Foreign Assembly
Electrical harnesses	Local Assembly	Foreign Assembly
Braking & clutch systems incl. pipes	Local Assembly	Foreign Assembly
Instrument panel	Local Assembly	Local Assembly
Interior trimmings	Local Assembly	Local Assembly
Fuel tank	Local Assembly	Local Assembly
Frt & RR bumpers	Local Assembly	Local Assembly
Head and tail lamps	Local Assembly	Local Assembly
Exhaust systems	Local Assembly	Local Assembly
Suspension hang-on parts	Local Assembly	Local Assembly
Drive train	Local Assembly	Local Assembly
(Engine/transmission/driveshaft's & RR axles)	Local Assembly	Local Assembly
Battery	Local Assembly	Local Assembly
Tyres & wheels	Local Assembly	Local Assembly

CKD will be defined as when "the floor panel, body sides and roof panel are not assembled locally. All other parts will be assembled to the completed body locally."

