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A REVIEW OF SOUTH AFRICA'S **AUTOMOTIVE SECTOR**

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CONTENTS

ABBREVIATIONS AND ACRONYMS	4
KEY DEVELOPMENTS	5
VEHICLE SALES	7
Exports	10
MANUFACTURING AND INVESTMENT	12
■ BMW South Africa	12
Nissan South Africa	13
■ Ford Motor Company South Africa	13
■ Toyota South Africa Motors	14
Mercedes-Benz South Africa	15
 Volkswagen South Africa 	16
 Isuzu Motors South Africa 	16
BAIC South Africa	17
Mahindra & Mahindra South Africa	17
 Component suppliers 	17
SECTOR SUPPORT	20
TRANSFORMATION	22
LABOUR	23
ELECTRIC VEHICLES	24
CLEANER FUELS	26
AUTOMOTIVE AFTERMARKET GUIDELINES	27
AFRICAN AUTOMOTIVE MARKET	28
OUTLOOK	30
MAIN SOURCES	32

ABBREVIATIONS AND ACRONYMS

BAIC Beijing Automotive International Corporation BMW SA BMW Group South Africa CKD completely knockdown EV electric vehicle FMCSA Ford Motor Company of Southern Africa ICE internal combustion engine IDC Industrial Development Corporation GDP gross damestic product GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAF Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa ICV medium commercial vehicle Naccum National Association of Automotive Component and Allied Manufacturers Naarmsa National Association of Automotive Component South Africa DEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	AITF	Automotive Industry Transformation Fund
CKD completely knockdown EV electric vehicle FMCSA Ford Motor Company of Southern Africa ICE internal combustion engine IDC Industrial Development Corporation GDP gross domestic product GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAF Isuzu Motors South Africa ICV light commercial vehicle MAchindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automotive Manufacturers of South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sportsutility vehicle	BAIC	Beijing Automotive International Corporation
EV electric vehicle FMCSA Ford Motor Company of Southern Africa ICE internal combustion engine IDC Industrial Development Corporation GDP gross domestic product GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automotive Tomponent and Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sportsutility vehicle	BMW SA	BMVV Group South Africa
FMCSA Ford Motor Company of Southern Africa ICE internal combustion engine IDC Industrial Development Corporation GDP gross domestic product GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automotive South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sportsutility vehicle	CKD	completely knockdown
ICE internal combustion engine IDC Industrial Development Corporation GDP gross domestic product GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mohindra SA Mahindra & Mahindra South Africa ICV medium commercial vehicle Macam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports utility vehicle	EV	electric vehicle
IDC Industrial Development Corporation GDP gross domestic product GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	FMCSA	Ford Motor Company of Southern Africa
GDP gross domestic product GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	ICE	internal combustion engine
GHG greenhouse gas GMSA General Motors South Africa HCV heavy commercial vehicle IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	IDC	Industrial Development Corporation
GMSA General Motors South Africa HCV heavy commercial vehicle IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	GDP	gross domestic product
HCV heavy commercial vehicle IMSAF Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	GHG	greenhouse gas
IMSAf Isuzu Motors South Africa ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	GMSA	General Motors South Africa
ICV light commercial vehicle Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	HCV	heavy commercial vehicle
Mahindra SA Mahindra & Mahindra South Africa MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	IMSAf	Isuzu Motors South Africa
MCV medium commercial vehicle Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	LCV	light commercial vehicle
Naacam National Association of Automotive Component and Allied Manufacturers Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	Mahindra SA	Mahindra & Mahindra South Africa
Naamsa National Association of Automobile Manufacturers of South Africa Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	MCV	medium commercial vehicle
Nissan SA Nissan South Africa OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	Naacam	National Association of Automotive Component and Allied Manufacturers
OEM original-equipment manufacturer PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	Naamsa	National Association of Automobile Manufacturers of South Africa
PAAP Pan-African Auto Pact SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	Nissan SA	Nissan South Africa
SEZ special economic zone SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	OEM	original-equipment manufacturer
SKD semi-knockdown SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	PAAP	Pan-African Auto Pact
SPSS Specialised Productivity Support Solutions SUV sports-utility vehicle	SEZ	special economic zone
SUV sports-utility vehicle	SKD	semi-knockdown
	SPSS	Specialised Productivity Support Solutions
	SUV	sports-utility vehicle
3D three-dimensional	3D	three-dimensional
TSAM Toyota South Africa Motors	TSAM	Toyota South Africa Motors
VPI Vehicle Pricing Index	VPI	Vehicle Pricing Index
VWSA Volkswagen South Africa	VWSA	Volkswagen South Africa



KEY DEVELOPMENTS

August 2019: The Industrial Development Corporation says the Beijing Automotive International Corporation South Africa plant, in the Eastern Cape, will proceed to completely knockdown production by November 2020.

August 2019: Ford Motor Company of South Africa introduces a third shift at its Silverton assembly plant, near Pretoria, in Gauteng.

September 2019: Then president of National Association of Automobile Manufacturers of South Africa Andrew Kirby says the vehicle manufacturing and automotive component sectors are expected to invest about R60-billion over a five-year period.

September 2019: South Africa's original-equipment manufacturers and unions sign a three-year wage deal for employees in the vehicle manufacturing sector.

October 2019: Chinese vehicle manufacturer Haval assures customers in South Africa it is committed to staying in the country and offering quality vehicles with the necessary after-sales support.

November 2019: Japan's Isuzu Motors announces plans to invest R1.20-billion in the production of a next-generation bakkie by Isuzu Motors South Africa in the Eastern Cape.

November 2019: During the South Africa Investment Conference, eight automotive component manufacturers commit to investing R2.40-billion on expanding their operations in South Africa.

November 2019: The National Association of Automobile Manufacturers of South Africa announces the launch of the R6-billion Automotive Industry Transformation Fund.

December 2019: BMW South Africa and sub-Saharan Africa CEO Tim Abbott is elected president of the National Association of Automobile Manufacturers of South Africa.

January 2020: Volkswagen South Africa achieves a new yearly production record at its Uitenhage plant, in the Eastern Cape.





January 2020: The automotive components sector and unions conclude a three-year wage deal after protracted negotiations.

January 2020: Mahindra & Mahindra South Africa, a subsidiary of Indian conglomerate Mahindra, says its engineers have met with automotive component manufacturers to assess the potential of increasing the locally produced components used in the assembly of its Pik Up bakkies at its KwaZulu-Natal plant.

February 2020: Automotive Industry Transformation Fund CEO Jabulani Selumane says the fund will be ready to start transactional business from 2021.

February 2020: VWSA announces the launch of its e-Golf pilot project and plans to start selling electric vehicles locally from 2022.

March 2020: The National Association of Automobile Manufacturers of South Africa reports that new-vehicle sales reached 536 611 units in 2019, compared with the 552 227 units sold in 2018.

March 2020: The BMW Group announces it will temporarily shut its European and South African manufacturing plants, as demand for its vehicles declined in light of the global spread of Covid-19.

April 2020: The National Association of Automobile Manufacturers of South Africa reports that South Africa's new-vehicle sales for March 2020 decreased by 30% year-on-year, as a result of measures implemented to help curb the spread of Covid-19.

April 2020: The South African automotive components sector says it is ready to start producing ventilators for the medical industry should the need arise.

April 2020: Ford Motor Company Southern Africa volunteer staff start producing protective face shields to help curb the spread of Covid-19 in South Africa.

 $\mbox{{\it May}}$ 2020: Mercedes-Benz South Africa announces that it will manufacture three-dimensional-printed recyclable plastic face shields to use in the mass screening for Covid-19, and for use at clinics and hospitals. It will also produce and supply continuous positive airway pressure breathing-aid devices, which deliver oxygen to the lungs without the need for a ventilator.

May 2020: The South African motor industry asks government to delay the introduction of its new automotive development policy, due in January 2021, because of the Covid-19 pandemic.





VEHICLE SALES

New-vehicle sales in South Africa have been declining for a number of years and 2019 was no different, with 536 611 units sold, compared with the 552 227 units sold in 2018. Sales for 2019 were at their lowest since 2010, the National Association of Automobile Manufacturers of South Africa (Naamsa) commented in its 'Quarterly review of business conditions' report for the fourth quarter of 2019, published in March 2020.

Naamsa attributed the decline in new-vehicle sales to depressed consumer and business confidence, South Africa's recessionary economic conditions, the country's high unemployment rate and the ongoing load-shedding being implemented by State-owned electricity utility Eskom.

The South African economy is facing significant headwinds and gross domestic product (GDP) grew by only 0.20% in 2019. The unemployment rate remained above 29% and Eskom has warned that load-shedding is likely to continue until 2021, as it undertakes necessary maintenance at its ageing coal-fired power plants.

Credit reporting agency TransUnion, meanwhile, has pointed out that the downward trend in new-vehicle sales in 2019 continued despite a decline in TransUnion's Vehicle Pricing Index (VPI). The VPI measures the relationship between the increase in vehicle pricing for new and used vehicles from a basket of passenger vehicles sold by 15 of the biggest vehicle manufacturers. The VPI for the fourth quarter of 2019 shows that the index has remained below inflation for new and used vehicles since the third quarter of 2017. It notes that new-vehicle price increases have remained below inflation for the past two years and that this is the longest consecutive period since the VPI was launched in 2000. Used-vehicle price increases also decreased to 1.20% in the

fourth quarter of 2019, indicating that even the used-vehicle market is under strain

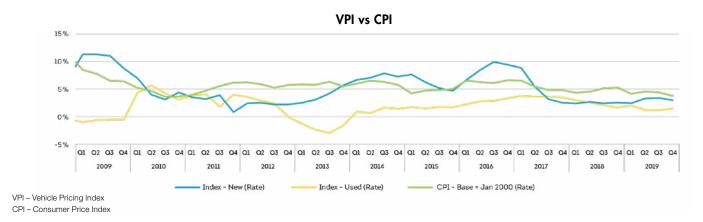
Further, TransUnion states that, as a result of the slow economic growth and pressure on consumers' disposable income, consumers continue to choose less expensive entry-level vehicles or older used vehicles, despite lower inflation, slower increases in vehicle prices and dealer incentives.

The credit reporting agency points out that demonstration models account for about 6% of used-vehicle finance applications, while cars under two years old account for about 36% of applications. It states that this shows that consumers are choosing to buy older vehicles amid the tough economic climate. Naamsa has also noted the buying-down trend, with consumers increasingly choosing smaller and less expensive passenger cars.

The association also pointed out in March 2020 that fewer units of passenger cars and light commercial vehicles (LCVs) had been sold during 2019, with only the low-volume, medium and heavy commercial vehicle (MCV/HCV) segments having achieved some sales growth.

Passenger car sales decreased by 2.70% to 355 378 units in 2019 (2018: 365 247 units), while LCV sales decreased by 3.97% to 153 525 units (2018: 159 525). Naamsa's data shows that the majority of passenger cars in South Africa are imported. Of the 355 378 cars sold in 2019, a total of 88 608 were locally produced, while 266 770 cars were imported.

In the LCV market, however, locally produced vehicles account for the majority of units sold, at 129 338 in 2019, compared with the 23 854 units imported.





South Africans have a choice of about 24 brands of vehicles, including the vehicles by local original-equipment manufacturers (OEM) – BMW South Africa, Ford Motor Company South Africa (FMCSA), Isuzu Motors South Africa, Mercedes-Benz South Africa (MBSA), Nissan South Africa, Toyota South Africa Motors (TSAM) and Volkswagen South Africa (VWSA) – as well as vehicles produced by Korean manufacturers Hyundai and Kia, Japanese manufacturer Mazda and various Chinese manufacturers, including Beijing Automobile Works (BAW), FAW Group and Great Wall Motors (GWM), which owns the Haval brand.

Haval South Africa MD Charles Zhao told news publication Business Day in October 2019 that its sports-utility vehicles (SUVs) were gaining appreciation in South Africa and that the company expected to sell about 15 000 units a year over the next five years. He conceded that some Chinese vehicle manufacturers had contributed to the perception that Chinese brands were cheap and the manufacturers unreliable.

Former Geely South Africa MD John Jessup agreed, telling Business Day that any manufacturers wanting to sell their vehicles in South Africa would have to ensure they offered quality vehicles and the necessary after-sales support demanded by consumers and dealers.

The publication pointed out that Geely had done the exact opposite, twice closing its operations in South Africa without putting the necessary after-sales support in place for those who had bought Geely vehicles. Zhao assured consumers that Haval was committed to staying in South Africa, adding that the company offers warranties and service plans.

Although there had been some optimism by the industry that vehicle sales for 2020 could show some recovery, those hopes were destroyed in March 2020 when the effects of measures implemented to help curb the spread of Covid-19 started emerging. South Africa had initially declared a state of disaster, with citizens encouraged to stay home and avoid crowds. However, with a rising number of Covid-19 cases, the country went into a lockdown at the end of March 2020.



During an initial five-week "hard" lockdown, or Level 5 lockdown, people were allowed to leave their homes only if they worked in essential service industries or to buy essential goods such as medicine and food. From May 2020, restrictions were eased to a Level 4 lockdown, with some sectors of the economy allowed to partially resume operations under strict health and safety conditions; however, much of the economy remained shuttered.

Naamsa reported on April 1, 2020, that new-vehicle sales for March 2020 had decreased by 30% year-on-year to 33 545 units. New passenger vehicle sales for the month had decreased by 26.80% year-on-year to 22 200 units and sales of new LCVs by 37.10% year-on-year to 9 425 units.

Naamsa reported in May 2020 that new-vehicle sales for April 2020 had dropped by a record 98.40% year-on-year, with only 574 units – 105 passenger cars, 318 LCVs and 151 trucks and buses – sold in the month. Sales for the four months to April 2020 were down by 31.20% year-on-year.

Aggregate industry sales by sector							
Sector	2015	2016	2017	2018	2019	Projections for 2020	
Cars	412 397	361 265	368 114	365 247	355 378	346 000	
Light commercial vehicles	174 812	159 316	163 317	159 525	153 192	151 000	
Medium and heavy commercial vehicles	30 441	26 971	26 273	27 455	28 041	28 500	
Total	617 650	547 552	557 704	552 227	536 611	525 500	
Gross domestic product growth rate	1.30%	0.60%	1.30%	0.80%	0.20%	0.80%	

Source: Naamsa



Meanwhile, prior to the Level 5 lockdown being announced, Naamsa had said it expected the declining trend in new-vehicle sales to continue in 2020 as the macroeconomic environment remained weak. With GDP growth forecast at only 0.80%, the association said vehicle sales were likely to decrease further to 525 500 units.

Domestic sales for the year started off weak, with 42 374 units sold in January, a 7.40% year-on-year decrease. This was followed by a 6.50% year-on-year decrease in new-vehicle sales, at 43 251 units, in February.

The association noted in March 2020 that although the tax relief announced by Finance Minister Tito Mboweni for individual taxpayers in the 2020 Budget in February 2020 was welcome, it warned that a higher carbon dioxide emissions tax and an increase in the tax on double-cab bakkies would increase vehicle pricing at a time when the automotive industry was already experiencing a sustained market decline.

Naamsa said at the time that the South African automotive industry was likely to consolidate further until the economy started growing at a higher rate, noting that consumers and businesses were expected to continue delaying new-vehicle purchases or to continue with the buying-down trend for the foreseeable future.

Motor vehicle financier WesBank said in March 2020 that it expected South Africa's new-vehicle sales to decline by a further 3.50% in 2020, with passenger car sales to decline by about 2.90% year-on-year, LCV sales by about 4.70% year-on-year, and MCH and HCV sales by 2.51% and 4.31% year-on-year respectively.

These expectations were published before the number of Covid-19 infections in South Africa starting increasing, prompting government to implement measures to halt the spread of the virus.

TSAM sales and marketing VP Leon Theron in April 2020 said the country's new-vehicle sales for 2020 would decrease by at least 16% year-on-year and that the premium segment of the market would be worst affected.

TSAM CEO and president Andrew Kirby expressed concern about the future of automotive component manufacturers in the country, stating that the automotive industry was "on the cusp" of what it could withstand as a result of the lockdown implemented in South Africa.

He warned of the possible impact on the automotive industry supply chain because of possible job losses among the tier-two and -three component manufacturers.

TransUnion, meanwhile, reported in April 2020 that expectations of petrol price decreases and inflation rate decreases, along with below-inflation vehicle price increases and dealer incentives, were not enough to counter the uncertainty felt by consumers. It expects consumers to hold off on making big purchases, such as new vehicles, for some time.

TransUnion's data shows that the number of vehicles financed decreased by 12% year-on-year in the first quarter of 2020.

Financing for new-vehicle sales decreased by 35% year-on-year and by 31% year-on-year for used-vehicle sales, despite new-vehicle price increases remaining below inflation. The VPI for new-vehicle pricing increased to 4% in the first quarter of 2020, compared with 2.30% in the first quarter of 2019.

Engineering News quoted WesBank marketing and communication head Lebogang Gaoaketse in May 2020 as stating that there was unlikely to be a return to "normal" for the vehicle industry or the economy any time soon. He averred that consumers would



The impacts of measures implemented to help curb the spread of Covid-19, following a Level 5 lockdown, are yet to be measured



be slow to start buying vehicles again, despite interest rates having already been reduced during the course of the year.

The South African Reserve Bank lowered interest rates again on May 21 by 50 basis points to 3.75% to promote growth. This followed two earlier decreases amounting to 200 basis points.

In mid-May 2020, the Department of Trade, Industry and Competition published new regulations, allowing the motor dealerships to immediately open for business and sell new and used vehicles. Vehicle imports and exports were also allowed to resume. Dealerships were allowed to resume operations with, initially, 30% of staff and the majority of car sales to be conducted over the Internet or telephone. Sanitised vehicles had to be delivered to buyers at their homes.

A second phase would allow for up to 60% of staff and a limited number of customers to return to dealerships and a final phase, set to start in June 2020, would allow for a return of all employees.

Online vehicle marketplace AutoTrader welcomed the reopening of dealerships, noting that online searches by consumers had shown that many people were seeking to sell their cars or trade down their vehicles as a result of the changing economic environment.

EXPORTS

In contrast to the decrease in local new-vehicle sales, the automotive industry's export sales have been on an upward trajectory for many years. For the second consecutive year, new-vehicle export sales achieved a new record, at 387 125 units, in 2019. Export sales reflected a 10.20% year-on-year increase on the 351 139 units exported in 2018, data published by Naamsa shows.

Sales data adjustment

German vehicle manufacturers BMW and Mercedes-Benz in early 2020 decided to publish new-vehicle sales figures only quarterly and instructed their subsidiaries globally to do the same. This means that BMW South Africa and Mercedes-Benz South Africa will no longer provide monthly sales figures for the National Association of Automobile Manufacturers of South Africa (Naamsa), which publishes industry-wide sales and export figures on a monthly basis. Without the monthly sales figures from two of the biggest manufacturers in South Africa, the sales figures could be distorted. Meanwhile, Naamsa is estimating the monthly sales figures of BMW South Africa and Mercedes-Benz South Africa.

Source: Business Day

With the publication of the '2020 Automotive Export Manual' in May 2020, Naamsa and Automotive Industry Export Council executive manager Dr Norman Lamprecht said the South African automotive industry had excelled on the export front during 2019. He pointed out that several new export records achieved during the year had compensated to a large extent for the decline in domestic new-vehicle sales. The manual showed that the export value of vehicles and automotive components had reached a record R201.70-billion - equal to about 15.50% of the country's total exports - in 2019.

Vehicles valued at about R148-billion had been exported, while automotive components valued at about R53.70-billion had been exported.

WesBank CEO Chris de Kock noted in February 2020 that South Africa's healthy new-vehicle exports continued to underpin the automotive industry's contribution to GDP growth.



There is unlikely to be a return to "normal" for the vehicle industry any time soon



Europe remains the biggest buyer of South Africa's export vehicles, accounting for about 73.80%. South Africa's vehicle exports to Europe also recorded the biggest growth of all regions at 22.20% in 2019 to 285 599 units (2018: 233 772 units).

Vehicle exports to South America increased by 5.30% to 6 093 units in 2019 (2018: 5 787 units), while exports to North America increased by 3.90% to 13 540 units (2018: 13 037). Despite the growth in vehicle exports to North America in 2019, Naamsa stated in March 2020 that exports to the region had been slowing since 2017, probably as a result of similar model ranges, particularly those of BMW and Mercedes-Benz, now being manufactured in the US and South Africa.

New-vehicle exports to Australasia, meanwhile, decreased by 23.80% to 17 350 units in 2019 (2018: 22 767), while exports to Asia decreased by 20.70% to 39 879 units in 2019 (2018: 50 277 units) and exports to Central America by 17.90% to 1 249 units (2018: 1 511 units).

New-vehicle exports to the rest of Africa decreased by 2.40% to 23 415 units in 2019 (2018: 23 988 units). Africa remains a very important export market for the South African automotive manufacturers and Naamsa expects the region's low motorisation rate, its growing middle class and the implementation of the African Continental Free Trade Area (AfCFTA) agreement to result in higher demand for vehicles from South Africa in future.

Consulting firm Cova Advisory reported in January 2020 that there were good growth opportunities for South African vehicle manufacturers in the rest of Africa. It pointed out that Africa accounted for about 1.20-million of the world's 95-million vehicles and that South Africa supplied about half of the continent's vehicles.

The firm said the AfCFTA agreement was likely to result in the creation of stronger automotive value chains, which should unlock further growth opportunities for South African automotive manufacturers.

Durban auto terminal

Engineering News reported in May 2020 that the Department of Transport was considering plans to develop a new automotive berth at the Port of Durban, in KwaZulu-Natal. The department's director-general Alec Moemi told a Parliamentary Portfolio Committee that a new automotive berth would be needed at the port within the next five years. He noted that technology would be used to increase crane movements at the port and thereby improve competitiveness and efficiency.

Vehicles are currently exported through the Durban Car Terminal at the port, which has the capacity to handle 480 000 fully built units a year.

Source: Engineering News

Naamsa expects new-vehicle exports to increase to 391 900 units in 2020 and to 396 000 units in 2021.

While South Africa's vehicle exports have continued to grow in recent years, exports suffered a big setback in March 2020, as countries worldwide implemented measures to try to halt the spread of Covid-19. Europe, by far the most significant market for South Africa's vehicle exports, has been particularly affected, with much of the region having gone into lockdown. This contributed to a 21.50% year-on-year decrease in exports to 28 883 units in March 2020.

New-vehicle exports decreased by 97.30% to 901 units in April 2020, compared with the 32 829 units exported in April 2019. Exports for the four months to April 2020 decreased by 35.60% year-on-year.

Many vehicle and automotive component manufacturers restarted operations in early May 2020, under revised lockdown restrictions in South Africa, to honour their export supply contracts, news organisation Business Day reported in May 2020.

South Africa's vehicle exports by region							
	2016	2017	2018	2019	Change between 2018/19		
Europe	196 727	190 503	233 772	285 599	+22.20%		
Asia	46 655	52 827	50 277	39 879	-20.70%		
Africa	21 505	21 848	23 988	23 415	-2.40%		
Australasia	22 735	25 125	22 767	17 350	-23.80%		
North America	52 024	43 393	13 037	13 540	+3.90%		
South America	4 750	3 588	5 787	6 093	+5.30%		
Central America	410	812	1 511	1 249	-17.30%		
Total	344 816	338 096	351 139	387 125	+10.20%		

Source: Naamsa



MANUFACTURING AND INVESTMENT

South Africa is the world's twenty-second biggest automotive manufacturer and holds about 0.69% of the global market share in terms of passenger cars. Although it is not a significant global manufacturer, it does contribute significantly to the South African economy. In contributed about 6.80% to the country's gross domestic product in 2018 and accounted for about 30% of the manufacturing sector's output. It also employs about 110 000 people directly, with thousands more employed indirectly.

Global new motor vehicle production declined by 5.30% to 91.12-million units in 2019 (2018: 96.23-million units). South Africa, however, increased its vehicle manufacturing by about 3.60% to 631 983 units in 2019 (2018: 610 060), with aggregate capital expenditure (capex) by the major vehicle manufacturers having reached its second-highest level on record at R7.27-billion in 2019. This followed on the highest investment ever on record of R8.17-billion in 2017 and investment of R7.25-billion in 2018.

Naamsa attributed the high level of capex for investment projects embarked on by the seven biggest original-equipment manufacturers (OEMs) in terms of the Automotive Production Development Programme to increased production to meet export demand.

Naamsa president Andrew Kirby in September 2019 told delegates attending the Naamsa Conference, in Johannesburg, Gauteng, that the local OEMs and component manufacturers could invest about R60-billion over a five-year period. News organisation Business Day reported at the time that about R40-billion would be invested by the OEMs and about R20-billion by the component manufacturers.

The article quoted Kirby as stating that the local industry was aiming to increase vehicle production to 800 000 units by 2023. Naamsa forecast in March 2020 that South Africa's vehicle manufacturing would increase to about 639 400 units for 2020.

According to the news article, Kirby highlighted that, to reach that goal, it was important for the OEMs to embrace advanced manufacturing practices and technologies, while automotive

Abbott appointed Naamsa president

BMW South Africa and sub-Saharan Africa CEO Tim Abbott was elected president of the National Association of Automobile Manufacturers of South Africa (Naamsa) in December 2019. He was appointed for a two-year term. Abbott succeeded Andrew Kirby, CEO of Toyota South Africa Motors.

Source: Engineering News

component suppliers needed to develop tier-two and -three suppliers able to meet increased localisation targets. He noted that local procurement was likely to grow by R12.60-billion in the five-year period, increasing local content to 42% from the current 39% and creating a further 16 000 jobs.

In what will be a boost for local automotive manufacturing, President Cyril Ramaphosa unveiled the Tshwane Automotive Hub - an automotive-focused special economic zone (SEZ), near Mamelodi, in November 2019. The hub is expected to attract small businesses and black-owned companies that will supply subassemblies to the country's tier-one automotive component suppliers. About R3.60-billion will be invested in establishing the SEZ, which is expected to expand the local manufacture of automotive components and create jobs. According to newspaper SowetanLive, the SEZ will start operating in 2021, with nine companies said to be ready to start production at that time. A further nine companies have expressed an interest in also establishing operations within the SEZ.

Meanwhile, local vehicle manufacturing plants were, from the end of March 2020, forced to temporarily halt operations, as a result of low global demand for vehicles and the measures implemented locally to halt the spread of Covid-19, which requires physical distancing between persons. The lockdown measures implemented in Europe, as well as the significant economic impact of such measures, have resulted in dwindling demand for items such as new vehicles.

South Africa also implemented a Level 5 lockdown from the end of March 2020, with only essential service providers allowed to operate, resulting in all nonessential manufacturing and sales having been halted for the time being. From May 2020, restrictions were eased to Level 4, with some sectors allowed to partially resume operations.

The rate at which the industry will be able to resume manufacturing will depend on demand, which, in turn, is dependent on the pace at which dealerships reopen.

BMW SOUTH AFRICA

BMW South Africa's (BMW SA's) vehicle manufacturing plant, which has the capacity to produce about 76 000 vehicles a year, is located in Rosslyn, near Pretoria, in Gauteng. The OEM announced a R6.10-billion investment in 2015 to enable the production of the X3 sports utility vehicle (SUV).





BMW SA vehicle manufacturing plant

The plant stopped producing the 3 Series sedan in 2018, with the production of that vehicle having moved to Mexico, and the Rosslyn plant now producing only the X3.

In April 2019, BMVV SA invested a further R260-million in a new campus in Midrand, Gauteng. The campus comprises the company's head office, BMW Financial Services and a new dealer training centre, besides other amenities.

Meanwhile, the OEM was, in late March 2020, forced to halt manufacturing at the Rosslyn plant as a result of the spread of Covid-19 globally and in South Africa. The BMW Group announced on March 18, 2020, that it would close its European and South African manufacturing plants, owing to dwindling demand. Many European countries had already implemented lockdowns to help curb the spread of the virus, with South Africa implementing a lockdown from March 27, 2020.

NISSAN SOUTH AFRICA

Nissan South Africa (NSA) produces the NP200 half-ton bakkie and the NP300 one-ton bakkie models at its Rosslyn plant and plans to start production on the new Navara pick-up from November 2020.



Nissan Rosslyn manufacturing plant

The plant, with a 70 000-unit-a-year capacity, produced about 45 000 NP200 and NP300 vehicles in 2018. Thousands of the bakkies produced at Rosslyn are exported yearly to other markets in Africa.

NSA announced in April 2018 that it would invest about R3-billion in the plant to allow for the production of about 30 000 single- and double-cab, as well as cab-and-a-half Navaras a year. The investment will add a second production shift at the plant and create about 400 new direct jobs, as well as about 800 indirect jobs.

About 12 000 Navaras a year will be exported to the rest of sub-Saharan Africa.

At the time of announcing the investment, NSA indicated that the Navaras would initially comprise about 35% local content, which would eventually increase to 48%. To ensure locally made components are available, NSA partnered with government agency, the Automotive Industry Development Centre, for the incubation and support of empowered component manufacturers.

Prior to announcing the R3-billion investment in the Rosslyn plant in 2019, NSA had invested about R500-million over a three-year period in modernising its production facilities, as well as a further R150-million on skills and people development.

FORD MOTOR COMPANY SOUTH AFRICA

Ford Motor Company South Africa (FMCSA) produces the Ford Ranger and Ford Raptor bakkies and the Ford Everest SUV at its assembly plant in Silverton, near Pretoria.

About two-thirds of the vehicles produced at the plant are destined for export outside of Africa, with the balance sold in South Africa, as well as in other sub-Saharan African countries.

As a result of growing demand for the Ranger model in Europe, FMCSA announced plans in April 2019 to start using a multiport strategy, exporting Rangers from Port Elizabeth. This decision was taken to address significant congestion at Durban Harbour's roll on/roll off terminal. It is also expected to improve efficiencies and reduce delivery timeframes.

FMCSA reported in July 2019 that it was exporting about 1 000 Rangers a month from Port Elizabeth to European customers.

In August 2019, FMCSA introduced a third shift at its Silverton plant to help meet growing demand for its vehicles. This formed part of a R3-billion investment, first announced in 2017, to increase output at the Silverton plant to 168 000 units a year, compared with 124 000 units previously.



The introduction of a third shift also created a further 1 200 jobs, taking FMCSA's staff complement to 5 500. FMCSA noted in a July 2019 press release that it would also result in the creation of about 10 000 additional jobs in the supplier industry.

In March 2020, the company reported that it was on track to produce its 700 000th Ford Ranger in 2020, with more than 225 000 already sold in the domestic market. It further reported that it had shipped nearly 7 000 Rangers through the Port Elizabeth

FMCSA exported 65 908 Ford Rangers to international customers in 2019, with 52 500 of those vehicles sold in Europe.

Meanwhile, the Tshwane Automotive Hub SEZ is being developed adjacent to FMCSA's Silverton plant and is expected to help the vehicle manufacturer overtake the Ford plant in Thailand as the world's biggest Ford Ranger producer. The SEZ will be home to various automotive component suppliers that will supply parts to FMCSA and other vehicle manufacturers.

FMCSA also operates an engine plant at Struandale, in Port Elizabeth, which produces components for two global Ford programmes. The plant started producing new-generation 2 ℓ bi-turbo and single turbo engines for use in select Ranger and Everest models, produced at the Silverton assembly plant, in late 2018.

The Struandale plant has capacity to produce 120 000 of these engines a year and up to 130 000 engines for other Ford vehicle models being assembled in North America, China and parts of Europe. It can also machine up to 280 000 component sets a year for 2.2 l and 2.3 l Duratora TDCi engines. The component sets include a cylinder head, block and crankshaft, and are exported to Thailand and Argentina, as well as used in local engine assembly.

Meanwhile, in light of the global spread of Covid-19 and the national lockdown implemented in South Africa, FMCSA temporarily suspended operations at its Silverton and Struandale plants from March 27, 2020. Employees able to work remotely were encouraged to do so, with only those performing business-critical jobs on site allowed to work.

However, amid the global shortage of personal protective equipment (PPE) for medical personnel working to fight the virus, many automotive companies globally have stepped forward to help manufacture PPE. In early April 2020, FMCSA started producing protective face shields at the Silverton plant, which protect a user's eyes, nose and mouth. An initial 57 000 face shields will be manufactured by volunteer FMCSA staff and will be donated to front-line medical personnel, as well as others in the country providing essential services during the lockdown. FMCSA plans to eventually manufacture about 500 000 face shields.



FMCSA Silverton manufacturing plant

This is in line with FMCSA's parent company, in the US, which is aiming to produce about one-million protective face shields a week to help combat the global spread of the virus.

TOYOTA SOUTH AFRICA MOTORS

Toyota South Africa Motors (TSAM) manufactures the Corolla, the Corolla Quest, the Hiace Ses'fikile minibus, the Hilux bakkie and the Fortuner SUV at its production plant in Prospecton, in KwaZulu-Natal.

In January 2020, the OEM announced that it would invest about R4.28-billion in its operations during the year, with R2.43-billion to be invested in preparing the Prospecton plant for producing a new passenger-car model. Production of the new model, which will replace the Corolla production line that will come to an end in 2020, will start in 2021. Engineering News reported at the time that TSAM expected the new model to contribute about R2.85-billion a year towards the South African economy while creating about 500 direct jobs and 1 000 jobs at suppliers' operations.

TSAM will continue to manufacture the Corolla Quest. An R18-million investment in the new Corolla Quest model, which started in 2019, is ongoing. TSAM also invested R928-million in facilities upgrades.

Engineering News further reported that, of the overall investment, R454-million would be spent on enhancing production of the Hiace Ses'fikile minibus and a further R91-million on increasing production of the minibus to 18 000 units a year, up from the previous 14 000 units a year. This will create a further 270 new jobs.

Another R20-million will be invested in establishing a packing plant to support knockdown production of the Hilux bakkie for assembly in Kenya. TSAM is also investing R365-million on expanding its



40 000 m² Atlas automotive parts warehouse, in Gauteng, to 80 000 m²

In line with South Africa's move to cleaner energy and as a result of ongoing electricity supply constraints, TSAM is investing in renewable energy at its operations. It has invested R33-million in solar energy projects, with 3 MW of its electricity needs provided for by the sun. It plans to have 16 MW of installed solar energy capacity by 2025, enough to meet 22% of the Prospecton plant's consumption.

Meanwhile, TSAM CEO and president Andrew Kirby said in April 2020 that the company did not expect any job losses at its operations as a result of the lockdown implemented by South Africa to help curb the spread of Covid-19 infections. He noted that, since the lockdown started on March 27, 2020, to April 23, 2020, the company had lost production of 13 500 units. TSAM had initially planned to produce between 135 000 and 150 000 vehicles in 2020, but in April 2020 said production would be up to 20% lower than that target because of the lockdown.

Throughout the lockdown, TSAM and its dealerships continued to provide vehicle services and parts for vehicles needed by essential-services providers, including mobile clinics and persons transporting medical test samples.

MERCEDES-BENZ SOUTH AFRICA

Mercedes-Benz South Africa (MBSA) produces the C-Class saloon at its production plant in East London, in the Eastern Cape, for export to left- and right-hand-drive markets. It is one of four plants globally to produce the C-Class model.

Parent company Daimler announced in June 2018 a €600-million (about R10-billion) investment to the expand MBSA plant by about 100 000 m². This included the construction of a new paint shop and a new body shop, upgrades to the assembly shop and the construction of new logistics warehouses. The investment includes new technology, such as the introduction of 500 Internet of Thingsready robots, as well as projects to reduce energy consumption.

Engineering News reported in May 2019 that Daimler had also announced plans to establish an information technology (IT) hub at the Eastern Cape production plant. The IT hub, one of three global IT hubs within Mercedes-Benz Cars' IT operations, would focus on data analytics, software development and business analysis. The other two IT hubs are in India and Spain and are focused on engineering and quality solutions respectively. The IT hub will employ about 90 people.

Like other OEMs in South Africa, MBSA had to temporarily halt production at its East London plant in March 2020 as South



MBSA shop floor

Africa implemented a national lockdown to curb the spread of Covid-19. While the company had planned to restart operations during April, South Africa extended the nationwide lockdown by a further two weeks until the end of April.

Re-opened Merc plant gears up for face-shield, breathing aid production

In May 2020, MBSA announced that it would manufacture threedimensional-printed recyclable plastic face shields to use in the mass screening for Covid-19, and for use at clinics and hospitals.

In addition, and pending quality assurance regulatory approval, the local arm of the German automotive manufacturer will also produce and supply continuous positive airway pressure (CPAP) breathing-aid devices, which deliver oxygen to the lungs without the need for a ventilator, from its East London manufacturing plant for the Eastern Cape Department of Health.

CPAP breathing aid devices have been extensively used in hospitals in countries hardest hit by Covid-19 to assist patients with serious respiratory problems to breathe more easily, when oxygen using a face mask alone has proved insufficient.

The devices are noninvasive and provide a constant, steady pressure to keep the lungs expanded.

Reports from Italy indicate that about 50% of patients given CPAP have avoided the need for invasive mechanical ventilation.

Pending regulatory approval from local medical licensing authorities, MBSA expects that it will be able to manufacture more than 1 000 face shields and CPAP devices a month.

Source: Engineering News



VOLKSWAGEN SOUTH AFRICA

Volkswagen South Africa (VVVSA) manufactures the Polo, Polo Vivo and Polo GTI models at its plant in Uitenhage, in the Eastern Cape.

The OEM delivered 161 954 vehicles - 131 365 Polos and 30 589 Polo Vivos - in 2019. This was the highest production in its history and followed on from its previous record of 137 758 vehicles produced in 2011.

VWSA had also, in September 2019, achieved another record the production of its 200 000th new Polo. Engineering News reported at the time that VWSA had been producing various Polo models since 1996, with production of the new Polo having started in 2018.

VWSA is also considering investing in a biogas plant to enable the Uitenhage plant to operate independently of power utility Eskom's electricity grid, to continue operations amid power supply constraints and regular bouts of load-shedding. Financial publication Moneyweb reported in October 2019 that VWSA expected a biogas plant, which would be sustained by organic waste to produce electricity, to cost about R3.50-billion. VWSA MD Thomas Schaefer told the publication that its parent company had approved the proposed project and that a funding package would be completed by early 2020. Construction of the plant was expected to take about 18 months to complete.

Meanwhile, VWSA reported in May 2020 that it had lost production of about 17 000 units during the nationwide lockdown implemented from the end of March 2020 to help curb the spread of Covid-19. It now expects to produce about 140 000 vehicles in 2020, with about 100 000 units to be exported.

VWSA further reported that it had restarted production in May 2020.

Successful audit

The Port Elizabeth (PE) Car Terminal in April 2020 scored 96% in the Volkswagen (VVV) group's global quality audit. The audit, conducted every five years, covers all sites through which VW vehicles are imported and exported. VW South Africa exports its Polo vehicle models to the European Union through the PE Car Terminal.

Source: Engineering News

ISUZU MOTORS SOUTH AFRICA

Japanese automotive company Isuzu Motors owns Isuzu Motors South Africa (IMSAf). When US company General Motors (GM) announced its exit from the South African market in 2017, Isuzu Motors acquired GM South Africa's Struandale manufacturing plant, which was used to assemble Isuzu bakkies under the terms of an agreement between GM and Isuzu Motors.

IMSAf consolidated its truck and bakkie manufacturing at the Struandale plant in 2018. The plant has, since 2012, assembled Isuzu's KB bakkie, which has since been renamed the D-Max bakkie.

Isuzu Motors announced in November 2019 that it would invest about R1.20-billion in the production of a next-generation oneton bakkie in South Africa. Engineering News reported that the investment was expected to result in a local parts and content value of R2.80-billion over the life cycle of the new-generation bakkie.

Further, the investment is expected to increase output at the Struandale plant to about 29 000 bakkies a year, compared with the 20 000 D-Max bakkies produced in 2018.

Meanwhile, in February 2020, IMSAf started exporting knocked down D-Max assembly kits to Kenya. This conforms with Isuzu Motors' plans for IMSAf to serve as a hub for expanding Isuzu's market share in the sub-Saharan African market.

Isuzu Motors expects Kenya will need to import about 1 300 assembly kits a year initially and expects volumes to increase further over the long term.

IMSAf has also contributed to the fight against Covid-19. In April 2020, it renovated the Livingstone and the Port Elizabeth provincial hospitals, in Nelson Mandela Bay, to ensure that the hospitals can accommodate screening and testing, as well as the hospitalisation of Covid-19 patients. The renovations have increased capacity at the Livingstone hospital by 135 beds and accommodated an isolation facility next to the wards to enable medical staff to sanitise before entering a ward.

IMSAf also assisted nonprofit organisation FoodForward SA in transporting crucial food supplies from Johannesburg to Port Elizabeth. FoodForward SA distributes food to impoverished communities. With many people unable to work during the lockdown, the need for such supplies increased, resulting in reduced stock levels at the Port Elizabeth branch. IMSAf, which had been due to deliver four Isuzu trucks to Port Elizabeth, partnered with TruckLogix, which provides drivers for Isuzu trucks, to collect and transport the much-needed supplies from Johannesburg. This included four pallets of maize meal, one pallet of canned food and 50 bags of 5 kg rice.

In late April 2020, IMSAf announced that it had also provided 15 Isuzu D-Max bakkies, which would usually be used for marketing purposes, to the Faculty of Health Sciences at the University of Pretoria to assist with the transportation of personal protective equipment and medical supplies to assist health workers in the fight against Covid-19.



BAIC SOUTH AFRICA

Chinese automotive manufacturer Beijing Automotive International Corporation (BAIC) has, in partnership with South Africa's Industrial Development Corporation (IDC), established BAIC South Africa (SA), an automotive assembly plant in the Coega Industrial Development Zone, in the Eastern Cape. The IDC holds a 35% interest in BAIC SA and BAIC the balance.

Semi-knockdown (SKD) production of the BAIC X25 SUV and the D20 small passenger vehicle started in late 2019.

Engineering News reported in August 2019 that, according to IDC Automotive and Transport Equipment head Joy Balepile, SKD production at the plant would be followed by completely knocked down (CKD) production from about November 2020.

SKD production involves the assembly of imported, already assembled component subsets into a completed vehicle, while CKD involves the assembly of a large number of small parts into a completed vehicle.

The plant had initially been scheduled to start SKD production in mid-2018, but there have been several delays.

Balepile conceded to Engineering News in August 2019 that the initial estimated construction timeline had been too ambitious, particularly as about 90 different emerging contractors had been involved in the plant's construction. Nevertheless, by August 2019, the construction of an office block, assembly hall and body shop had been completed. Construction of a 21 000 m² paint shop is under way and will, once completed, allow for the start of CKD production.

Once fully operational, the plant will produce about 50 000 units a year for the South African and export markets. Production could, at a later stage, potentially increase to 100 000 units a year.

The plant is expected to eventually progress to full vehicle manufacturing and BAIC SA is seeking potential suppliers to help it meet local content requirements, which is set at about 60%.

MAHINDRA & MAHINDRA SOUTH AFRICA

Mahindra & Mahindra South Africa (Mahindra SA) partnered with Automotive Investment Holdings in May 2018 to establish a R10-million plant to assemble its Pik Up bakkie range in KwaZulu-Natal, from SKD kits imported from India.

The plant was designed to assemble 2 400 to 2 500 single- and double-cab Pik Up units a year. If a second shift is added, the plant's capacity could increase to 4 000 units a year.

In a tough domestic market for new-vehicle sales, Mahindra SA has achieved good growth in sales in recent years as a result of its focus on bakkie and SUV sales. Engineering News reported in March 2020 that the company's sales had grown by 22% in 2016, by 13% in 2017, by 25% in 2018 and by 29% in 2019, and that the company remained confident of further growth in 2020 on the back of its focus on competitively priced bakkies and SUVs. The publication further pointed out that Mahindra SA planned to strengthen its after-sales services to ensure its continued growth.

Mahindra SA opened one special fitment centre, in Kempton Park, in Gauteng, in November 2019. This enables the company to introduce locally designed and tested special-edition models for customers. Mahindra SA expects the fitment centre to source many parts locally.

Mahindra SA also plans to increase its localisation in line with commitments made when it opened its assembly plant in 2018. Online publication Moneyweb reported in January 2020 that a team of engineers from Mahindra SA had met with first- and second-tier automotive component suppliers to determine the potential of procuring basic components initially, but eventually also more complex components.

COMPONENT SUPPLIERS

Unlike other significant automotive manufacturing countries, South Africa's automotive industry supply chain is concentrated around the original-equipment manufacturers (OEMs) and Tier 1 components suppliers. This is the opinion of Professor Justin Barnes, executive director of the Toyota Wessels Institute for Manufacturing Studies, chairperson of Benchmarking and Manufacturing Analysts and lead consultant on the South African Automotive Masterplan (SAAM), as reported by Engineering News in August 2018.

The OEMs and Tier 1 component suppliers, comprising large multinational companies that supply subassemblies to the OEMs, each contribute 40% of the value generated in the South African automotive industry value chain.

The remaining 20% is generated by the smaller Tier 2 and Tier 3 component suppliers that supply the Tier 1 companies.

Globally, OEMs generally contribute only 20% of value addition in the automotive supply chain, followed by Tier 1 suppliers, at 30%. The remaining 50% of value is generated by the Tier 2 and Tier 3 suppliers.

Barnes has indicated that the South African industry will be able to increase its localisation and create significantly more jobs only by developing its Tier 2 and Tier 3 suppliers.



He notes that the local content in vehicles produced in South Africa declined from about 46.60% in 2012 to about 38.70% in 2016, with more than 60% of components imported.

South Africa has set a localisation target of 60% under the SAAM. Barnes contends that, if South Africa increases its vehicle production numbers to the planned 1.40-million units by 2035, and if it can attain the 60% localisation target, the automotive sector will be able to double its employment levels and achieve improved economies of scale. However, among many other challenges facing the components sector, South Africa's low vehicle production volumes are negatively impacting on the cost competitiveness of the automotive component suppliers, while a lack of investment in the Tier 2 and Tier 3 segments is also inhibiting growth.

Some investment is, however, flowing through to the local component suppliers, with the National Association of Automotive Component and Allied Manufacturers (Naacam) having reported in November 2019 that eight of its members were planning to invest a further R2.40-billion to expand their businesses or to prepare for new market opportunities. Engineering News reported at the time that ZF Lemforder, Ebor Automotive Systems, MA Automotive, Atlantis Foundries, Faurecia, VM Automotive, KLT and Motherson had announced the combined investment during the 2019 South Africa Investment Conference, held in Johannesburg.

ZF Lemforder has invested R240-million in its axle plant, in East London; Ebor is investing R140-million in plastic injection mouldings; VM automotive is investing R426.23-million in a laser blanking line; and Faurecia is investing R250.72-million in its vehicle interior production facilities in Cape Town, Port Elizabeth and Pretoria. Atlantis Foundries, which produces engine blocks for trucks, invested R82.30-million in its operations during 2019, with a further R90-million to be invested during 2020. Details of the other investments have not been disclosed.

Other investment has followed. Component supplier Bosal Afrika officially opened a new 18 000 m² emissions control systems (ECS) manufacturing plant, in Pretoria, in February 2020. The company previously manufactured the ECS, which include exhausts, heat exchangers for exhaust systems, silencers and manifolds, at its towbar manufacturing facility, which is also located in Pretoria, but invested R25-million relocating the ECS plant to its new premises. Bosal Afrika supplies components to FMCSA, NSA, IMSAf and VWSA.

Meanwhile, black-owned company Specialised Productivity Support Solutions (SPSS) has secured a contract with MBSA to supply body shop loader services. Under the terms of the contract, SPSS will take responsibility for loading single parts and subassemblies into body shop loading stations at MBSA's East London production plant. MBSA noted in January 2020 that the contract was part of initiatives to help transform the South African automotive industry.

Further, in March 2020, Engineering News also reported on the success of family-owned business Max Output Industries. The company expanded its turnover to R70-million a year within a ten-year period, compared with the R1.40-million a year when it first started. The company started with only two people, but currently employs about 150 people.

The publication also reported that energy storage solutions and automotive components supplier Metair was planning to invest R650-million in various businesses in the automotive components vertical

The company, which is considering unbundling and separating its energy storage and automotive components verticals, said the investment was as a result of the automotive component businesses having secured significant contracts. The investment plans include investing about R500-million in Hesto Harnesses, in which Metair holds a 75% interest. Hesto is expected to supply wire harnesses to new customers.

The investment is expected to create about 3 200 new jobs and generate between R12-billion and R14-billion in turnover over a seven-year period. Engineering News further reported that Valeo SA, an associate company to Metair, had secured a contract to supply heating, ventilation and cooling modules for MBSA from April 2021.

Meanwhile, Naacam VP Arthur Mtombeni has emphasised the need to replace imported automotive components with locally developed components to increase localisation. Engineering News quoted Mtombeni in a March 2020 article as saying that the components industry should seek to increase localisation based on OEMs' long-term plans. He further encouraged people working within the components industry to consider starting their own businesses and, thereby, grow the supply base.

Naacam executive director Renai Moothilal, meanwhile, told the publication that the automotive components sector had expanded as a result of supportive industrial policy, which was key to the country's re-industrialisation ambitions. To encourage further growth in the industry, Naacam works to help its members find ways of benefiting from localisation opportunities and manufacturers to improve their competitiveness, as well as to increase the number of black-owned businesses entering the industry.

Sumitomo Rubber South Africa CEO and Naacam VP Riaz Haffejee has said that the policy certainty created by the SAAM ensures a high level of certainty for the automotive industry and will enable the entire supply chain to plan better and invest for growth in demand. He notes that, by working with the OEMs, component manufacturers will be able to investigate export production potential while benefiting from new models that could be manufactured in South Africa.



Covid-19 impact, response

The temporary closure of vehicle manufacturing plants in South Africa is also having a knock-on effect on automotive component suppliers, National Association of Automotive Component and Allied Manufacturers (Naacam) told *Engineering News* in March 2020. Nevertheless, like its overseas counterparts, the component manufacturers have seized the opportunity to use their expertise and skills to produce equipment desperately needed by the medical sector to treat Covid-19 patients.

Naacam executive director Renai Moothilal told the publication that the components sector could produce ventilators that are in short supply globally, owing to the vast number of Covid-19 infections, which, besides other symptoms, results in difficulty breathing for those patients most severely affected.

In an update to *Engineering News* in April 2020, Moothilal said production of ventilators by the components sector could be ramped up within a month. In a project led by Naacam member Rand York Castings' Justin Corbett, manufacturing companies have reverse-engineered the Nuffield 200 ventilator, designed in the UK, to use as the base from which to produce a prototype and then operational ventilators for use by the medical sector.

Moothilal told the publication that more than 20 of its member companies had offered to help with the project, which has also attracted the interest of government agencies, including the Council for Scientific and Industrial Research and the Industrial Development Corporation. He further noted that the industry should be able to produce ventilators at R50 000 each, compared with the cost of buying Penlon Nuffield 200 ventilators for about R300 000 each.

Meanwhile, automotive components manufacturers are also producing face shields for use by the medical industry. As with ventilators, there is a global shortage of personal protective equipment needed by medical personnel who treat Covid-19 patients. Face shields are needed, as Covid-19 is spread by the droplets expelled when an infected person coughs or exhales, which then comes into contact with another person's mouth, nose or eyes.

Further, subsidiary companies of Bosch Rexroth South Africa have started the three-dimensional (3D) printing of protective face masks.

The country's vehicle manufacturers have also contributed equipment needed in the fight against Covid-19.

BMW South Africa donated 40 000 protective respiratory face masks in April 2020 to the Gauteng government for use by healthcare workers.

Volkswagen South Africa (VWSA) started manufacturing face masks in the same month for distribution in the Eastern Cape, where it has its manufacturing plant. Its research and development team is also using 3D printing technology to produce parts for mechanical ventilators.

In May 2020, VWSA announced that it, the German government, the Nelson Mandela Bay Business Chamber, the Nelson Mandela Bay municipality and the Eastern Cape Department of Health had started a R135-million project to convert its 66 000 m² Port Elizabeth plant into a temporary medical facility to help in the fight against Covid-19. Once operational, the medical facility will be able to accommodate up to 4 000 beds. The German Federal Ministry for Economic Cooperation and Development will contribute R107-million of the funding, while VWSA will contribute R28-million. The facility will be developed in phases, with the first to be completed within six to eight weeks.

VWSA also donated 150 beds in May 2020 for use in a Covid-19 isolation facility being developed at the Nelson Mandela Bay Stadium, in the Eastern Cape. Further, to assist its customers during this difficult time, the vehicle manufacturer said it would extend certain of its new-vehicle warranties by three months. Warranties or EasyDrive Plans that expired or were due to expire between March and June 2020 would be extended by three months.

Toyota South Africa Motors has also started production of advanced face shields at its manufacturing plant, in KwaZulu-Natal. It has capacity to produce about 20 000 of the shields a week, with the shields to be used by its staff, at its dealerships and by its suppliers, as well as by hospital staff and first responders. After producing about 100 000 of the face shields, it plans to hand the operation over to a small and medium-sized business, which will become a new supplier in the country.

Ford Motor Company of Southern Africa, meanwhile, provided the Port Elizabeth branch of the South African Red Cross Society with two Ford Ranger double-cab bakkies to use between March and May 2020 to distribute food parcels, meals and hygiene products to poor communities negatively impacted on by the Covid-19 lockdown measures.

Source: Engineering News



SECTOR SUPPORT

The South African government has, since the 1990s, supported the local automotive manufacturing industry through various programmes, starting with the Motor Industry Development Programme (MIDP), which was replaced by the Automotive Production and Development Programme (APDP) in 2013.

The APDP is due to come to an end in 2020 and the South African Cabinet approved a revised APDP in November 2018 for implementation from 2021 to 2035. National Association of Automotive Component and Allied Manufacturers (Naacam) executive director Renai Moothilal told Engineering News in February 2018 that the revised APDP would introduce changes to ensure increased localisation. Companies would no longer receive rebates simply for assembling a certain volume of vehicles locally but would have to ensure increased use of local components in the vehicles they produced.

Advisory firm Deloitte noted in a September 2019 report, titled 'Rooting SA: Strengthening the local automotive industry', that the MIDP had been focused on increasing South Africa's exports, while the APDP had aimed to increase production in general.

The focus has now shifted to increasing local content and developing the local component manufacturers. However, Deloitte notes that, for the localisation targets to be achieved, structural reforms will be needed to ensure broader economic efficiency gains, which will contribute to increased local demand for new vehicles, as well as stimulate local business for the automotive industry from which to procure goods and services. It further suggests that small automotive component suppliers are generally unable to access the benefits of operating in special economic zones, but improving their access to such zones will enable them to benefit from, for example, preferential electricity pricing that will increase their competitiveness.

Deloitte also encourages original-equipment manufacturers (OEMs) and Tier 1 suppliers to offer clustering incentives. It states that a unified approach to sharing information and using small local suppliers would offer greater support to small businesses while establishing a supplier base for the OEMs and Tier 1 companies. It further notes that OEMs should provide component suppliers with information about the opportunities available in the market, which will help the small businesses with business planning.

There is also a need to increase the volume of vehicles produced, and South African OEMs have made a concerted effort to establish a presence in the rest of Africa and, thereby, increase volumes.



Ford Motor Company South Africa's Ford Ranger production line at its Silverton plant, in Pretoria, Gauteng

However, Deloitte suggests that South Africa should consider providing incentives for consumers in the domestic market to buy locally produced vehicles rather than vehicles produced in other regions.

The report further notes the potential to ensure that lower-tier component suppliers are able to supply more than one industry, thereby increasing their production volumes.

The ambitions of the revised APDP, however, align well with that of the South African Automotive Masterplan (SAAM), which was unveiled in December 2018, and which is the overarching strategic plan that will guide the long-term development of the local automotive manufacturing industry.

The SAAM is based on six key objectives. The first is to increase South Africa's vehicle production to 1% of global output by 2035, up from the current 0.86%. Secondly, it aims for the local content in vehicles produced in South Africa to reach 60%.

The masterplan is also expected to double employment levels in the industry by 2035 while ensuring the improved competitiveness of the industry and its further transformation to include more previously disadvantaged individuals. The last objective is to increase value addition within the automotive value chain.

Although industry is largely supportive of the SAAM, there are concerns that it does not adequately address the need to incentivise the production of vehicles, including electric vehicles, which are likely to be the basis of future global fleets.



Meanwhile, news publication Business Day reported in April 2020 that the slow pace at which the government has worked to finalise the SAAM may turn out to be a blessing in disguise, in light of the challenges the industry is likely to face following the spread of Covid-19 and the measures implemented to contain it. A five-week lockdown from the end of March 2020 to the end of April 2020 resulted in automotive manufacturing in South Africa being halted.

The impact on South Africa's economy as a result of the lockdown measures is expected to be severe, with the country forecast to enter a deep recession this year. This is, in turn, expected to dent demand for products, such as new vehicles, thereby negatively impacting on production and employment in the automotive industry.

Further, South African manufacturers were also not permitted to produce vehicles for the export market during the initial lockdown period. Exports comprise a significant portion of manufacturers' new-vehicle sales.

Business Day pointed out that, with the percentages and technicalities in the SAAM not yet finalised, there was an opportunity for government to adapt the master plan to existing circumstances instead of only forecast estimates. Professor Justin Barnes who is an adviser to government on automotive policy, suggested that, besides other possible amendments, should employment numbers decrease, vehicle and component manufacturers should be excluded from recouping up to 35% of new investments.

Business Day reported in May 2020 that the South African motor industry had asked government to delay the introduction of the SAAM, because of the Covid-19 pandemic. It also wanted government to relax regulations governing current industry policy because the recent

lockdown, allied to expected weakness in local and export demand for months to come, would make it impossible for many companies to achieve production targets required to earn incentives.

The publication further noted that the National Association of Automobile Manufacturers of South Africa (Naamsa) had asked President Cyril Ramaphosa to consider postponing the masterplan by at least six months, to July 2021, as companies were too busy contending with the immediate impact of the pandemic and "securing the survival of the industry" to look too far ahead.

Preparations were further affected by government's slow response to finalising details of the updated APDP incentive regime. Naamsa said that internal systems amendments could not be made in the remaining period before the effective date in January 2021.

The need to amend the APDP as it already exists, however, is more pressing. The APDP vehicle assembly allowance, which obliges companies to build at least 50 000 vehicles a year to win duty credits, makes no allowance for enforced shutdowns, Naamsa argues.

Naamsa wants allowances for 2020 to be based on volumes in the second half of 2019. Government has been requested to take similar issues into consideration when assigning product rebate credits and when managing the automotive investment scheme, which allows for vehicle and components manufacturers to recover up to 35% of production-related investments.

The industry also wants extensions to deadlines by which it must submit documentation to customs and to the South African Revenue Service. The concessions are considered to be imperative to keep



Besides other possible amendments to the SAAM, it has been suggested that, should employment numbers decrease, vehicle and component manufacturers should be excluded from recouping up to 35% of new investments



TRANSFORMATION

South Africa's automotive manufacturing industry is dominated by multinational companies and these original-equipment manufacturers (OEMs) have, thus far, been unable to meet the ownership element under South Africa's empowerment legislation.

However, in November 2019, the National Association of Automobile Manufacturers of South Africa (Naamsa) announced that consultations with the Department of Trade, Industry and Competition had resulted in an agreement for the provision of recognition of contributions instead of a direct sale of equity in the OEM firms. To give effect to the agreement, Naamsa and its OEM members announced the launch of a R6-billion Automotive Industry Transformation Fund (AITF).

The AITF is a sector-wide initiative that is aimed at "broadening and deepening" the participation of black and historically disadvantaged persons in the local automotive sector. The AITF will work to accelerate the empowerment of black South Africans in the industry, upskill black employees and entrepreneurs; contribute to the expansion of black-owned dealerships, repair facilities and workshops; increase the contribution of black-owned automotive component manufacturers in the automotive supply chain; and create employment opportunities for young South Africans.

Engineering News quoted Naamsa CEO Michael Mabasa as stating that the fund was a business imperative that was needed to ensure the sustainability of the local automotive industry. He stated that the barriers to entry in the industry remained high and that it was important for the industry to deal with the issue.

The AITF is a nonprofit entity that is managed by its own board of directors and executive management team. BMW South Africa (BMW SA) head of government and external affairs Jabulani Selumane has been appointed CEO of the fund, effective January 1,

The fund is still being established and will start transactional business from 2021.

BMW SA CEO Tim Abbott explained in an opinion piece published by online publication Business Day in November 2019 that the AITF would serve as a venture capital fund that would develop and support black-owned companies in the automotive industry by helping to establish the black industrialists that the industry needs to meet localisation targets. He pointed out that black industrialists wanting to participate in the industry have, meanwhile,



struggled to secure the capital required to start their businesses and build the scale to meet the demand required by the OEMs. The AITF will bridge that gap.

Mabasa told Engineering News in March 2020 that the industry's transformation efforts would include measures to ensure it was ready for a new era of mobility, which requires new skills, such as those needed to manufacture and maintain electric vehicles, as well as those in information and communication technology needed to maintain "computers" being installed in some newer vehicle models.

The success of the fund, however, came under threat in April 2020 amid the spread of Covid-19 in South Africa. Financial publication Financial Mail reported at the time that calls had been made for the R6-billion in funding to capitalise the AITF, to be contributed by the OEMs, to be made available immediately to help small automotive component businesses that were facing possible closure, as a result of the financial impact of Covid-19 on their businesses and the economy in general. The article pointed out, however, that the funding had yet to be contributed by the OEMs, which had turned their focus inward to deal with the immediate challenges they were also facing because of Covid-19. The lack of funding to survive the current uncertainties could potentially result in some of the small component manufacturers closing down at a time when government is hoping to increase their participation in the automotive value chain



LABOUR

The manufacturing segment of South Africa's automotive industry, across all tiers of component manufacture and vehicle assembly, employs more than 110 000 people. The National Association of Automobile Manufacturers of South Africa notes, however, that the industry sustains about 457 000 jobs in South Africa when taking its multiplier effect into account.

South Africa's original-equipment manufacturers (OEMs) and unions embarked on negotiations in 2019 for a new three-year wage deal. The National Union of Metalworkers of South Africa (Numsa), the biggest union in the sector, demanded increases of 12%, along with various shift allowances for its members. The Automobile Manufacturers Employers Association (AMEO), however, offered employees a 4.50% increase.

After months of negotiations, Numsa and AMEO reached a threeyear wage deal in September 2019, effective from July 1, 2019, to June 30, 2022. The agreement includes wage increases of 9% for the first year and increases of 7% or consumer price inflation, depending on which is higher, in years two and three of the agreement.

Negotiations between Numsa and the automotive component and retail sector, however, continued, with a final agreement reached only in January 2020. Under the terms of that agreement, Numsa members employed by component manufacturers are due to receive increases of 7.50% for the first year of a three-year agreement. This will be followed by increases of 7% in the second and third years of the agreement.

Meanwhile, the South African Automotive Masterplan, published in December 2018, envisions the potential to increase employment in the manufacturing segment of the automotive industry to 224 000 by 2035. This will depend on vehicle production increasing to 1.40-million units a year, OEMs reaching the 60% localisation target and productivity improvements.

Further, while it is too early to tell what long-term impact Covid-19 will have globally, a worldwide recession is generally expected in 2020. South Africa had already, in recent years, recorded low growth and is now expected to enter into a deep recession following the implementation of a lockdown to help prevent the spread of Covid-19.

The economy's performance will have an impact on the automotive manufacturing sector, as well as on employment in the sector. Newswire Reuters reported in April 2020 that the National Association of Automobile Manufacturers of South Africa had warned that between 1% and 10% of jobs in the industry could potentially be cut as a result of the Covid-19 lockdown.



The economy's performance and Covid-19 will have an impact on the automotive manufacturing sector, as well as on employment in the sector



ELECTRIC VEHICLES

The global electric vehicle (EV) market has grown strongly in recent years and, by 2018, there were about five-million EVs on the world's roads. This number is expected to rise further as countries continue to invest in clean energy technologies and greener transport.

Bloomberg New Energy Finance (BNEF) reported in May 2019 that global EV sales were forecast to increase from two-million a year in 2018 to 56-million a year by 2040, taking the number of passenger EVs on the world's roads to about 500-million, while internal combustion engine (ICE) vehicle sales were expected to decrease from about 85-million in 2018 to about 42-million in 2040.

BNEF further reported in January 2020 that it expected the global passenger EV fleet to increase to about ten-million by the end of the year. It also stated that data was likely to show that ICE vehicle sales had passed their peak and would start a steady decline going forward.

By April 2020, it was unclear what impact the outbreak of Covid-19, which originated in China in early 2020 and has since spread worldwide, would have on the global EV market.

It is also unclear what impact this is likely to have on the South African EV market. The country has a small share of the global EV market.

The uYilo Electric Mobility Programme, a government-led programme that focuses on enabling electric mobility in South Africa, reported in April 2020 that about 1 119 plug-in EVs had, thus far, been sold in South Africa. The total included 545 battery EVs (BEVs) and 574 plug-in hybrid EVs (PHEVs). There are currently no fuel cell EVs (FCEVs) in use by South African consumers.

Metals supply chain

Specialty materials and clean solutions provider Clean TeQ Holdings CEO Sam Riggall has advised vehicle manufacturers to invest directly in mining operations to secure their future raw material supplies. In a May 2020 article published by newswire Bloomberg, he said this would also benefit battery metals project owners in securing the necessary funding to develop operations that would supply the metals - lithium, cobalt, graphite, copper and aluminium, besides others – needed for producing greater numbers of electric vehicles in future.

Source: Bloomberg



Nissan Leaf electric vehicle

Vehicle manufacturers and dealers are seeing increasing interest in buyers wanting to invest in EV or hybrid vehicles, but there are constraints.

uYilo states in its 'State of Electric Vehicles in South Africa Report', released in April 2020, that automotive policy has not provided incentives for original-equipment manufacturers to locally produce EVs. It adds that the South African Automotive Masterplan also does not provide for a direct technology incentive for South Africa to capture a share of the global EV market potential.

The country exports many of the vehicles it manufactures to Europe, which is working on plans to phase out petrol and diesel vehicles. This could negatively impact on South Africa's future exports to the European region, which could, in turn, also negatively impact on South Africa, given the automotive manufacturing industry's significant contribution to the country's gross domestic product.

Deloitte Africa MD Dr Martyn Davies told newswire Bloomberg in August that EV development in South Africa would be driven by the requirements of the markets it exported to rather than local consumers.

Trade and Industry Minister Ebrahim Patel also told delegates attending the Naamsa conference, in Gauteng, in September 2019, that South Africa did not have to first develop local demand for EVs before manufacturing these vehicles. He said it was important for the local OEMs to develop the capabilities to produce the vehicles that would be in demand globally in future.

Further, as the country does not locally manufacture a large number of EVs, it mainly relies on imports to meet demand. Importing EVs from Europe to South Africa is currently more expensive than



importing petrol or diesel vehicles, as imported petrol and diesel vehicles are subject to an 18% customs duty and EVs to a 25% customs duty, in addition to the ad valorem customs excise duties and value-added tax

Another area of concern for the local market is the available EV charging network, which is still being rolled out by the various automotive companies. uYilo notes that, by the end of 2019, the country had about 214 public charging points across the country, mainly in the metropolitans and along major highways.

EV charging solution specialist GridCars has installed about 100 of the public charging stations available across the country. About half of its charging stations are fast chargers that enable consumers to quickly recharge their vehicles and continue with their journeys. GridCars has also partnered with Jaguar to establish the GridCars Powerway highway charging network, which has resulted in charging stations being available at 200 km intervals along the N1, N2, N3 and N4 highways.

According to GridCars, there are about four EVs to one public charger in South Africa, compared with the global average of about 20 EVs to a charger. While this means that South Africa is currently well prepared for growth in the number of EVs on its roads, GridCars plans to further expand the charging network in expectation of future growth. The company is in negotiations with various hotel and property groups about the potential to install more chargers at key nodes.

In a further boost to the local charging network, BMW South Africa in November 2019 launched BMW ChargeNow EV charging stations at three of the country's biggest airports - the OR Tambo International Airport, in Gauteng; the Cape Town International Airport, in the Western Cape; and the King Shaka International Airport, in KwaZulu-Natal.

The stations were rolled out in partnership with Airports Company South Africa, which manages the airports. The charging stations at OR Tambo International and Cape Town International can accommodate up to four EVs at a time, while the one at King Shaka International can accommodate two EVs at a time.

To determine how it responds to the changing market, the National Association of Automobile Manufacturers of South Africa (Naamsa) has initiated a position paper on EVs. The paper will consider South Africa's manufacturing potential, the charging infrastructure required and how this will be funded, as well as the potential incentives for producing EVs.

Meanwhile, there is a growing range of EVs available on the local market. Mercedes-Benz South Africa was the first OEM to locally manufacture an EV, with the 2016 introduction of the C-Class PHEV at its East London plant.

Car of the Year

The Jaguar I-Pace, an all-electric vehicle, was named the 2020 AutoTrader South African Car of the Year in April 2020. This was the first time an electric vehicle was selected as the car of the year. It had also been chosen 2019 World Car of the Year, World Car Design of the Year, World Green Car and European Car of the Year.

Source: Engineering News

Also available on the local market, although not locally manufactured, are Jaguar's I-Pace, the BMW i3 and the Nissan Leaf.

Volkswagen South Africa (VVVSA) announced in February 2020 the launch of its e-Golf pilot project. Through the project, select dealerships in Gauteng and the Western Cape will use electric Golfs as shuttles and courtesy cars for Volkswagen customers. This will help to drive customer awareness of the benefits of driving an EV. As part of the pilot project, VWSA will invest in charging infrastructure at its Uitenhage manufacturing plant, in the Eastern Cape, as well as at its Dealer Training Academy in Centurion, Gauteng.

Further, VWSA will introduce a fleet of fully electric VW ID.3 vehicles in 2021 for testing purposes. Neither the e-Golf nor the ID.3 will be available for sale locally. However, from 2022, VWSA will start selling its first fully electric VW vehicles in South Africa.

VWSA believes that South Africa will eventually have to make the transition to EVs. MD Thomas Schaefer told Engineering News in August 2019 that the South African government would have to, at some point, decide whether it wanted to use incentives or penalties to move the market to cleaner eMobility transport options. He stated that the country needed a strong EV strategy to drive the development of this sector of the industry in the coming years.

uYilo has highlighted the role EVs can play in reducing pollution, which it emphasises is a significant threat to human health. Programme director Hiten Parmar told Engineering News in April 2020 that EVs produced no tailpipe emissions and were up to 60% more energy efficient than petrol and diesel vehicles, making EVs a good option for the world as it seeks to progress to cleaner energy sources. He pointed out that Johannesburg, Cape Town, Durban and Port Elizabeth were all included in the top 500 most polluted cities in the world, with Johannesburg ranked thirteenth and Cape Town eighty-ninth.

uYilo noted that if South Africa were to adopt Euro 6 fuels for its fleet of petrol and diesel vehicles, its greenhouse-gas (GHG) emissions would decrease by 12%. If it were to phase out petrol and diesel vehicles and move to EVs that are charged with the country's existing energy mix, emissions would reduce by 34%. Significantly, if the country's energy mix transitioned to a zero-carbon one, GHG emissions from charging the EV fleet would reduce by 67%.



CLEANER FUELS

Many international markets have adopted Euro 6 fuel standards, while South Africa is still maintaining only Euro 2 standards, as it will cost billions of dollars for the country's refineries to undertake the necessary upgrades to produce cleaner fuels. In the long run, this is expected to impact not only on South Africa's air quality, but is also impacting on the vehicles that can be brought into the local market.

Mahindra South Africa reported in March 2020 that it had to delay the introduction of certain models in South Africa, as engines had to first be adapted to suit the fuel standard in South Africa. This also adds to the cost of importing vehicles into the country.

Nissan Group of Africa sales and operations director Jim Dando highlighted in July 2019 that it was not only South Africa that was suffering the consequences of delays in producing cleaner fuels, with much of Africa in the same position. Engineering News quoted Dando as stating that only three countries in Africa had Euro 5 emission standards, while five had Euro 4 emission standards. Seventeen countries had Euro 3 standards or lower, while 25 had no emission standards in place.

This could have a significant impact on air quality, as older vehicles that can no longer be sold in other parts of the world, due to their level of emissions, are frequently sold in Africa, contributing to pollution.

Dando has suggested that African countries should introduce legislative changes to introduce cleaner fuels, as well as ban the importation of vehicles that do not have adequate emission control technology.

Meanwhile, the world is increasingly seeking alternative fuel sources to those produced from fossil fuels. This includes hydrogen fuel cell electric vehicles.

Isuzu Motors South Africa (IMSAf) is also considering the introduction of trucks capable of running on compressed natural gas (CNG) as an alternative to diesel. IMSAf in September 2019 noted that there were currently not enough CNG refilling stations available, but that the network was growing.

Globally, German truck manufacturer Daimler Truck has signed a preliminary agreement with Swedish vehicle manufacturer Volvo Group to establish a joint venture to develop, produce and commercialise fuel-cell systems for use in heavy-duty tracks, as well as in other applications. Fuel-cell electric vehicles (EVs) are expected to contribute to a carbon-neutral transport sector in the future. Daimler and Volvo believe converting hydrogen into electricity to power EVs is an important part of the initiative to ensure green transport.



Toyota Mirai hydrogen fuel cell car



AUTOMOTIVE AFTERMARKET **GUIDELINES**

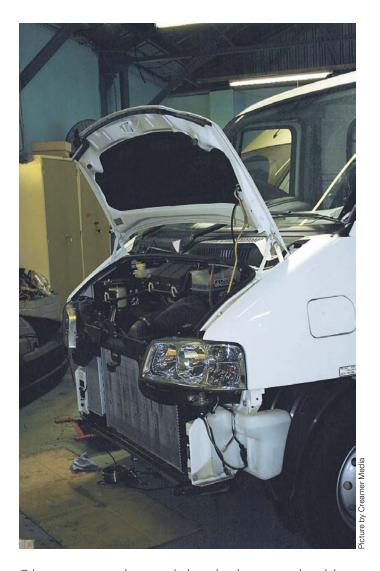
South Africa's Competition Commission released a draft of its 'Guidelines for Competition in the South African Automotive Aftermarket Industry' in February 2020 for public consultation. The guidelines are aimed at transforming the automotive aftermarket, increasing competition by including more small businesses and historically disadvantaged groups, and preventing anticompetitive behaviour.

The document states that many complaints have, over the past ten years, been made about restrictive agreements between original-equipment manufacturers (OEMs) and automotive aftermarket industry participants. Among the biggest concerns from a competition perspective are the exclusion of independent service providers (ISPs) in the markets for service and maintenance, mechanical repairs and motor body repairs of under-warranty vehicles; unclear and allegedly unfair allocation of work by insurers in the allocation of motor body repairs; restrictions on the sale of OEM-branded parts and components to ISPs; high barriers to entry for small businesses and previously disadvantaged individuals from becoming authorised dealers; and a lack of competition in terms of the sale and fitment of spare parts.

The commission's guidelines are aimed at increasing the number of approved service providers that are allowed to undertake under-warranty service and maintenance work, mechanical repairs and motor body repairs; ensuring that ISPs are allowed to undertake under-warranty service and maintenance work and motor body repairs; broadening consumer choice and product competition in terms of service and maintenance plans; and ensuring the fair allocation of motor body repairs among approved service providers. There have been mixed reactions to the draft document.

The National Association of Automobile Manufacturers of South Africa has called the commission's guidelines punitive and has said it will harm the economy. It has noted that OEMs have already committed to transforming the industry. Although not opposed to the suggested reforms, the association is opposed to the manner in which the commission intends to implement the measures.

According to an article published by financial publication Moneyweb in February 2020, the National Automobile Dealers' Association (Nada) was also not in favour of the guidelines, saying that OEMs and vehicle importers should have the right to determine the standards of entities that service their products. Nada believes that the guidelines pose a threat to road safety.



Other organisations, however, believe that the proposed guidelines are a positive step.

Moneyweb quoted the Motor Industry Workshop Association as stating that the guidelines would open up the market and result in cost savings for consumers while still maintaining quality service.

Engineering News quoted auto glass, paint and parts specialist Autoboys CEO Filum Ho in February 2020 as stating that consumers would no longer be forced to use OEM service centres, repair shops and parts to avoid risking their warranties being voided by the OEMs. Consumers would also be able to use original-equipment-equivalent parts, which offer the same standard as the OEM parts, but at a much lower cost.



AFRICAN AUTOMOTIVE MARKET

South Africa is a relatively small market, which makes it difficult to maintain an automotive manufacturing industry. There is also a growing realisation by OEMs and the broader industry that the rest of Africa will play a significant role in increasing demand for vehicles and components produced in South Africa.

South Africa's OEMs established the African Association of Automotive Manufacturers (AAAM) in 2015 to drive vehicle production and assembly across the continent. As part of plans to further expand the AAAM's influence on the continent, Dave Coffey was appointed to lead the organisation full-time as from February 1, 2020.

Previously, the association had been managed by executives of the OEMs, in addition to their duties at their respective OEMs.

The AAAM is working with the governments of African countries that are considering establishing automotive industries to ensure that they have certain fundamentals in place, including the availability of

the right fuel quality, vehicle financing mechanisms and automotive policy that supports local assembly, *Engineering News* reported in April 2020.

According to the publication, the AAAM is also working to establish a Pan-African Auto Pact (PAAP), which is aimed at creating a market for up to four-million new vehicles. Using a hub-and-spoke model, the plan is to establish a vehicle manufacturing hub in each of Africa's regions, such as East Africa and West Africa, and then developing complementary component manufacturing industries around those hubs. The PAAP is expected to enable the big African manufacturers to easily trade products with one another.

Meanwhile, to improve skills development on the continent, the AAAM has enlisted the help of development agency the German Corporation for International Cooperation. It is also in talks with various associations in African countries, as well as in Europe and Japan, to help drive the industrialisation efforts across the continent.

African car market can grow despite Covid-19

Despite the Covid-19 pandemic, new-vehicle sales in sub-Saharan Africa can increase from an estimated 100 000 a year, outside South Africa, to about two-million a year in the next 15 years – and this is a "very, very conservative" estimate, African Association of Automotive Manufacturers (AAAM) CEO Dave Coffey has said.

"I think there is an opportunity coming out of this in that around the world, organisations may want to diversify their sourcing.

"Globally, companies will consider localising and regionalising supply chains and new forms of technology."

As used cars occupy more than 80% of vehicle sales in Africa, there is an ageing fleet in the heart of Africa, Coffey has noted.

"I see this high percentage of used cars as an opportunity, because we come off such a low base of new-vehicle sales, that even in the post Covid-19 environment new-car sales will grow in the right automotive ecosystem," Coffey notes.

It is absolutely critical that an African country wishing to start up an automotive assembly and sizeable new-car sales industry has the political will to introduce an effective automotive policy, Coffey contends.

"That is the starting point. And this is where I applaud the Ghanaian government for approving their Customs Amendment Bill in Parliament in March this year."

"Reducing second-hand and grey-vehicle imports are key to driving new-vehicle demand. Africa is used as a dumping ground for used vehicles. So, limiting or managing second-hand vehicles is important to ensure safety and to support the manufacturing and assembly of vehicles."

Coffey says the AAAM understands that African governments cannot "just switch off" the flow of imported second-hand vehicles.

"However, it is important that we, over time, move towards creating a second-hand car market from the sale of new vehicles."

Equally important to creating an automotive industry are legal certainty and political predictability, adds Coffey.

"Investors need confidence. A stable regulatory framework is, therefore, required, and where applicable, certain aspects need to be passed into law."

Source: Engineering News





Engineering News in March 2020 quoted Coffey as stating that a regional approach was needed to provide the scale needed for a successful African automotive manufacturing sector. To ensure effective automotive industrialisation on the continent, there needs to be sound policy and legislation to provide incentives, regulate the sale of second-hand vehicles and ensure that quality standards are met.

Coffey further stated that more than 80% of vehicles in Africa were bought second-hand and, to ensure the roadworthiness of vehicles operating on the continent's roads and to reduce pollution, it was important that countries regulate the standard and age of vehicles being imported.

The AAAM is already working with Ghana to establish an automotive manufacturing industry. VWSA CEO Thomas Schaefer, who previously managed the AAAM, has noted that Ethiopia, Rwanda, Kenya and Nigeria have also demonstrated the potential and political will to establish vehicle manufacturing industries.

Volkswagen (VW) has vehicle assembly operations in Kenya and is expanding those operations. Engineering News reported in April 2020 that the VVV assembly plant in Kenya, which started operating in 2016, has introduced a fourth vehicle model to its line-up.





OUTLOOK

There is a lot of uncertainty globally about the impact Covid-19 will have on the global economy and industries such as the automotive industry. The expectation is that the global economy is likely to enter into a deep recession or perhaps even a depression, as most economies, developed and developing, invest billions of dollars in trying to fight the disease.

Despite measures being taken by governments to provide support for citizens and industries during this time, the real economic impact is likely to be significant, with millions expected to lose their jobs globally in all sectors. This will impact on peoples' ability to buy new vehicles and in consumers being more cautious about their spending until there is greater certainty about the future.

Data analytics and consulting company GlobalData said in April 2020 that the global automotive industry was facing its biggest existential crisis since the 2008/9 financial crisis. It pointed out that measures to ensure physical distancing had decimated demand, with the majority of vehicle manufacturers globally having halted output. Covid-19 has affected all markets. The company also noted that a number of global vehicle manufacturers had subsequently approached capital markets for credit to help them through this difficult period.

GlobalData estimates that about 2.50-million light vehicles had been removed from European and North American production schedules as a result of plant shutdowns related to Covid-19 restrictions in March and April 2020.

GlobalData warns, however, that it expects the industry to face a greater impact from the Covid-19 crisis than it did from the 2008/9 financial crisis.

As a result of the significant decrease in oil prices because of dwindling demand amid the Covid-19 outbreak, GlobalData also expects the progression to greater EV adoption to be delayed globally. It stated in April 2020 that this would also negatively impact on the world's ambitions to reduce greenhouse-gas emissions.

Further, Deloitte emerging markets and Africa MD Dr Martyn Davies has warned about the impact of Covid-19 and low oil prices on West Africa's biggest economies, including Nigeria, which is a significant market for automotive sales. He expects the low oil price – as has been the case in the past – to have a drastic impact on vehicle sales in the country, as well as other countries that are significant oil producers and depend on the income of selling that oil to support their economies.

South Africa is also expected to enter into a deep recession in 2020, which will impact negatively on local demand for new vehicles. The South African industry will also be affected by developments in export markets, where demand for new vehicles has also been impacted on.

The South African automotive sector is a significant contributor to the country's gross domestic product and the temporary halt in vehicle production and automotive component manufacturing is expected to hugely impact on the country's economy.

News publication Business Day in April 2020 quoted National Association of Automobile Manufacturers of South Africa CEO Mike Mabasa as saying that as much as 20% of jobs in the industry could potentially be cut following a five-week lockdown during which the vehicle manufacturers were shut down. He also warned that up to 30% of small automotive component suppliers might have to close their doors.

Taking into account an expected 6.10% decline in South Africa's economic growth owing to the Covid-19 pandemic, new-vehicle sales will probably also fall by between 20% and 30% in 2020, a report issued by the Automotive Industry Development Centre (AIDC), titled 'Re-gearing the Gauteng Automotive Sector, Navigating the Business Impact of Covid-19' has said.

Local vehicle production is expected to track this decline.

The local production target for 2020 was originally estimated at more than 650 000 vehicles, but currently it is impossible that this target will be achieved.

In all probability, in line with the anticipated slump in demand, production volumes will also decrease by up to 30% for 2020.

Automotive policy adviser to government Professor Justin Barnes told news publication Business Day in April 2020 that there was a risk of the local original-equipment manufacturers losing their share in the markets to which they export, which would have a long-term negative impact on the industry.

While manufacturing effectively came to a standstill on March 26, as the country entered national lockdown, the South African subsidiaries of BMW, Nissan and Ford were instructed to suspend operations along with other group plants before the lockdown was implemented.



Since then several working weeks have been lost, which the majority of manufacturers will not be able to recover, the AIDC report avers.

Exports are also likely to suffer owing to the Covid-19 pandemic.

However, Volkswagen South Africa CEO Thomas Schaefer noted in May 2020, that it was still seeing some demand for its vehicles in Europe, which is South Africa's main trading partner, accounting for 64.30% of vehicle and component exports.

From mid-May 2020, vehicle dealerships were allowed to start resuming operations at 30% capacity. This would increase to 100% of capacity by June 2020. Simultaneously, vehicle manufacturers were also allowed to export vehicles. This development was key to the overall industry getting back to work, as dealerships need to operate and sell vehicles to enable vehicle manufacturers to match production to demand. The resumption of exports is also critical to the domestic industry, given the successes it has achieved in terms of export sales in recent years

The AIDC report has described a two-year recovery for the local automotive sector, and up to five years for the global automotive sector to return to normal.

Covid-19 may, however, also lead to some behavioural changes regarding mobility within communities, which may last longer than five years.

"The advent of people that make an effort to eat food that is grown, raised, or produced locally, may result in shorter supply chains and less transport [opportunities]," the AIDC report states.

The report notes, however, that more on-line deliveries may lead to an increase in demand for commercial vehicles.

"The positive impact of lockdowns on the environment is glaringly obvious, and a new drive to eliminate pollution is likely to increase," the report asserts.

The report speculates that the automotive industry may see a greater drive for alternative drive trains - electric versus internal combustion engines versus hydrogen.

The local automotive sector – vehicle manufacturers and automotive components manufacturers - has, however, demonstrated its ingenuity and ability to adapt amid the difficult circumstances and is working to develop prototypes of ventilators that are in short supply globally as a result of Covid-19. The industry has also been producing face masks and other personal protective equipment desperately needed by healthcare workers treating Covid-19 patients.

Meanwhile, as the technicalities of the South African Automotive Masterplan had yet to be finalised before the Covid-19 disruptions, there may be an opportunity for the domestic industry to adapt the plan to align with the current realities rather than on outdated forecast estimates.





MAIN SOURCES

Bloomberg. Nissan, BMW in talks to pull South Africa into electric car era (August 12, 2019). Bloomberg. Carmakers urged to invest in mines to avoid battery metal pinch (May 11, 2020).

Bloomberg New Energy Finance. Electric Vehicle Outlook 2019 (May 2019).

Bloomberg New Energy Finance. Energy, Vehicles, Sustainability – 10 Predictions for 2020 (January 16, 2020).

Business Day. Motor industry set to create 16 000 new jobs (September 12, 2019).

Business Day. Haval makes inroads in SA motor market (October 10, 2019).

Business Day. Opinion: Why transformation in the car industry is good for business (November 6, 2019).

Business Day. BMW orders its subsidiaries to stop reporting monthly car sales (February 4, 2020).

Business Day. Mercedes-Benz joins BMW and stops monthly sales reports (March 2, 2020).

Business Day, Mercedes-Benz also cutting back on operations in SA (March 23, 2020).

Business Day. Still time to adjust the motor industry master plan for a Covid-19 world (April 21, 2020).

Business Day. Automotive sector's success could press the case for lockdown release (May 11, 2020).

Business Day. Motor industry seeks to delay new government plan (May 21, 2020).

BusinessTech. These are South Africa's best cars in 13 major categories (September 11, 2019).

Competition Commission. Draft guidelines for Competition in the South African automotive aftermarket industry (February 2020).

Cova Advisory. The road ahead for SA's slowing automotive sector (January 15, 2020).

Deloitte. Rooting SA: Strengthening the local automotive industry (September 2019).

Department of Trade, Industry and Competition. South African Automotive Masterplan (December 2018).

Engineering News. Auto thought leader on need to build Tier 2 and 3 suppliers as local content falls (August 24, 2018).

Engineering News. New-look APDP could change face of the local auto industry, says Naacam (February 1, 2019).

Engineering News. Nissan invests R3bn in Rosslyn plant to build Navara pickup (April 10, 2019).

Engineering News. Daimler to open IT hub at its East London plant (May 7, 2019).

Engineering News. Africa's vehicle policies threatening its air quality, warns Nissan's Dando (July 10, 2019).

Engineering News. South Africa does not need domestic EV market to produce EVs, says Patel (August 22, 2019).

Engineering News. Volkswagen to launch EV in South Africa in 2021, urges govt support (August 23, 2020).

Engineering News. SKD production set to start at BAIC plant, CKD to follow in 2020, says IDC (August 26, 2019).

Engineering News. ZF starts production at new East London axle plant (September 4, 2019).

Engineering News. Isuzu South Africa explores alternative fuel solutions for trucks (September 9, 2020).

Engineering News. Volkswagen reaches production of its 200 000th new Polo (September 9, 2019).

Engineering News. BMW, ACSA unveil EV charging stations at three airports (November 4, 2020).

Engineering News. Mahindra supports rapid sales growth with new Special Fitment Centre (November 5, 2019).

Engineering News. R3.5bn Tshwane SEZ to support proposed doubling of production at Ford plant (November 5, 2019).

Engineering News. Vehicle manufacturers to launch Róbn auto industry empowerment fund (November 6, 2019).

Engineering News. Isuzu announces R1.2bn investment in next-gen bakkie programme (November 11, 2019).

Engineering News. Automotive component makers to invest R2.4bn in South Africa (November 12, 2019). Engineering News. EV charging network gears up for numerous new models (November 26, 2019).

Engineering News. BMW boss elected as new Naamsa president (December 10, 2019).

Engineering News. VWSA achieves full-year production record at Uitenhage (January 13, 2020).



```
Engineering News. Black-owned SPSS clinches contract from Merc SA (January 28, 2020).
Engineering News. Numsa signs wage deal in motor retail, components sector (January 28, 2020).
Engineering News. Toyota South Africa rolls out R4.3-billion investment at local operations (January 31, 2020).
Engineering News. Isuzu SA starts exports of bakkie assembly kits to Kenya (February 4, 2020).
Engineering News. New-vehicle sales to decline by 3.5%, says WesBank (February 13, 2020).
Engineering News. BMW's Selumane appointed as CEO of transformation fund (February 17, 2020).
Engineering News. Criticism, praise for Competition Commission's aftermarket guidelines (February 18, 2020).
Engineering News. VWSA launches e-Golf project, with the aim to sell EVs from 2022 (February 19, 2020).
Engineering News. Bosal launches emission control systems manufacturing plant in Pretoria (February 28, 2020).
Engineering News. Position paper to chart way forward for electric vehicle market in South Africa (February 28, 2020).
Engineering News. Ford to build 700 000th Ranger in South Africa this year (March 2, 2020).
Engineering News. Mahindra SA sees scope for growth in SUV market (March 9, 2020).
Engineering News. 10-year 'overnight success' automotive Tier 2 supplier (March 11, 2020).
Engineering News. BMW HQ shutters Rosslyn plant as Covid-19 cools demand (March 18, 2020).
Engineering News. Metair investing R650m in auto components business (March 18, 2020).
Engineering News. Covid-19 'disastrous' for component sector; part makers gear up for ventilator manufacture (March 23, 2020).
Engineering News. Ford suspends production in South Africa as Covid-19 takes its toll (March 23, 2020).
Engineering News. African automotive industrialisation requires political will, ecosystem (March 27, 2020).
Engineering News. Automotive industry transformation focused on future of mobility (March 27, 2020).
Engineering News. Export competitiveness will boost local component manufacturers (March 27, 2020).
Engineering News. Oil, Covid-19 to take heavy toll on Africa's new-vehicle market (March 27, 2020).
Engineering News. Policy certainty to support automotive manufacturing growth (March 27, 2020).
Engineering News. SA automotive manufacturing long-term planning, growth supported by policy (March 27, 2020).
Engineering News. New-vehicle sales plummet by 30% (April 1, 2020).
Engineering News. Volkswagen expands operations in Kenya (April 1, 2020).
Engineering News. Auto industry faces 'existential threat', says GlobalData (April 2, 2020).
Engineering News. Local ventilator production could start within a month, says Naacam (April 3, 2020).
Engineering News. As Covid-19 clears the air in the 13th most polluted city, rethink EVs, urges uYilo (April 6, 2020).
Engineering News. Toyota has repaired 70 essential service vehicles since lockdown started (April 6, 2020).
Engineering News. Bosch Rexroth South Africa to 3D print protective face masks (April 7, 2020).
Engineering News. Covid-19 puts EV sales, carbon emission targets at risk, says GlobalData (April 7, 2020).
Engineering News. Review the market longevity of vehicles made locally, asks EV programme (April 7, 2020).
Engineering News. PE car terminal scores 96% in Volkswagen audit (April 8, 2020).
Engineering News. Ford South Africa starts face shield production (April 9, 2020).
Engineering News. Isuzu Trucks lightens the load for NPO (April 9, 2020).
Engineering News. An African automotive industry is starting to emerge (April 10, 2020).
Engineering News. Isuzu supports Business Chamber Covid-19 initiative (April 16, 2020).
Engineering News. BMW South Africa donates 40 000 high-grade masks to Gauteng govt (April 20, 2020).
Engineering News. VWSA produces ventilator parts, face masks in fight against Covid-19 (April 20, 2020).
Engineering News. Daimler, Volvo form JV to develop, produce fuel-cell systems for trucks (April 21, 2020).
Engineering News. A number of firsts as Jaguar I-Pace named Car of the Year (April 21, 2020).
Engineering News. Best-case scenario a 16% drop in new-vehicle sales, says Toyota (April 22, 2020).
Engineering News. Supply chain may be on the cusp of what it can endure, says Toyota boss (April 23, 2020).
Engineering News. Toyota to produce face shields, hand over operation to small business (April 24, 2020).
Engineering News. Covid-19 lockdown pummels April new-vehicle sales, exports (May 5, 2020).
Engineering News. VW, German govt in project to convert PE plant into R135m medical facility (May 5, 2020).
Engineering News. Auto exports broke several records pre-Covid-19, says Lamprecht (May 8, 2020).
Engineering News. VWSA lost 17 000 units owing to lockdown; restarts production (May 11, 2020).
Engineering News. DoT unveils plans for new auto terminal at Durban, branch line concessioning (May 12, 2020).
Engineering News. The motor industry reopens its doors (May 13, 2020).
Engineering News. Re-opened Merc plant gears up for face-shield, breathing aid production (May 14, 2020).
Engineering News. African car market can grow despite Covid-19, says AAAM's Coffey (May 18, 2020)
```



Engineering News. Auto Industry to face up to 30% job, production losses, says AIDC report (May 27, 2020).

Main sources

Fin24.com. Numsa and automakers break deadlock, reach 3-year wage agreement (September 13, 2019).

Financial Mail. Motor industry's black industrialist programme stalls (April 9, 2020).

Mining Weekly. Impact of SA's Covid-19 shutdown on platinum uncertain as supply slumps with demand (April 17, 2020).

Moneyweb. VW to take its huge Uitenhage plant off the Eskom grid (October 24, 2019).

Moneyweb. Mahindra SA set to enter a new growth phase (January 17, 2020).

Moneyweb. Draft guidelines 'a threat to road safety standards' - Association (February 27, 2020).

National Association of Automobile Manufacturers of South Africa. Quarterly review for the fourth quarter of 2019 (March 2020).

Reuters. South Africa's auto industry could cut up to 10% of workforce due to lockdown – survey (April 9, 2020).

SowetanLive. Gauteng revs engine to take over car industry (November 11, 2019).

TransUnion. Vehicle Pricing Index Q4 2019 (January 2020). TransUnion. Vehicle Pricing Index Q1 2020 (April 2020).

uYilo Mobility Programme. State of Electric Vehicles in South Africa (April 3, 2020).

www.bmwgroup.com www.daimler.com www.ford.co.za www.mahindra.co.za www.naamsa.co.za





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