A Special Economic Zone Masterplan for Gauteng

Ray Hartley and Richard Morrow

August 2021

Discussion paper 010/2021

THE BRENTHURST FOUNDATION

The Brenthurst Foundation

The Brenthurst Foundation is on the frontier of new ideas and innovative actions for strengthening Africa's economic performance. Our activities are focused in three areas: encouraging key decision-makers and experts to share experiences and insights at private meetings and seminars; delivering relevant, practical policy advice to governments; and generating new thinking and thought-leadership to address Africa's development challenges.

About the Authors

Ray Hartley is the Research Director of the Brenthurst Foundation. He holds a post-graduate degree from Rhodes University where he studied African Politics and Journalism. He was the editor of the Rand Daily Mail, BusinessLIVE and South Africa's largest newspaper, the Sunday Times. He was a member of the anti-apartheid United Democratic Front and worked as an administrator in constitutional negotiations to end apartheid.

Richard Morrow is a Researcher at the Brenthurst Foundation. He has represented South Africa at Chatham House's Common Futures Conversations platform and the European Forum Alpbach. Richard holds a Master's degree in International Relations from Durham University.

Published in August 2021 by the Brenthurst Foundation (Pty) Limited

PO Box 61631, Johannesburg 2000, South Africa

Tel +27-(0)11 274-2096

Fax +27-(0)11 274-2097

www.thebrenthurstfoundation.org

Executive Summary

With the goal of creating a seamlessly integrated, socially cohesive, sustainable and economically inclusive Gauteng City-Region (GCR), the Gauteng government has decided to undertake an ambitious journey using Special Economic Zones (SEZs). By using SEZs as its primary vehicle, the provincial government aims to boost manufacturing, exports, and employment, and eventually convert the GCR into a single, multi-tier SEZ. If developed and governed correctly, these SEZs can play a vital role in strengthening the region's economy and improving the livelihoods of the 17-million people who call it home, thereby achieving the objectives.

However, while the prospect of delivering socio-economic growth to the region using SEZs is an attractive—and certainly achievable—goal, one cannot overlook the many challenges and shortcomings which can result in failure. There are numerous examples of SEZs which set out to achieve ambitious goals with the support of government, only to later become white elephants. The reasons for their failure vary: from poor choice of location, to overbearing political interference, to an inability to leverage the comparative advantages of the economy in which they were located. A common theme among many of these white elephants has been the mindset that SEZs can serve as a silver bullet or panacea for economic growth and prosperity. This is not the case.

This strategy document has sought to dismiss these whimsical beliefs and has outlined a comprehensive approach towards developing successful SEZs by focusing on the specific actions which will need to be implemented by the Gauteng government. By combining global best practices with an understanding of the opportunities and threats that exist within the GCR, this strategy argues for a series of actions aimed at creating functional and investor-friendly SEZs; boosting manufacturing and exports; and stimulating employment.

Creating functional and investor-friendly SEZs will require implementing a streamlined governance structure for each SEZ, the adoption of a hybrid energy solution, and collaboration among stakeholders to bolster InvestSA's capabilities. When looking at manufacturing and exports, a strong focus needs to be placed on high-growth and value-add industries as well as supporting local startups and fledgling industries. Finally, the Gauteng government will need to encourage backward linkages between SEZs and the local economy, in addition to prioritising the adoption of 'Industries Without Smokestacks' (IWOSS) as a means of stimulating employment.

It is by incrementally developing functional and successful SEZs that the Gauteng government can convert the GCR into a single, multi-tier SEZ. This methodical approach will see the GCR transformed into a region whereby each SEZ functions optimally and can operate in an environment that allows for frictionless engagements between each SEZ and the broader economy.

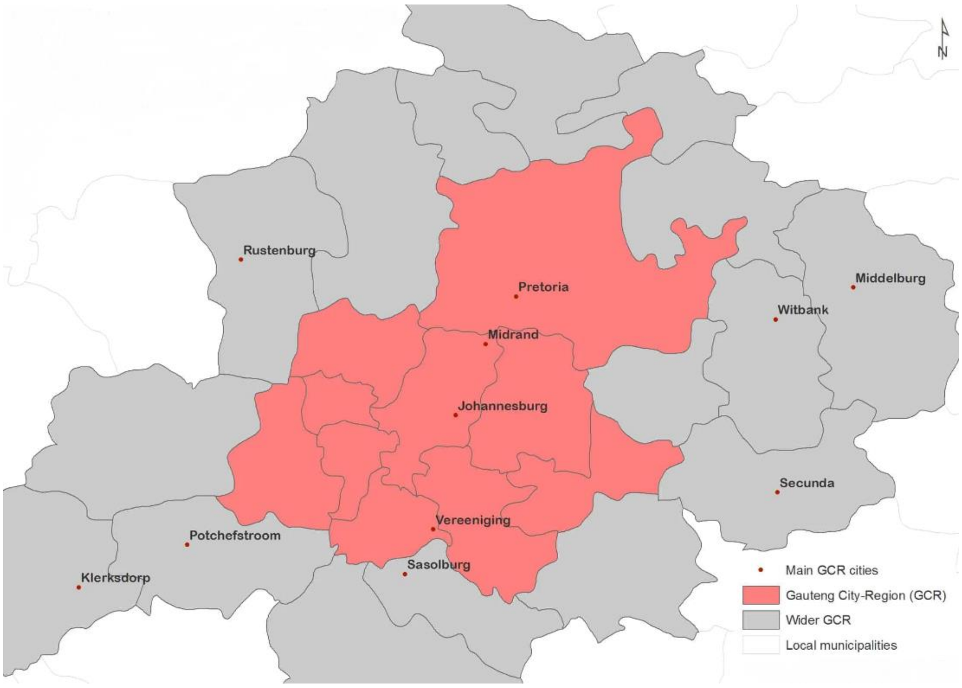
This vision can be achieved. It is only by marrying the big picture with actionable measures – namely those outlined in this strategy document – that the Gauteng government will see its vision materialise.

Contents

Rebuilding and Expanding the Gauteng City-Region With Special Economic Zones

The Gauteng City-Region (GCR) has positioned itself as an integral part of the South African economy, comprising a variety of industries, communities, and walks of life. With Gauteng at its core, the GCR includes many of the towns and cities which lie on the province's periphery yet share close ties through various infrastructure, movement, and economic networks. It is home to an estimated 15.5 million inhabitants and a combined economy which contributes towards a third of South Africa's GDP, making it the country's economic heartland.

Figure 1: The GCR Comprises of Gauteng at its Core and the Key Towns and Cities which Surround it



Source: GCRO

For its many strengths and attractions such as infrastructure and access to mineral resources, there are an equal number of challenges which hinder the GCR's growth potential. Poverty, unemployment, and social exclusion are particularly pervasive issues, perpetuated by apartheid-era spatial planning and a traditional core-periphery model which sees much of the GCR's outlying communities neglected.

As part of its *Grow Gauteng Together 2030* strategy, the Gauteng government intends to create a seamlessly integrated, socially cohesive, sustainable and economically inclusive GCR.[1] As such, the provincial government has identified a key component to be the introduction of Special Economic Zones (SEZs), where feasible, to boost manufacturing, increase exports and employment, and add momentum towards turning the GCR into a single, multitier and integrated SEZ.[2] This is an ambitious yet equally challenging endeavour, one which requires a detailed and comprehensive strategy.

Figure 2: The Gauteng Government Intends to Use SEZs as a Mechanism for Improving Socio-Economic Standards Within the GCR

Source: Brenthurst Foundation

Avoiding 'Shenzhen Syndrome': Marrying the Big Picture with Actionable Measures

The Gauteng Government has a vision – what it requires is a strategy to assist it in achieving its objectives. With any large masterplan, it is easy to focus on the end goal and the benefits it will yield; the difficulty is that this often obfuscates the actionable measures necessary for realising it.

Many cite the example of Shenzhen, the former fishing village in southeast China which has since grown exponentially to become one of the country's most important manufacturing bases and a case study for SEZ success the world over. While the success of Shenzhen cannot be understated, the reality is that it took years before it became operational, requiring significant commitment from the Chinese government and a concise roadmap.

The public sector in South Africa has unfortunately earned a reputation for developing grand and visionary blueprints yet often struggles to implement them – a phenomenon dubbed as 'Shenzhen Syndrome'. The first step in this strategic roadmap therefore requires a shift in mindset from the Gauteng government. SEZs are large, costly, and lengthy projects which cannot achieve success without significant levels of commitment and patience. While the government's *Grow Gauteng Together 2030* strategy provides the necessary framework for kickstarting an SEZ development, it does not provide a realistic timeline necessary for realising their full potential. Indeed, a major reason as to why SEZs have struggled to gain traction in sub-Saharan Africa is because they are often viewed as a 'silver bullet' for growth and a 'quick fix' for ailing economies. Adopting this short-sighted mindset will result in SEZs which are special in name only.

Figure 3: **Shenzhen's 39-Year Development Story is a Testament to the Patience and Commitment Necessary for Developing a Successful SEZ**

↑ 39 years ↓

1980	Central Committee designates Shenzhen as an SEZ
1981	Shenzhen promoted to a sub-provincial city
1988	Shenzhen becomes a separate city
1990	Shenzhen Stock Exchange is established
2010	Development Plan for Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone announced
2015	Shekou Industrial Zone and Qianhai are integrated into the new Guandong Free Trade Zone
2019	Central government of Beijing unveils development plans which intend to make Shenzhen a model city for others in China to follow

Source: Brenthurst Foundation

Understanding Global Best Practices

Marrying the big picture with actionable measures begins with an understanding of global best practices. With over 5,000 SEZs in operation across the world, the Gauteng Government does not need to reinvent the wheel when pursuing its SEZ program. While SEZs certainly do differ according to their purpose, location, and the economy in which they are situated, there are nonetheless several best practices which, if adopted, can play a crucial role in the success of the GCR's SEZs. These include:

- Active and consistent commitment from government
- Leveraging comparative advantage
- Getting location right
- Promoting private-public partnerships
- Integrating with the local economy
- Identifying and reducing bottlenecks

During several of our interactions with industry stakeholders, Dube TradePort in KwaZulu-Natal was frequently cited as an example of what a successful SEZ can look like, having adopted many of the global best practices listed above. These include securing a favourable location adjacent to King Shaka International Airport; leveraging the province's comparative advantage of being a major logistics hub; and delivering on its promises with high-quality infrastructure and amenities for its tenants. The ability for SEZs to succeed within the GCR is contingent on their ability to adopt these best practices and tailor them according to the region's socio-economic makeup.

Implementing a Tailored Strategy for the GCR

The final piece of this strategy requires that the Gauteng government, with an understanding of global best practices, execute a series of actions which are tailored towards the GCR based on the region's socio-economic landscape. Here is where the

Gauteng government will need to adopt a strict stance, making decisions which may not appear politically expedient nor favourable among certain ranks of the provincial and municipal governments, but which will prove beneficial in the overall success of the region's SEZ masterplan. Examples of this include addressing the energy crisis by pioneering a hybrid solution which utilises the Eskom grid and renewable sources; establishing governance structures for each SEZ which remove bureaucratic middle-men while optimising for efficiency; and prioritising the transition from road to rail so as to improve logistical throughput.

A Region Divided: Mapping the Socio-Economic Landscape of the GCR

In 2004, the provincial government adopted the vision of developing Gauteng into a larger and more connected City-Region; an urban conurbation of highly integrated cities and urban economic nodes. At its core is Gauteng, the smallest yet most densely populated province – home to an estimated 15.2-million people – and a sophisticated economy which in recent years has contributed towards 34% of the nation's GDP.

Along the GCR's periphery exists a cluster of towns, cities, and urban nodes which enjoy strong and historic linkages with the Gauteng economy. These include Rustenburg, Secunda, Potchefstroom, and Emalahleni (formerly Witbank). Today, the GCR is home to 17-million people and an economy which is estimated to have contributed roughly 45% of South Africa's total economic output.[3]

Underpinning the GCR's economy are the mining, manufacturing, and financial and services industries. Today's GCR can attribute its success to the wealth of natural resources which it boasts, from the Witwatersrand gold ores, to coal mining in Emalahleni, to diamond reserves in Cullinan east of Pretoria. This minerals-energy complex, as it has come to be known, bred a strong manufacturing sector, as many sought to establish themselves in the region where they could quickly and easily access key commodities. The GCR has since evolved to a sophisticated and diverse economy, with the finance and services sectors serving as the region's economic backbone. These industries alone account for nearly one quarter of Gauteng's GDP.

Manufacturing occupies a unique position within the GCR's economy. Serving as the third-largest in Gauteng, it contributes towards 15% of provincial GDP and employs some 625,000. Within the broader GCR economy, the manufacturing industry employs an estimated 799,000 individuals. Indeed, many of the large multinational corporations who have a presence in South Africa have elected to establish their headquarters or manufacturing facilities in the GCR (See table below).

Figure 4: The GCR is Home to South Africa's Largest Manufacturing Sector with Many of the World's Most Prominent Companies

Foreign companies with manufacturing facilities in the GCR

Electronics	Automotive	
LG Electronics	Marcopolo	Ford
Samsung	BAW	MAN
Lubricants	Scania	Iveco
FUCHS	Fiat	Mercedes-Benz
Mining & Machinery	DAF	Volvo
Becker	BMW	Nissan
Caterpillar	Tata	Hyundai

Source: InvestSA; Brenthurst Foundation analysis
Note: This list is not exhaustive and only utilises a select number of examples

One such reason why the GCR boasts South Africa's largest manufacturing sector is, as has been mentioned, historic. Geography is another reason. Given its location at the centre of South Africa, a significant number of goods and materials are transported between the GCR and various economic nodes throughout the country, namely Durban, Port Elizabeth, and Cape Town. The region also serves as a thoroughfare for goods moving further afield into Botswana, Mozambique, Zimbabwe and northern reaches of the continent. Because road freight is the predominant form of transport for goods and materials, the road infrastructure and networks which connect these nodes to the GCR are particularly advanced relative to many other parts of the country. Adding to the region's logistical list of advantages is O. R. Tambo International Airport. One of only 4 airports in the world that fly scheduled non-stop services to all 6 inhabited continents, O. R. Tambo accommodates 41 major airlines and has an annual cargo capacity of 650,000 tons, making it Africa's largest and busiest airport.

Looking beyond infrastructure, the GCR also has a significant advantage in the areas of skills and access to human capital. Gauteng boasts the highest adult literacy rate of any province in South Africa, and is home to the largest number of individuals with National Senior Certificates (those who have completed Grade 12), and the second-largest number of individuals with post-school qualifications.[4]

The province is also home to the largest number of individuals aged between 15 and 24, roughly 2.3 million. These numbers will be bolstered by large in-flows of migrants—both local and foreign—who will be drawn to the province and broader GCR in the hopes of finding employment. Gauteng alone is expected to experience a net migration of 1,068,885 between 2016 and 2021, the highest of any province.[5]

However, the GCR is not without its problems. The core-periphery model which underpins the region ultimately means there are winners and losers, and although the government has made numerous inroads in recent years which have been aimed at reducing inequalities, challenges still remain. For example, peripheral areas have higher rates of low income and

> The core-periphery model which underpins the region ultimately means there are winners and losers

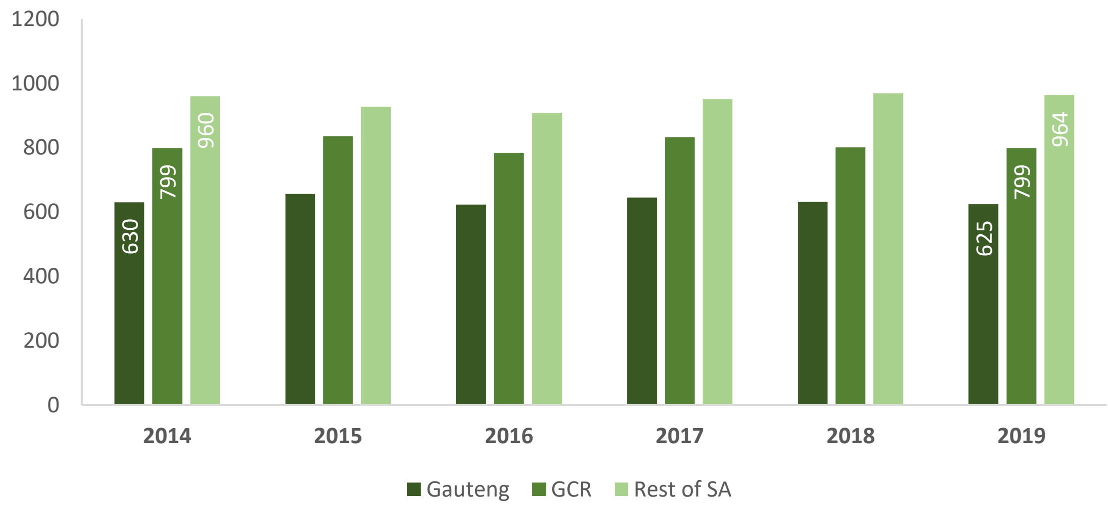
insecure employment as well as unemployment, than core areas. Gauteng alone is home to an estimated 2.2 million unemployed individuals.[6] Similar trends exist within education where peripheral areas are more likely to have low levels of education, an uneven distribution of schools, weak schools, pupils who have to travel long distances to school, poor attendance at school and little access to institutions of higher education.[7]

In certain peripheral areas, the legacies of the mining-era remain present, and have even spawned a new wave of challenges for these communities. These include abandoned mine areas; earth tremors caused by the excavated cavities below the earth; silicosis, a preventable lung disease brought about by unsafe working conditions in the mines; toxic lakes caused by acidic water emanating from mining voids; and informal mining activities.[8]

The GCR's manufacturing sector also faces several challenges, particularly around the areas of productivity and job creation. South Africa has, in recent years, undergone a process of deindustrialisation. The nation's manufacturing sector has experienced an annual growth rate of less than 1% between 2010 and 2018, a trend which saw Gauteng shed 5,000 manufacturing jobs between 2014 and 2019. While employment within the manufacturing sector has remained relatively consistent in the GCR, a worrying trend is the reduction in employment at the region's core of Gauteng.

Figure 5: Employment in the GCR's Manufacturing Sector Has Remained Consistent While Gauteng Has Experienced a Cutback

Individuals employed in manufacturing (thousand)



Source: Statistics South Africa

Note: GCR combines employment figures from Gauteng, Mpumalanga, and the North West; Rest of SA combines outstanding provinces

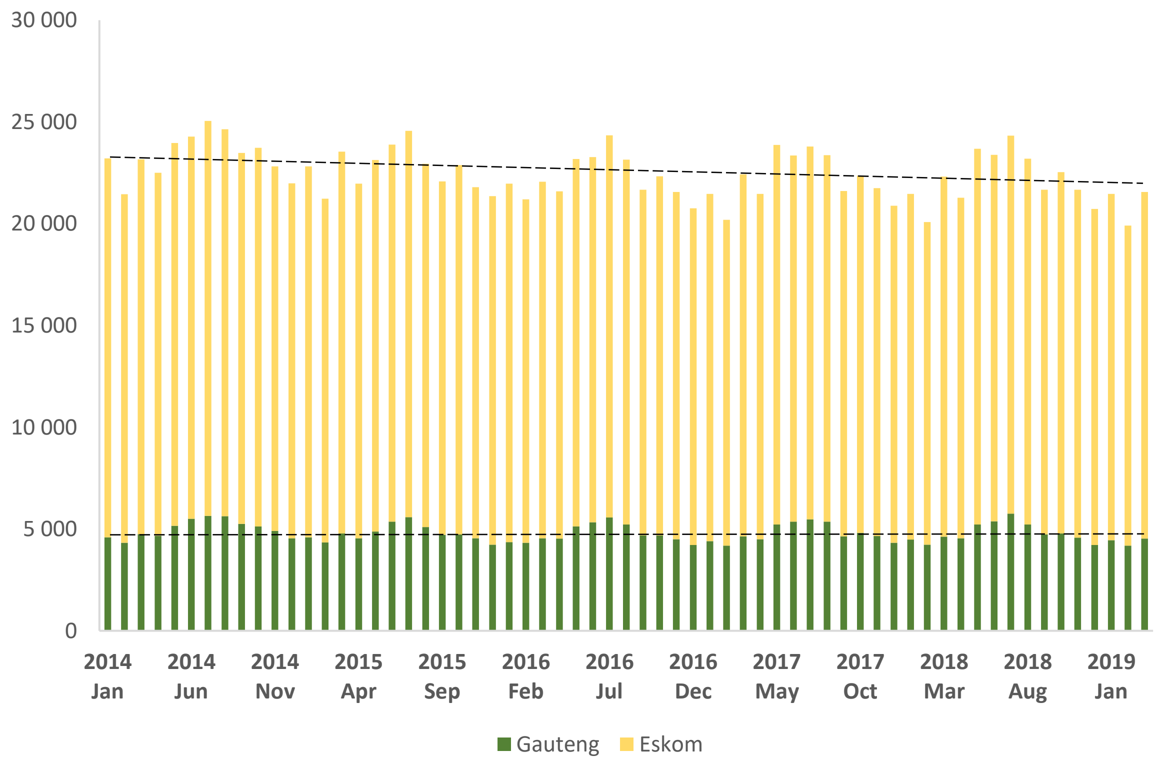
This stagnation in manufacturing forms part of a larger phenomenon which has seen South Africa bypass the traditional Lewis model of structural transformation, which argues that labour in a developing economy will typically transition from agriculture to manufacturing given the prospect of earning higher wages. South Africa, however, has transitioned straight from low productivity agriculture to high productivity services, with no significant stop at manufacturing along the way, and in doing so, has begun the process of deindustrialisation.[9] The GCR exemplifies this trend, moving from an economy dominated by mineral products and precious metals to one which is now driven by the finance and services sectors.

An additional challenge for the GCR's manufacturing sector is the province's significant consumption of energy from a shrinking Eskom grid. Because it serves as the economic hub of South Africa, Gauteng unsurprisingly consumes the largest amount of energy from the state-owned electricity utility, recording an average of 4 826,21 GWh between 2014 and 2019. By comparison, KwaZulu-Natal – who has the second-largest consumption levels of any province – recorded an average of 3 529,43 GWh during the same period.

Despite distribution to Gauteng remaining consistent in recent years, Eskom's overall distribution capacity has declined as years of maladministration and neglect of key infrastructure have finally caught up to the power utility. This is particularly concerning given that Eskom forecasts an increase of 29% in Gauteng's peak energy demand between 2020 and 2029[10] while loadshedding is said to become a more frequent experience as it is expected to triple within the next three years.[11]

Figure 6: The Delivery of Electricity to Gauteng From Eskom Has Remained Consistent in Recent Years Despite a Decline in the Power Utility's Overall Distribution Capacity

Electricity available for distribution in South Africa from Eskom (GWh) and volume of electricity delivered to Gauteng (GWh)



Source: Statistics South Africa

The GCR is colloquially referred to as the 'Gateway to Africa'. This primarily stems from its economic size; its advanced infrastructure; concentration of business headquarters; and its access to highly skilled labour. While none of this can be denied, one does need to consider the other side of the same coin: the highest levels of unemployment in the country; a core-periphery model which perpetuates inequalities; and a precarious manufacturing sector. The SWOT diagram below outlines the GCR's socio-economic landscape.

Strengths	Weaknesses
• Established and sophisticated manufacturing sector • Favourable destination for international brands • Centrally located with strong links to major logistical routes • Access to high concentration of skills	• Considerable energy consumption from the Eskom grid • Small province with limited space • A core-periphery model which perpetuates inequalities • High unemployment • Dependence on road rather than rail
Opportunities	**Threats**
• Leveraging comparative advantages in key industries • Redefining the core-periphery model • Huge labour pool and potential for employment • World-class logistics facilities	• Shifting global manufacturing landscape • Increasingly unreliable energy supply from Eskom • Growth in unemployment and inward migration of job-seekers • Increased competition, both domestically and abroad • Collapse of logistics infrastructure

In seeking to redress these issues, the Gauteng government intends to develop SEZs throughout the GCR. These can prove beneficial in catalysing socio-economic growth as there are key strengths and opportunities which can be leveraged within the region. However, there are also weaknesses and threats which have the potential to undermine any such developments. This section has highlighted these key factors – a vital step in developing a successful strategy. The next section of this report will provide a global analysis of SEZs with the aim of outlining the factors which commonly improve and reduce the likelihood of achieving success in their development.

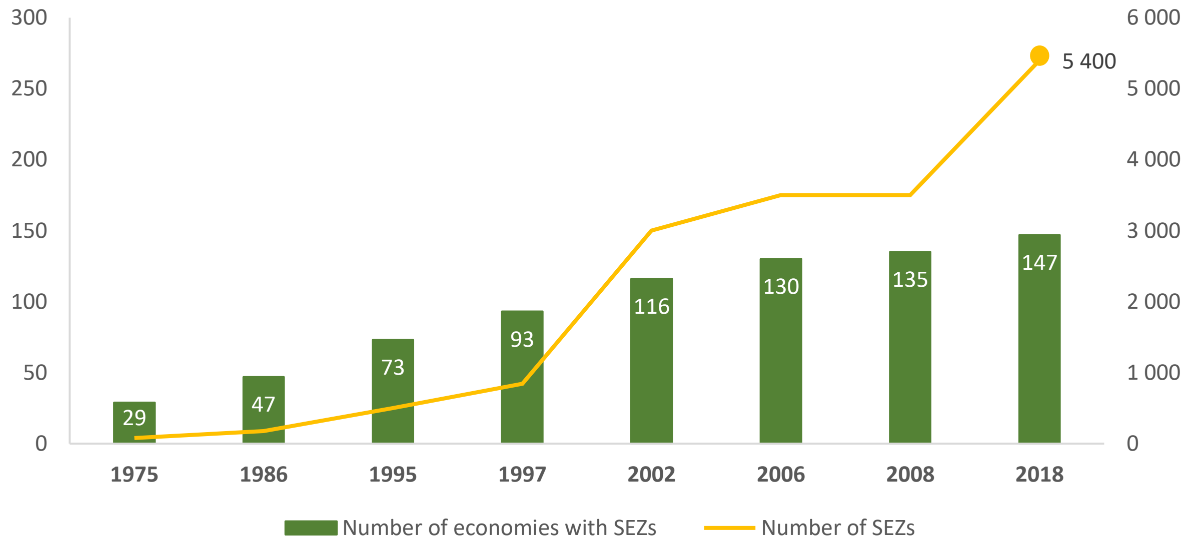
Developing Successful SEZs to Facilitate Socio-Economic Growth: A Global Analysis

The proliferation of SEZs across the world in the past 50 years has been significant. Seen as effective mechanisms for catalysing economic growth by way of attracting foreign direct investment (FDI) and creating employment, SEZs have unsurprisingly become a key focus for many emerging economies. In China, for example, SEZs account for over 80% of cumulative FDI, while in Vietnam, between 60 and 70% of all FDI is located within SEZs.[12] It is not only emerging economies which have sought to leverage SEZs, however. This follows estimates that SEZs are present in 70% of developed countries, with the US accommodating the lion's share.[13]

There are several characteristics which define an SEZ and make it an attractive destination for investment as well as an effective catalyst for economic growth. The first is that they are demarcated geographical areas which have definitive—and strict—boundary lines. This enables governments and private investors to focus their resources within these areas and provide infrastructure and amenities which would otherwise be unfeasible on a larger scale. Examples include sophisticated information and communication technologies (ICT) and integrated logistical systems. Beyond the physical attractions, SEZs typically provide those operating within them with perks such as tax breaks and lower tariffs. Through the use of 'one-stop-shops', SEZs can provide tenants with a comprehensive list of services, ranging from support in registering their business, to electricity and water, to the contact details of local materials suppliers and intermediaries. All of this therefore removes bureaucratic bottlenecks which would otherwise cost the tenant time and slow their operations.

Figure 7: SEZs Have Grown in Popularity Since Their Inception In the 1970s

Numbers of countries and SEZs (left axis = number of economies; right axis = number of SEZs)



Source: UNCTAD

These unique characteristics enable SEZs to attract large numbers of multinational and domestic firms, which in turn promotes employment, investment and overall economic development. Returning to China as an example, it is estimated that SEZs account for more than 30 million jobs, 22% of national GDP, 46% of FDI, and 60% of exports.[14] The impact of SEZs can be seen elsewhere in the world: the Jebel Ali Free Zone in Dubai is home to an estimated 7,000 firms and has created employment for 170,000 people, while in Jordan, the Aqaba Special Economic Zone has attracted $18 billion in investment and generated 100,000 jobs.[15]

While SEZs have had a significant impact in various corners of the world, they are not without their risks and challenges. One such challenge is the increase in competition as new SEZs are developed. Despite launching SEZs in the 1970s, many economies in sub-Saharan Africa only began operationalising them in the 1990s and early 2000s. This can largely be attributed to the tough competition emanating from Asian counterparts during this period, which exposed Africa's competitive weaknesses in terms of high labour costs and inabilities to reach scale, as well as the absence of political will to successfully execute on their plans.[16]

In 1997 there were less than 1,000 SEZs across the globe and by 2018 this had grown exponentially to over 5,000. In regions such as East Asia – where SEZs first gained prominence – there were 2,645 SEZs in 2019, with 2,543 located in China alone. Across Africa there were only 237 SEZs in 2019. With a growing number of SEZs comes an increase in competition for investment and funds. With global FDI inflows reaching $1.6 trillion in 2019 – of which $29.2 billion was invested in sub-Saharan Africa and $493.7 billion in East Asia and the Pacific – the competition is fierce.[17]

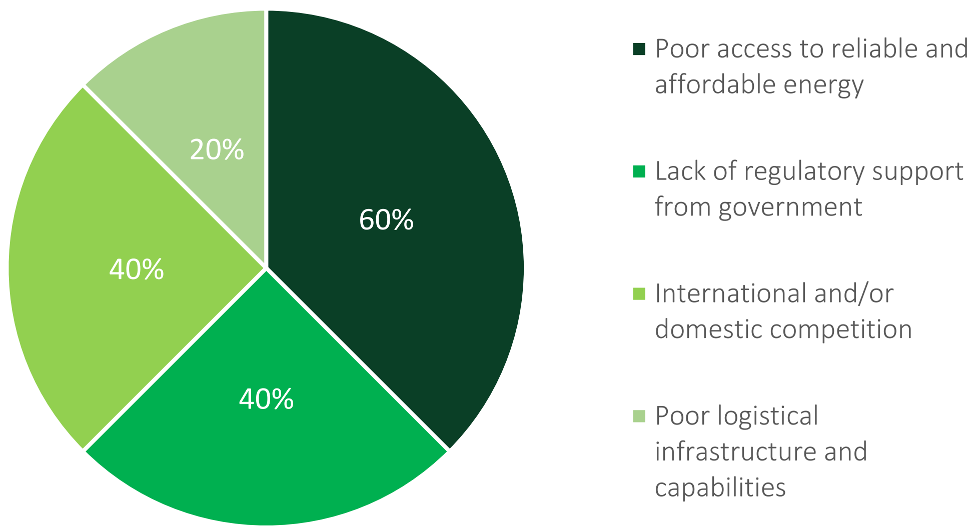
“ In 1997 there were less than 1,000 SEZs across the globe and by 2018 this had grown exponentially to over 5,000

A second challenge is that SEZs also need to contend with the changing landscape in manufacturing and the global economy. Historically, SEZs have provided distinguishable benefits such as access to affordable skills and resources. While these remain important aspects of any successful SEZ, growth in both the digital and technology sectors has disrupted the manufacturing landscape – making traditional benefits such as low-cost labour less relevant within certain sectors (i.e. automotive). Global supply chains have also undergone changes in the aftermath of COVID-19, with companies looking to shore up vulnerabilities by pivoting key aspects of their supply chains to new territories.

There is also the growing emphasis on placing environmental and ethical standards at the core of new developments. A global shift in sustainable development has seen considerable pressure being placed on laws and regulations surrounding environmentalism. A heightening of environmental, social and governance (ESG) standards will see investors direct their attention—and funds—towards projects which demonstrate satisfactory standards in each of these three areas,[18] while those governments which seek to pursue specific benchmarks (for example, the Sustainable Development Goals or Paris Climate Agreement) will also favour initiatives which place a premium on sustainability. The use of laxer social and environmental standards to woo investors is therefore no longer a competitive advantage as it will achieve the opposite effect.

While external factors such as foreign competition are a key challenge for any SEZ, internal factors such as corruption and poor infrastructure are equally as detrimental to success. These are particularly problematic in sub-Saharan Africa, a region where SEZs are often characterised by insufficient strategic planning; poor choice of location; insufficient investment in connective and social infrastructure outside zone boundaries; weak implementation capacity and poor internal co-ordination; and a lack of sustained, high-level support, and policy stability.[19] Indeed, most African zones have failed to attract significant investment, promote exports, and create sustainable employment due to these issues.[20]

Figure 8: A Key Concern for SEZ Managers in South Africa Is Energy, With 60% of Respondents Highlighting Poor Access to Reliable and Affordable Energy as a Threat to Their Future Success



Source: Brenthurst Foundation survey
'Which of the following do you consider to be the most threatening to the success of your SEZ within the next 10 years?'
Note: Survey respondents include managers from Dube TradePort, O R Tambo SEZ, and Richard's Bay IDZ.

The reality is that SEZs are large, complex and costly endeavours which face numerous challenges. Those in emerging economies face an additional set of challenges, ranging from inadequate infrastructure to problematic and weak legal, regulatory and institutional frameworks. While the allure of economic growth and foreign investment can encourage governments to pursue SEZ programs with great enthusiasm, failure to address many of the core challenges will likely result in underperforming SEZs, on track to becoming white elephants.

While the nature and performance of an SEZ varies according to its purpose and location, there are nonetheless several factors which can increase the likelihood of success. Indeed, with over 5,000 SEZs in operation across 147 economies, there are lessons to be learned and best practices adhered to. When observing SEZs globally, there are several factors which are necessary for success, namely: active and consistent government commitment; leveraging of comparative advantages; getting location right; identifying and resolving barriers to investment; promoting private-public partnerships; and integrating with the local economy.[21]

Active and Consistent Commitment from Government

Government plays a vital role in the development and success of an SEZ. The development of an SEZ is, by nature, large, costly and lengthy and can take years before they are fully functional. They are dynamic entities which are likely to undergo changes once they are complete, be it territorial expansion due to growth or regulatory amendments to fit a new regional or national policy. Government should therefore act as an engaged stakeholder, collaborating on strategic objectives, releasing funds where necessary, and using its resources to mitigate bottlenecks – especially those which are regulatory in nature.

One reason why East Asian nations have been so successful with SEZs is because their governments were committed to their success from the onset and outlined clear, long-term economic strategies for their respective SEZs. This level of involvement instilled confidence among stakeholders and signalled to investors that these governments were serious about economic growth, therefore improving their success with attracting FDI. Conversely, a lack of strategy and half-hearted commitment from government can see SEZs struggle to gain traction. In 2016 the Zimbabwean government introduced the Zimbabwe Special Economic Zones Act (SEZA) with the purpose of creating the necessary administrative and regulatory measures and incentives for managing SEZs. However, since being passed into law there remains confusion around the exact role of SEZs within the country's economy, and the responsibilities of the various stakeholders. This has seen several flagship projects such as the Sunway City Integrated Park struggle to attract investment and gain traction.

An important caveat is that government involvement must remain balanced in that it should not assume the role of the zone developer or manager and ensure that it curtails any form of political interference (red tape, corruption, bureaucratic heavy-handedness) which has the potential to stymie growth. Governments cannot allow SEZs to become political pawns; used as a means of achieving political end goals or scoring points among the electorate.

Leveraging Comparative Advantage

While governments may be tempted to pursue SEZ developments which are geared towards lucrative and technologically advanced sectors (i.e. Biomedicine and 4IR), it is important that they instead leverage their comparative advantages. This is particularly important given the pronounced growth in SEZs globally and the competition for investment. By leveraging one's comparative advantages, SEZs are likely to be more successful in attracting investment and stimulating employment within the broader economy.

For example, Bangladesh intended for its export-oriented SEZs to attract high-technology investment, but it was only once they pivoted towards the garment sector where they have a comparative advantage in the form of low-cost labour, that their program began to thrive. Similarly, attention should be given to a select few sectors which leverage one's comparative advantage, rather than attempt to cover a diverse spread. Failure to do so could result in a number of SEZs becoming white elephants.

Getting Location Right

As is the case with any infrastructure development, location is critical to the success of an SEZ. While governments might seek to position SEZs within specific districts or locales for the purposes of garnering support amongst their electorate, it is vital that commercial reasoning is what underpins the decision-making process. This will see governments prioritise location vis-à-vis access to infrastructure, labour, logistical networks, and suppliers.

When looking at the successful SEZs in China, many are located in the coastal regions near major cities where there exist strong linkages with international markets due to strong traditions of foreign trading. Examples include those SEZs located in the Pearl River Delta region (close to Hong Kong) and the Min Delta region (close to Taiwan).[22]

Indeed, the right choice of location can enable SEZs to better integrate within global value chains (GVCs) and multinational enterprise (MNE) supply chains. Take for example Port Louis in Mauritius. The decision to locate an SEZ in the capital city of Port Louis has allowed Mauritius to capitalise on its unique position at the crossroads of African and Asian maritime routes. By utilising the port's sophisticated docking and storage facilities, the Mauritian government has successfully marketed itself as a favourable location for investors seeking these amenities within the region.

Identifying and Resolving Barriers to Investment

In seeking to attract investment – especially FDI – SEZs have to ensure that they provide a frictionless environment for investors to operate within. Bureaucratic red tape, bottlenecks surrounding implementation of policies, and an inability to deliver the advertised incentives will ultimately prevent SEZs from achieving success on this front.

For example, Costa Rica initially had little luck in attracting foreign investors until the government implemented sound macroeconomic policies in the mid-1980s, bringing inflation under control, adopting a realistic exchange rate, and undertaking a series of reforms to improve the business climate. A change of policy also allowed for the establishment of SEZs near the capital, where infrastructure was better. As a result, by the late 1980s Costa Rica had managed to attract some $368 million in investment, generating 37,000 jobs concentrated in the garment industry.[23]

Promoting Private-Public Partnerships

One of the key opportunities a SEZ provides is that it can enable partnerships between both public and private entities. By crowding in the private sector, government can leverage its wealth of industry experience and expertise which cannot necessarily be matched by the public sector. Such expertise can prove valuable when pursuing large-scale SEZ developments. Another benefit of crowding in the private sector is that it can help offset government risk and costs. By delegating specific roles and responsibilities to the private sector, governments can focus their resources elsewhere and hedge against potential obstacles such as political rent-seeking.

A noteworthy trend in recent decades has been the growth in private-sector management of SEZs. In countries such as Colombia and the Dominican Republic, there has been an increase in the number of zones developed and operated by private entities, while a similar trend has taken place in Egypt, Thailand and the Philippines. Crowding in the private sector does have its risks, however. It can alienate government and cause relations to deteriorate, resulting in unnecessary legislative and regulatory bottlenecks. Private sector entities may also not be as invested as the government in terms of promoting socio-economic development, instead choosing to maximise profit.

A hybrid model is arguably the favoured approach as it involves both the public and private sectors, and therefore leverages the strengths of both. This model of governance ensures that government continues to play a role in the oversight and performance of an SEZ, while also leveraging the expertise of the private sector who can optimise for growth and development.

Integration With the Local Economy

The success of SEZs is becoming increasingly contingent on their ability to integrate with the local economy. This is because the ability to integrate improves the overall sustainability of SEZs in several ways. Firstly, local communities are less likely to feel alienated, therefore reducing the likelihood of backlash against an SEZ. Second, strong ties between zones and communities can also prove attractive to investors who are looking to bolster their corporate social responsibility (CSR) mandates. Lastly, given that zones exist to boost economic activity, the multiplier effects that can potentially manifest outside an SEZ are tremendous. Therefore, SEZs which can stimulate the local economy are likely to attract more support from government which in turn can aid further growth and development.

In emerging economies such as those in sub-Saharan Africa, linkages with the local economy are especially important given the high rates of unemployment which underscore many communities. A core element of the Saldahna Bay SEZ strategy, therefore, has been to build local capabilities by promoting skills development and utilising local contractors, while the Coega Development Corporation which operates the Coega SEZ, attributed 35% of its procurement spend towards local SMMEs between 2015 and 2020.[24]

In Costa Rica, a domestic supplier development office was established for the purposes of identifying business opportunities and recommending local suppliers who meet the necessary criterion. Meanwhile in China, SEZs encourage foreign investors to establish joint ventures with local counterparts. Rather than serving as an enclave which internalises all aspects of their value-adding activity, SEZs can maximise their performance and output by integrating with local economies.

Case Study: Dube TradePort – A Pioneer in African SEZ Development

Located along the northern KwaZulu-Natal coastline and only 30 kilometres from Durban's city centre, is Dube TradePort, a world-class SEZ offering globally integrated logistics and manufacturing infrastructure.

With the vision of becoming Southern Africa's leading manufacturing and air logistics platform, Dube TradePort has embarked on a 50-year journey which first began in 2003. The zone is currently home to Dube City, AgriZone, Cargo Terminal, and TradeZone, all of which have been built within the past decade and are expected to undergo further development within the coming years.

Each entity forms part of what is arguably one of Africa's most exciting and forward-thinking SEZs. The AgriZone is home to several innovative facilities including an industrial hemp cultivation facility and Africa's largest glasshouse complex which is responsible for growing and packaging perishables such as cucumbers and tomatoes. The Cargo Terminal is equally as impressive, capable of handling 100,000 tons of goods each year, while the TradeZone boasts several renowned multinational manufacturing firms including Samsung, LG, Mahindra, and Yangtze Optics.

When visiting the Dube TradePort, it is evident how the SEZ has leveraged global best practices to position itself as one of South Africa's leading SEZs. Firstly, it chose the correct location. The northern KwaZulu-Natal coastline provides ample space for an SEZ to expand as it grows, while at the same time not being too removed from existing business and manufacturing districts.

Figure 9: Dube TradePort Has Grown Consistently in Recent Years and Intends to Continue its Expansion as Part of its 50-Year Vision to Develop an Aerotropolis

Source: Dube TradePort

When visiting the Dube TradePort, it is evident how the SEZ has leveraged global best practices to position itself as one of South Africa's leading SEZs. Firstly, it chose the correct location. The northern KwaZulu-Natal coastline provides ample space for an SEZ to expand as it grows, while at the same time not being too removed from existing business and manufacturing districts.

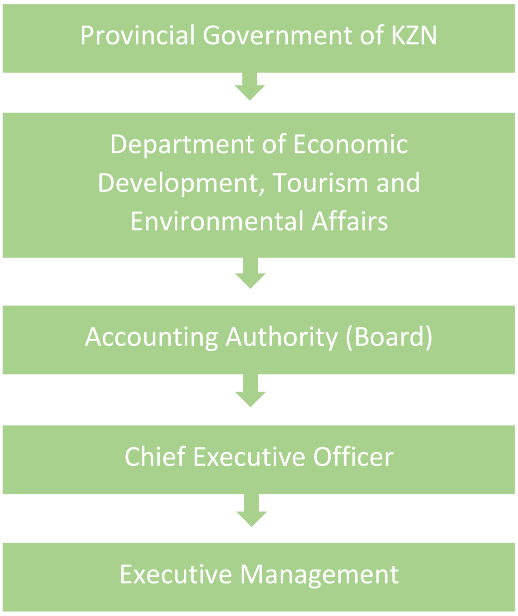
It's location between two of Africa's busiest seaports—Durban and Richard's Bay—and adjacent to King Shaka International Airport has allowed Dube to also capitalise on the region's comparative advantages in the form of manufacturing and logistics. For example, having both the TradeZone and Cargo Terminal located adjacent to King Shaka International Airport ensures a seamless transition from manufacturing, to storage, to transportation.

It has also successfully removed bottlenecks through its provision of high-quality and reliable infrastructure. Smooth roads; reliable and increasingly green energy; and on-site connectivity and telecommunication services makes Dube a site where tenants can enjoy world-class facilities and amenities from the first day they begin operating within the zone. Unsurprisingly, Dube TradePort is currently operating at 100% capacity and is pursuing its Phase 2 development plan which will see the expansion of its AgriZone and the launch of TradeZone 2.

Dube TradePort also demonstrates the right balance of government commitment as well as autonomy. The Dube TradePort Company (DTC), which is a business entity of the KwaZulu-Natal Provincial Government, is responsible for operating the TradePort. It functions like any other corporate entity: it has a board which it reports to as well as shareholders (the KZN Department of Economic Development, Tourism and Environmental Affairs and the KZN Provincial Government). It does so on a quarterly basis to discuss progress and evaluate performance against key performance indicators (KPI) and the overall strategic agenda. This model ensures that the SEZ is operated by a management team with a commercially-led agenda, while also maintaining input from the provincial government.

A hallmark of Dube TradePort's success, and a key lesson for the Gauteng government, is the importance of patience and commitment. The idea behind Dube TradePort was first conceived in 2003 with construction only commencing in 2007, while the Cargo Terminal was completed in 2010 and the TradePort officially declared an IDZ in 2014 (it then became an SEZ in 2016). With Phase 1 of its development complete, Dube is now commencing with Phase 2. What this timeline highlights is the scale of an SEZ and the level of commitment needed in order for it to succeed. An SEZ does not become operational overnight, nor does it begin delivering on its expectations immediately. The adage of 'slow and steady wins the race' speaks volumes when assessing Dube TradePort's success.

Figure 10: Dube TradePort's Governance Structure Demonstrates the Right Balance of Government Commitment as Well as Autonomy



Source: Dube TradePort

While no two SEZs are the same, there certainly are factors which improve the chances of success. There are numerous examples of SEZs which have failed to gain traction due to their inability to incorporate these best practices within their development plans. The active support from government; right location; leveraging of comparative advantages; promotion of public-private partnerships; removal of bottlenecks; and integration within the local economy can be the difference between an SEZ which thrives and one which simply becomes a white elephant. The Dube TradePort highlights how these best practices have shaped its success, making it one of the country's pioneering SEZs.

While a global analysis provides insight into the general elements behind successful SEZs, it is imperative that consideration is given to the specific actions required for creating success within a particular terrain and economy. To this end, the Gauteng government cannot rely on global best practices alone – it must go further by acting according to the nuances which underscore the GCR. This means mitigating threats while capitalising on opportunities, and hedging against weaknesses while leveraging strengths.

It is only by developing and deploying a strategy which caters for the nuances of the GCR, that the Gauteng government will be able to achieve a successful SEZ rollout and make inroads towards accomplishing its goals as outlined in the *Grow Gauteng Together 2030* strategy. What therefore follows is a comprehensive list of recommendations for the Gauteng government which combine global best practices and insights from the GCR's SWOT analysis.

Achieving SEZ Success in the GCR: The Whole Is Greater Than the Sum of Its Parts

The GCR is well-poised to benefit from SEZs and achieve its socio-economic goals as outlined in the *Grow Gauteng Together 2030* strategy. This is largely due to its manufacturing prowess, infrastructure, logistics networks, and access to labour, all of which provide the ideal platform for embarking on a SEZ rollout strategy. There are, however, several constraints which have the potential to undermine the success of such a strategy. These include an increasingly unreliable energy supplier in the form of Eskom, a declining manufacturing sector both provincially and nationally, and an absence of key skills.

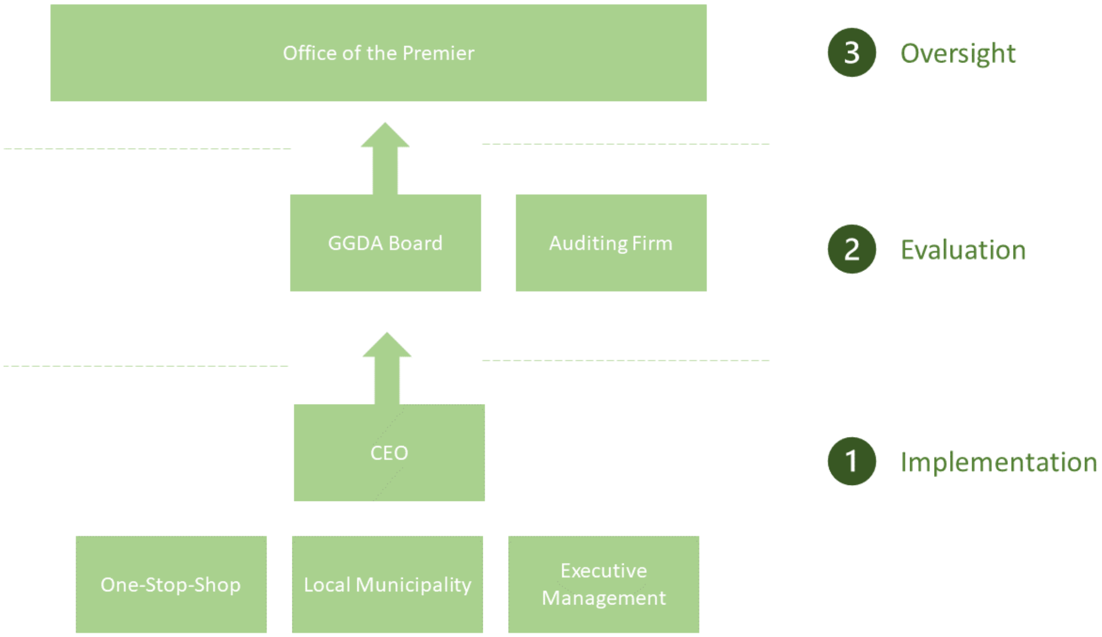
This section outlines a list of actions for each priority area as identified by the provincial government. By acting upon these recommended actions, the Gauteng government can achieve SEZ success within the GCR; make sustainable inroads towards achieving its vision of a multi-tier SEZ; and create a GCR which is integrated, socially cohesive, sustainable, and economically inclusive. The figure below summarises this strategy.

Fundamentals

Implement a streamlined SEZ governance structure with the goal of promoting coordination among stakeholders and reducing bureaucratic red tape

Over the course of our engagements with industry stakeholders, a consistent observation has been made surrounding the fragmented and bureaucratic governance structures which exist within the GCR. Several have criticised the Gauteng Department of Economic Development's ability (and willingness) to coordinate on matters which require significant implementation, while others have raised concerns around good governance within an initiative of such scale. In seeking to promote investment and create an environment which is conducive to effective cooperation and coordination among stakeholders, it is imperative that a streamlined hierarchy is implemented which prioritises accountability and minimises bureaucratic red tape.

Figure 12: The Proposed SEZ Governance Structure is Aimed at Promoting Coordination Among Stakeholders and Reducing Bureaucratic Red Tape



Source: Brenthurst Foundation

Figure 12 outlines a governance structure which would achieve these objectives. We recommend dividing each SEZ into three tiers of governance: Implementation, Evaluation, and Oversight.

The implementation tier will be focused on the operational aspects of an SEZ, with the key stakeholders being the CEO, Executive Management, a One-Stop-Shop representing InvestSA, and the local municipality in which the SEZ is located. Leading this will be the CEO, who will be appointed by the 12-person GGDA board. They will in turn be responsible for appointing a management team to assist in the overall operation of the SEZ. InvestSA's One-Stop-Shop will serve as a direct point of contact for investors seeking to take up residence within the SEZ. Finally, the local municipality will be responsible for service delivery and resolving matters which require municipal action. Each entity will be accountable for its responsibilities and the CEO will be tasked with reporting on their SEZ's overall performance to the GGDA board.

This will involve the Evaluation tier. Comprising of the GGDA Board and an independent auditing firm, this tier will be responsible for monitoring and evaluating the performance of an SEZ vis-à-vis a set of KPIs and benchmarks which would have previously been agreed upon. The GGDA Board will ideally meet with the CEO on a quarterly basis. The auditing firm will provide an objective assessment as well as scrutiny of the SEZs finances. The GGDA Board will then report to the Premier's Office and forward any other concerns and comments from the CEO which would require input at a provincial level.

Finally, the Oversight tier is where the Premier's Office resides. Although removed from the operation and evaluation of the GCR's SEZs, the Premier's Office needs to remain informed of their overall performance and whatever challenges may arise. If necessary, the Premier's

Office can voice its concerns and thoughts with the GGDA Board which can then in turn relay them to the relevant CEO.

By assigning specific roles and responsibilities as well as creating a clear channel of communication, each SEZ can function in an optimal manner and avoid overlap and more importantly, unnecessary bureaucracy.

Adopt a modular energy solution which combines the Eskom grid with on-site solar generation and battery storage capabilities

The most pressing challenge for any business in South Africa is undoubtedly the reliable and affordable provision of energy. Given the beleaguered state of Eskom and its fragile grid combined with the energy demands of a functional SEZ, it is imperative that the Gauteng government provide energy stability by incorporating a system for each SEZ which utilises the Eskom grid in addition to an on-site generation and storage facility.

A recent survey of 239 prospective municipal and private generators indicate substantial interest in the uptake of distributed generation in South Africa over the next five years, particularly in the form of solar PV, wind, and battery storage projects.[25] Key obstacles highlighted by the respondents were policy uncertainty and mixed messaging in respect of South Africa's stance on renewable energy, and a restrictive and inadequate regulatory framework for distributed generation uptake.[26]

The Gauteng government can capitalise on this enthusiasm and leverage President Ramaphosa's announcement to increase the licensing threshold on embedded energy – while also quashing many of these concerns by insisting that renewable systems and battery storage are part of each SEZ. One such renewable energy company we engaged with recommended the utilisation of solar PV panels across all buildings within the SEZ and the installation of lithium batteries for on-site storage purposes. This is the most cost-effective approach and does not require any regulatory oversight (i.e. you are not entering into an agreement with an independent power producer).

As an SEZ grows and the cost of renewable technologies decreases – and if the state of Eskom continues to deteriorate – each SEZ can scale-up its renewable capabilities accordingly, choosing to either increase their use of solar PV panels and battery storage units or look to wheel energy from a private generation source such as a wind farm. Not only will this strategy enable SEZs to hedge against an unreliable Eskom and fluctuating energy costs, but its modular nature makes it an affordable option which mitigates against risk. It will also prove beneficial in attracting tenants who are looking to locate their business in a locale where renewable energy is being championed.

Collaborate with the relevant stakeholders to ensure that InvestSA's 'One-Stop-Shop' offers a comprehensive and deliverable set of perks to foreign investors and established local businesses

A hallmark component of any SEZ is its ability to offer tenants a set of perks which they otherwise would not have access to elsewhere. In addition to infrastructure and access to amenities, SEZs need to create a frictionless investment environment, particularly for foreign investors seeking to navigate a new geography, and one which ultimately reduces the frictional cost of doing business.

One such organisation responsible for securing foreign investment outlined the list of concerns that many foreign investors and MNEs have when considering South Africa as an investment destination. These include the ongoing discussions surrounding land redistribution, the significance of labour unions, the strenuous regulatory environment (i.e. length of time for approvals), and service delivery. World Bank *Doing Business 2020* data reaffirms these difficulties: South Africa ranks 84 out of 190 countries, with the ease of starting a business (139), getting electricity (114), and registering a property (108) among the country's three poorest performing areas.[27]

It is imperative that those SEZs located within the GCR have the ability to provide as much certainty as possible to investors and to ensure that as many obstacles and barriers are removed. Rather than create a new entity for achieving this, the Gauteng government should aim to strengthen the Department for Trade and Industry's (DTI) InvestSA arm, making its 'One-Stop-Shop' (OSS) a more competent and authoritative entity. Indeed, our research among SEZ executives in South Africa indicates that the majority do not feel that the DTI has played a significant role in the success of their respective SEZ.

Strengthening InvestSA's OSS can be achieved by working with local municipalities to ensure that a predetermined list of conditions are secured. For example, The Gauteng government together with the SEZ executive team, DTI, and the City of Ekurhuleni can agree on a fixed rate for energy supplied via the grid for incoming tenants. This means that as soon as a lease agreement is signed between an SEZ and a tenant, that tenant can enjoy energy at a fixed rate without having to negotiate terms themselves. The purpose here is to have an entity which can actually deliver a set of regulatory perks and support, and not simply float them as possible value-adds.

Manufacturing

Tailor SEZs towards high-growth and value-add industries where the GCR enjoys a comparative advantage so as to boost demand

If the Gauteng government aims to boost manufacturing, it should focus its attention towards its existing comparative advantages with the goal of establishing itself as the leading global destination for these industries. This will require the government to develop SEZs which boast world-class facilities while prioritising the automotive, machinery, and beneficiation industries.

In seeking to boost manufacturing, the Gauteng government might be tempted to pursue labour-intensive forms of manufacturing within its SEZs, opting for a similar model seen in parts of East Asia where large volumes of low-value goods are produced at rapid speed. Alternatively, it might wish to adopt a scattershot approach towards manufacturing which will see it producing products in as many industries as possible. These approaches are not feasible in the GCR, nor are they recommended. The GCR—and South Africa more generally—cannot compete with other countries in these areas primarily due to the cost of labour. For the GCR to succeed it must leverage its comparative advantages, namely automotive, machinery, and beneficiation, and position itself as the key location for manufacturing within these sectors.

Central to realising this will be the Gauteng government's ability to invest significantly in its SEZs, making them world-class facilities and highly desirable locations for tenants. One such option will be to secure partnerships with an 'anchor tenant' who can share the cost in exchange for preferential terms. A recent example is Ford, who in early 2021, invested R15.8 billion as part of their strategy to modernise and expand their South African manufacturing presence. As part of this investment Ford entered into a private-public partnership with the Gauteng and Tshwane governments, which saw the vehicle manufacturer become a partner at the Tshwane Automotive SEZ (TASEZ). They have since begun construction of a new Ford-owned and operated chassis line in the TASEZ.

By combining existing expertise with world-class facilities, the GCR can cement itself as a key location within the areas of automotive, machinery, and beneficiation, therefore increasing demand for its products and in turn, boosting its manufacturing output.

Use SEZs as a hotbed for exploring new value-add industries

While the focus should be on those industries where the GCR enjoys a comparative advantage, SEZs should also be used as an opportunity to explore new industries and sub-sectors. By doing so, the GCR can potentially develop strengths in new areas which can result in it boosting its manufacturing output. The Gauteng government should therefore identify key industries where, using its SEZs, it can encourage experimentation and innovation.

Two individuals who work with foreign investors highlighted the opportunities for this approach. The COVID-19 pandemic has caused upheaval among GVCs, resulting in many companies diversifying their supply chains. In some instances countries have also sought to manufacture their own personal protective equipment, while the scarce supply of vaccines has seen some endeavour to manufacture their own. The GCR can leverage this shift in global manufacturing as an opportunity to pursue new markets. Examples include pharmaceuticals as well as aerospace and defence.

It is essential that the GCR has the capabilities to pursue these new industries, both in terms of accessing skills as well as facilities and resources. The Centurion Aerospace Village (CAV) is one such example of how an industry (aerospace and defence) has been able to leverage the expertise of the automotive and machinery sectors as well as the state-owned aerospace and military technology conglomerate, DENEL.

In seeking to explore new industries, the Gauteng government should first identify industries where there is potential for high-growth. From here it can develop niche or micro-SEZs similar to the CAV, or possibly position these industries within larger and more established SEZs so as to promote spill over.

Establish a fund and accelerator program for young manufacturing companies which demonstrate potential in high-growth industries

SEZs should not be limited to large manufacturing firms, but should also provide an opportunity for young firms to benefit from what they have to offer, including the spillover of ideas and new technologies which comes from operating in an environment alongside larger and more established companies.

Providing nascent manufacturing firms within the GCR with access to funds and training can serve as a key tactic for promoting growth within the region's manufacturing sector and boosting output. The prospect of receiving funding and training can be the difference between a company closing its doors or continuing its operations. It can also determine whether an entrepreneur decides to pursue their manufacturing venture or a different career path altogether. This approach also helps to strengthen the 'Proudly South African' narrative which has received increased focus from President Ramaphosa in his 2021 State of the Nation Address.

One manufacturing company illustrates the opportunity (and need) for such a program. This particular firm designs and installs lithium-ion batteries for heavy machinery, and is the first company in the world to build and sell battery-powered electric refrigeration units for the logistics and transport industry. Having been operational since 2017, the company has recently been approached by an SEZ in the Netherlands which has asked that they move their production facilities from South Africa to the European Union. While the company would like to remain in the country given that it serves as their largest market, they have not received any such interest or outreach from a South African-based SEZ, and are therefore actively considering the offer. Should they leave South Africa, they will take their intellectual property with them and the GCR will lose a promising young company.

In seeking to attract and retain local manufacturing talent, the Gauteng government should establish a venture capital fund alongside an accelerator training program which identifies high-potential firms within the GCR (and potentially the rest of the country) and encourages them to occupy one of the region's SEZs. By doing so the company will have access to world-class facilities, favourable financial terms, resources at their disposal from the Gauteng government, and the ability to work alongside larger and more established companies.

Exports

Prioritise the transition from road to rail by fast-tracking all rail developments within the GCR

A particular issue which was raised by many of the stakeholders we engaged with was the overreliance on road freight for transporting goods outside the GCR. The transition from road to rail has been frequently discussed within national government, yet it has been slow to gain traction. The Gauteng government needs to expedite this transition, focusing on the immediate rail development projects underway within the region.

Moving from road to rail will provide those SEZs within the GCR with a significant boost in their ability to get goods to market, as they can link more efficiently with export facilities in Durban, Port Elizabeth, and other key hubs in Southern Africa. The recent multi-billion Rand investment from Ford highlights the importance of rail and provides a strong platform to expand from. As part of the investment, the Gauteng Province-Eastern Cape Province High Capacity Rail Freight Corridor is set to begin construction. This corridor will create a direct rail connection between the new Ford factory at the Silverton plant and Ford's Struandale engine plant in Port Elizabeth. As such, Ford can transport higher volumes of vehicles at a faster pace to Port Elizabeth where they are then exported to foreign markets.

A similar opportunity presents itself with Tambo Springs – the logistics development located in southern Ekurhuleni. Tambo Springs aims to double the current freight logistics capacity in and out of Gauteng by incorporating world-class technologies and facilities, including the largest dry port in sub-Saharan Africa and a complete supply chain solution to the Southern Africa region.[28] By leveraging Tambo Springs, those SEZs operating within the GCR can access world-class facilities which can dramatically improve their export turnaround times.

As such, the Gauteng government must throw its weight behind these developments and champion rail as the future of logistics within the GCR. This will require the government to work with a variety of stakeholders to remove any bottlenecks and obstacles, such as the halting of negotiations between Tambo Springs and Transnet.

Develop a digital ledger which enables the frictionless movement of goods and materials within the GCR and between SEZs

With the development of several SEZs planned for the GCR, it is imperative that they are able to engage with each other in a frictionless manner. Adding to this is the importance of reducing bottlenecks along the logistical pipeline so that products can move more seamlessly from where they were manufactured to where they can be exported. A digital ledger system spearheaded by the Gauteng government can be assist with this.

A hallmark characteristic of the GCR is its integrated logistics networks, however, as SEZs develop within the region, there is likely to be more congestion and strain on logistical infrastructure. For example, an agri-processing SEZ on the West Rand looking to transport its products to O.R. Tambo International Airport for export will need to travel between 55 and 65 kilometres. This does not include the potential time lost due to traffic and congestion. An increase in road freight will ultimately place further strain on the region's busy roads.

One method of preventing said strain and supporting the free movement of goods and materials is to develop a digital ledger system. This system can track the movement of all products and materials leaving and entering the GCR's SEZs, and using Google's Directions API (the technology which supports Google Maps) it can advise on optimal travel times to help reduce congestion. More importantly, it can ensure that those products leaving an SEZ need not be checked or halted at any point during their journey, as the digital ledger will automatically capture the various stages of their transit. This can dramatically enhance logistical turnaround times as products can move from the production floor to the cargo plane with minimal oversight.

The Gauteng government will need to work with the private sector in developing this system, and must also ensure that it engages with the relevant SEZs and freight companies so as to include their input.

Capitalise on the GCR's infrastructure and skills by targeting service exports through the use of Business and Technology Parks

A significant opportunity presents itself for SEZs—in the form of business and technology parks—to export services in the area of Business Process Outsourcing (BPO). This will enable the GCR to tap into a growing market, and with its existing advantages such as infrastructure and access to skills, it can position itself as an industry leader.

BPO is the provision of business support services by outside third parties and can include a wide range of services from call centres to payroll, accounting and technical advice on things such as how to reboot a router that is on the blink. BPO can be rapidly expanded as all that is required to become an operator is language fluency and access to the internet in an office or at home. The cost of creating a BPO job compared to creating employment in mining or manufacturing is miniscule.

South Africa has a number of natural advantages when it comes to offering these services. The English language is widely spoken, there is time-zone synchronicity with the large European market and there is relatively advanced – although expensive – infrastructure in the form of information and communications technology. The country's reputation as a reliable, cost effective, and high-quality destination for outsourced business services has seen it voted as the second most attractive BPO location in the world for three consecutive years.[29]

Figure 13: **Johannesburg's BPO Market Benefits From its Infrastructure and Size, and Can Be Further Strengthened Through Skills Training and Improvements to the Business Environment**

Comparison of enabling environment across key BPO locations

Best / Worst	Bengaluru India	Kuala Lumpur Malaysia	Manila Philippines	San Jose Costa Rica	Krakow Poland	Johannesburg South Africa
Talent	1.85	1.49	1.44	1.45	2.04	2.05
Infrastructure	2.49	2.08	3.08	2.69	2.52	2.41
Risk profile	2.66	2.11	2.78	2.69	2.91	2.61
Environment	3.29	2.65	3.54	3.07	2.98	3.09
Industry size	1.00	3.00	1.00	3.44	3.00	1.00

Source: McKinsey Location Readiness Index

With the global BPO market valued at $163 billion – and an expected growth trajectory of $183 billion by 2023[30] – the GCR is well poised to position itself as favoured destination for such services. Indeed, interest in South Africa as a BPO destination has accelerated since the COVID-19 pandemic due to the industry's demonstrated resilience. As a result of this resilience, Web Help – a French company which works with Amazon, Cisco and Microsoft, among others – has opened 200 new BPO seats in Johannesburg during the initial lockdown.

A particular priority for the Gauteng government should therefore be to establish Business and Technology parks within the GCR that can provide the necessary training to individuals while also pairing them with employers. It is imperative that the necessary infrastructure is in place to support these BPO hubs, namely affordable fibre internet and reliable energy (see modular energy recommendation).

Employment

Encourage backward linkages with local suppliers and contractors through the use of business directories

A key aspect of any successful SEZ is its ability to integrate with the local economy in which it is situated. Therefore, rather than exist as economic enclaves, the GCR's SEZs must actively engage with local contractors and intermediaries. Here is where the Gauteng government can support SEZs in collating directories of local businesses with whom their tenants can engage with.

While government may be tempted to impose 'hard' regulations regarding local procurement, this is ill-advised as it can potentially inhibit competitiveness and therefore discourage investors from occupying the regions SEZs. A more viable option would be the introduction of 'soft' tactics aimed at encouraging SEZ engagement with the local economy and labour force. Here is where the Gauteng Government can work together with the SEZs to collate a directory of local intermediaries and manufacturers, selecting those which are reputable and capable of delivering high-quality components. From here, SEZs can actively encourage their tenants to engage with these local intermediaries, marketing them as affordable and reliable. This approach has the potential to expedite the procurement process for SEZ tenants as they will have a list of local intermediaries with whom they can readily engage with on the basis of their requirements.

A recent success story is the approach that Ford is taking in regards to its engagements with local intermediaries. As part of its recent R16-billion investment, Ford aims to increase its procurement of locally made components from 39% to 60%. This will provide new opportunities for local manufacturers who would have traditionally been excluded from larger supply chains, while it will increase sales for those intermediaries already part of Ford's local supply chain. This 21% increase in local procurement will have a ripple effect in the local economy as firms will likely look to increase their employee base while also upskilling existing employees to meet demand.

Blend the region's high-growth SEZs with IWOSS tenants as a means of absorbing low- and semi-skilled labour

A key factor in the success of Gauteng's SEZs will be their ability to absorb low- and semi-skilled labour. While the Gauteng government is primarily focused on the manufacturing sector, a key opportunity exists with industries without smoke stacks (IWOSS). As such, the Gauteng government should look to blend the region's SEZs, striking a balance between manufacturing and IWOSS.

IWOSS sectors are characterised as having high value add per worker; exhibit capacity for technological change and productivity growth; and have the ability to employ large numbers of low- and semi-skilled labour. Examples include agro-processing, horticulture, commercial agriculture, tourism, information and communication technologies (ICT), transit trade, financial and business services.[31]

What makes IWOSS sectors particularly attractive is their ability to absorb low- and semi-skilled labour while still providing jobs that can accommodate high-skilled labour. In South Africa, low-skilled employment accounts for 20.3% of all employment in IWOSS sectors, compared to 16.9% for non-IWOSS employment (mining, utilities, construction, and manufacturing). Data also suggests that IWOSS sectors are more female- and youth-intensive, enabling them to absorb a broader labour force when compared with non-IWOSS sectors. An additional benefit is that as the economy evolves and digitisation becomes more commonplace, IWOSS sectors are likely to be more resilient than their non-IWOSS counterparts due to the nature of the work and the transferability of certain skills.

As such, the province's SEZs must prioritise IWOSS sectors which are capable of providing employment to a variety of skill levels, with an emphasis on low- and semi-skilled individuals. The Gauteng Government has already earmarked several business and technology parks as part of its broader SEZ strategy. As has already been discussed, BPO provides a unique opportunity in this regard and can be a vital mechanism for creating employment.

Conclusion: Realising the Vision of a Single, Multi-tier SEZ Within the GCR

With the goal of creating a seamlessly integrated, socially cohesive, sustainable and economically inclusive GCR, the Gauteng government has decided to undertake an ambitious journey using SEZs. By using SEZs as its primary vehicle, the provincial government aims to boost manufacturing, exports, and employment, and eventually convert the GCR into a single, multi-tier SEZ. If developed and governed correctly, these SEZs can play a vital role in strengthening the region's economy and improving the livelihoods of the 17-million people who call it home, thereby achieving the objectives.

However, while the prospect of delivering socio-economic growth to the region using SEZs is an attractive—and certainly achievable—goal, one cannot overlook the many challenges and shortcomings which can result in failure. There are numerous examples of SEZs which set out to achieve ambitious goals with the support of government, only to later become white elephants. The reasons for their failure vary: from poor choice of location, to overbearing political interference, to an inability to leverage the comparative advantages of the economy in which they were located. A common theme among many of these white elephants has been the mindset that SEZs can serve as a silver bullet or panacea for economic growth and prosperity. This is not the case.

This strategy document has sought to dismiss these whimsical beliefs and has outlined a comprehensive approach towards developing successful SEZs by focusing on the specific actions which will need to be implemented by the Gauteng government. By combining global best practices with an understanding of the opportunities and threats that exist within the GCR, this strategy argues for a series of actions aimed at creating functional and investor-friendly SEZs; boosting manufacturing and exports; and stimulating employment.

The Gauteng government will need to continue monitoring the development and performance of their SEZs if they are to remain successful. As part of this, the Gauteng government must continue to promote sustainability within their SEZs by expanding upon the modular energy solution to one that is completely renewable; promoting clear and open communication among all stakeholders using the proposed governance framework; and expanding engagements with the broader GCR economy as SEZs continue to grow.

It is by incrementally developing functional and successful SEZs that the Gauteng government can convert the GCR into a single, multi-tier SEZ. This methodical approach will see the GCR transformed into a region whereby each SEZ functions optimally and can operate in an environment that allows for frictionless engagements between each SEZ and the broader economy.

This vision can be achieved. It is only by marrying the big picture with actionable measures – namely those outlined in this strategy document – that the Gauteng government will see its vision materialise.

Endnotes

[1] Gauteng Provincial Government, *Growing Gauteng Together 2030*, March 2020

[2] Ibid.

[3] GCRO, 'The Gauteng City-Region', Accessed 21 February 2021 at https://gcro.ac.za/about/the-gauteng-city-region/

[4] Statistics South Africa, *General Household Survey, 2019*, December 2020

[5] Ibid.

[6] Ibid.

[7] Sally Peberdy, Philip Harrison and Yasmeen Dinath, 'Uneven Spaces: Core and Periphery in the Gauteng City-Region', *GCRO Research Report #06*, Johannesburg: GCRO, August 2017

[8] Kerry Bobbins and Guy Trangoš, 'Mining Landscapes of the Gauteng City-Region', *GCRO Research Report #7*, Johannesburg: GCRO, January 2018

[9] Caitlin Allen, Zaakhir Asmal, Haroon Bhorat, Robert Hill, Jabulile Monnakgotla, Morne Oosthuizen, and Christopher Rooney, 'Employment creation potential, labor skills requirements, and skill gaps for young people: A South African case study', *AGI Working Paper #26*, Washington, DC: Brookings Institute, January 2021

[10] Eskom, *Transmission Development Plan 2020-2029*

[11] Jarrad Wright and Joanne Calitz, 'Setting up for the 2020s: Addressing South Africa's electricity crisis and getting ready for the next decade', *CSIR Energy Centre*, January 2020

[12] UNCTAD, *World Investment Report 2019 – Special Economic Zones*, New York: United Nations Publications, June 2019

[13] UNCTAD, *World Investment Report 2019 – Special Economic Zones*, New York: United Nations Publications, June 2019

[14] Douglas Zhihua Zeng (ed.), *Building Engines for Growth and Competitiveness in China: Experience with Special Economic Zones and Industrial Clusters*, Washington, DC: World Bank, February 2013

[15] Douglas Zhihua Zeng, 'Special Economic Zones: Lessons from the Global Experience', *PEDL Synthesis Paper Series*, No. 1, July 2019

[16] African Development Bank, *Special Economic Zones in Fragile Situations: A useful policy tool?*, Abidjan: African Development Bank Group, December 2018

[17] World Bank, https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD

[18] For more on ESG investing, see https://www.ft.com/content/a17fb0c4-9599-450b-b8ac-c2df0cc31514

[19] Thomas Farole and Lotta Moberg, 'It worked in China, so why not in Africa? The political economy challenge of special economic zones', *WIDER Working Paper*, Helsinki: The United Nations University World Institute for Development Economics Research, November 2014

[20] Ibid.

[21] Thomas Farole, 'The Global Experience in Special Economic Zones: A History and Review', Arkebe Oqubay and Justin Yifu Lin, *The Oxford Handbook of Industrial Hubs and Economic Development*, Oxford: Oxford University Press, July 2020

[22] Douglas Zhihua Zeng, 'Global Experiences with Special Economic Zones – With a Focus on China and Africa', Addis Ababa: Investing in Africa Forum, February 2015

[23] Theodore Moran, 'Special Economic Zones: Lessons for South Africa from international evidence and local experience', *Centre for Development Enterprise Round Table*, No. 19, June 2012

[24] Coega Development Corporation, *Integrated Annual Report 2019/20*, November 2020

[25] Grové Steyn and Celeste Renaud, 'Survey Results: Scoping Interest in the South African Distributed Energy Generation Sector, *Meridian Economics*, January 2021

[26] Ibid.

[27] World Bank, *Doing Business 2020*, Washington, DC: World Bank

[28] Tambo Springs, 'About Tambo Springs – Next Generation Logistics Gateway', Accessed 21 February 2021 at https://www.tambosprings.co.za/about/

[29] Carin Smith, 'SA placed 2nd among most favoured offshore contact centre locations', *News24*, Accessed 20 February 2021 at https://www.news24.com/fin24/companies/ict/sa-placed-2nd-among-most-favoured-offshore-contact-centre-locations-20200531

[30] Agesan Rajagopaul, Chika Ekeji, Tina Runyei, and Rodges Barendse, 'Driving economic recovery in South Africa's BPO industry', *McKinsey & Company*, September 2020, Available at https://www.mckinsey.com/featured-insights/middle-east-and-africa/driving-economic-recovery-in-south-africas-bpo-industry

[31] Caitlin Allen, Zaakhir Asmal, Haroon Bhorat, Robert Hill, Jabulile Monnakgotla, Morné Oosthuizen, and Christopher Rooney. 'Employment creation potential, labor skills requirements, and skill gaps for young people: A South African case study', *Brookings Institute – Africa Growth Initiative*, January 2021