



# CAPE AGULHAS MUNICIPALITY SMART CITY STRATEGY

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## EXECUTIVE SUMMARY

This document is the Smart City Strategy of the Cape Agulhas Municipality. It is a long-term strategy aligned to the ITC Strategy of the Municipality as well as the current Integrated Development Plan (2017/18 – 2021/22) and beyond.

Our honourable President, Cyril Ramaphosa in his State of the Nation Address, spoke of the fourth industrial revolution, namely the Digital industrial revolution. We need to ask ourselves will we be ready for this, how will we cope manage it and what will our role be. We also need to ask how we will align this the vision, mission, goals and objectives of the Municipality, and more specifically how we will use ICT for this purpose. The essence being that if we want to do things differently we need different solutions.

This strategy is an attempt to do just that. To think out of the box. Using smart thinking, smart practices and smart measurement to address the municipality's institutional challenges and the most critical development needs of the Municipality as identified by the community.

One of the key institutional challenges that this strategy seeks to address is our financial viability. Financial viability is key to our Municipality, and for this, we need investment and development in our Municipal Area so that sustainable job opportunities can be created for our people, especially our youth. Factors affecting our financial viability include:

- High personnel costs: (40.32% - 2016/17 Annual Report)
- Reliance on consultants
- Unaccounted for water and electricity (19.02 and 7.20% - 2016/17 Annual Report).
- Ageing infrastructure with associated high maintenance costs
- Limited economic development, which is also associated with the high cost of expanding our infrastructure network.

Some of the key development needs identified by the community during the development of the IDP Review include.

- Safety and security
- Youth development
- Economic development /Job creation
- Mobility

There is an interrelatedness between these and collectively these needs largely informed many of the other needs. Many of the infrastructure needs put on the table have a social impetus such as the need for sport and recreation facilities and programmes to keep our youth constructively occupied and away from the social ills that are prevalent in our community. The need for beautification and improvement of our towns has an economic impetus. The more attractive our towns are the more conducive they will be to development.

In this strategy, we have tried to address some of these issues and have focussed on initiatives that will lead to cost effectiveness and institutional efficacy, and contribute to addressing some of the needs of the community. Some of the benefits identified include:

- Reliable data on which to base management and planning decisions, which can lead to a reduction in use of consultants
- Reduced personnel costs, especially overtime
- More effective use of personnel and in house training opportunities
- Job creation
- Improved communication and client services

The foundation of the strategy is the development of an agile network and integrated digital platform, which has multiple purposes, now and into the future. It is a futuristic and ambitious project and even though we realise that full implementation may take some time, it is structured in such a way that every individual initiative will show benefits, whether implemented in the short, medium or long term.

This strategy comprises five initiatives namely

- Smart infrastructure
- Smart safety
- Smart Environment
- Smart Governance
- Smart economy

Each initiative is divided into a number of projects or business cases, which can be implemented and funded individually. This was done to enable us to apply for funding for individual projects and assign responsibility for their management to specific individuals. There is however a strong link and interrelatedness between many of the projects.

INITIATIVES		BUSINESS CASE
Smart infrastructure	Electricity	Smart electrical metering
		Public lighting
		Electrical infrastructure control and monitoring through SADA
	Water and sanitation	Smart water metering
		Management of water resources
		Water infrastructure control and monitoring through SADA
		Irrigation
		Sanitation
	Smart roads and transport	Mobility
Parking		
Smart safety	Crime prevention and law enforcement	CCTV Cameras
	Disaster and emergency response	Integrated emergency and disaster mitigation and response
Smart environment	Waste management	Awareness
		Waste collection and disposal
	Pollution	Pollution monitoring

	Climate change and adaptation	Renewable energy
		Environmental data management
		Green IT
Smart Governance	Public engagement	Access to information
		Client services
	Public connectivity	Public wifi
		Phone system (ISP)
Smart economy	Event and facilities marketing	Event and facilities marketing
	Education and research	Education and research

The outcomes of each initiative align to the following principles:

- Putting our people first
- Financial and institutional sustainability
- Socio economic development
- Environmental sustainability

A partnership approach to the implementation of this strategy is of vital importance, many of the initiatives require inter departmental cooperation if they are to succeed and many require the support of external stakeholders from other spheres of government. A key role player is also the community, and we look forward to taking hands with our valued stakeholders during implementation.

## 1 INTRODUCTION

The Cape Agulhas Municipality Smart City Strategy sets out the manner in which the Municipality proposes the adoption of a long term **smart city approach**, as a strategic response to a number of community and institutional challenges identified in the 2017/18 – 2021/22 Integrated Development Plan (IDP) and beyond (20 years).

It is important to take cognisance of the fact that although this strategy is a response to the 2017/18 – 2021/22 IDP, it is in fact a much longer term plan than the IDP. History and current trends show that the challenges that it seeks to address are of such nature that they will endure well beyond any political term of office. These challenges include but are not limited to the financial viability of our Municipality and socio economic circumstances of our community.

Smart initiatives are common, in fact there are many smart initiatives happening in various towns throughout South Africa as well as the rest of the world. The uniqueness of our strategy lies in the fact that we are endeavouring to integrate our initiatives into a singular strategy that will ensure optimal utilisation of our resources to deliver on our mandate and meet our institutional and community needs.

A project of this magnitude is a first for a Municipality of our size and shows that change can happen from the South. It is cross cutting and success depends on the extent to which departments co-operate with one another and partnerships can be established with other stakeholders.

## 2 BACKGROUND

The Smart City concept was embarked on as a response to risks evolving from the municipal ICT environment as well as access to resources managed within the parameters of the networks and the infrastructure that is hosted thereon. These risks were identified during 2017, when a third party was tasked with doing a security audit on the ICT environment as well as controls pertaining to this environment. This risk audit made it clear that although various controls are in place, the network(s) managing these environments may be at risk.

During consultation with various stakeholders, partners and third parties, ideas started to emerge on how a network can be utilized optimally to add value, assist with the mitigation of risks and be used as a mechanism to achieve the strategic goals of the municipality. We started by looking at the network mediums that are utilized by the municipality to ensure that basic services are delivered to the communities we serve. During the process, we made assessments on how to meet the gaps exposed during the ICT risk audit, and measures that need to be implemented to address these gaps.

We realized that in order to meet these goals a substantial financial investment needs to be made and that such an investment must add value to the organization. We started by looking at a type of network that can be managed and expanded in such a way that should additional needs arise in the future, they can also be addressed without spending an exuberant amount of money. Such a network needs to be agile so that it can be expanded over time. Once we started investigating this possibility,

we came to realize that such a network could generate multiple benefits that will enhance our service delivery, institutional sustainability and client interface. We were also able to identify socio economic benefits as well as ways of contributing to the conservation of our environment.

The idea was then referred to the Municipality's ICT Steering Committee, who considered the potential benefits that could arise from implementation of such a network. The Committee were very clear on the fact that the utilization of such a network needs to meet the current IDP objectives as well as future needs of the Municipality.

### 3 DEFINING A SMART CITY

There are various definitions of a Smart City worldwide.

**Deakin**

*...“one that utilises ICT to meet the demands of the market (the citizens of the city), and that community involvement in the process is necessary for a smart city. A smart city would thus be a city that not only possesses ICT technology in particular areas, but has also implemented this technology in a manner that positively impacts the local community”*

**Business Dictionary**

*"A developed urban area that creates sustainable economic development and high quality of life by excelling in multiple key areas; economy, mobility, environment, people, living, and government. Excelling in these key areas can be done so through strong human capital, social capital, and/or ICT infrastructure."*

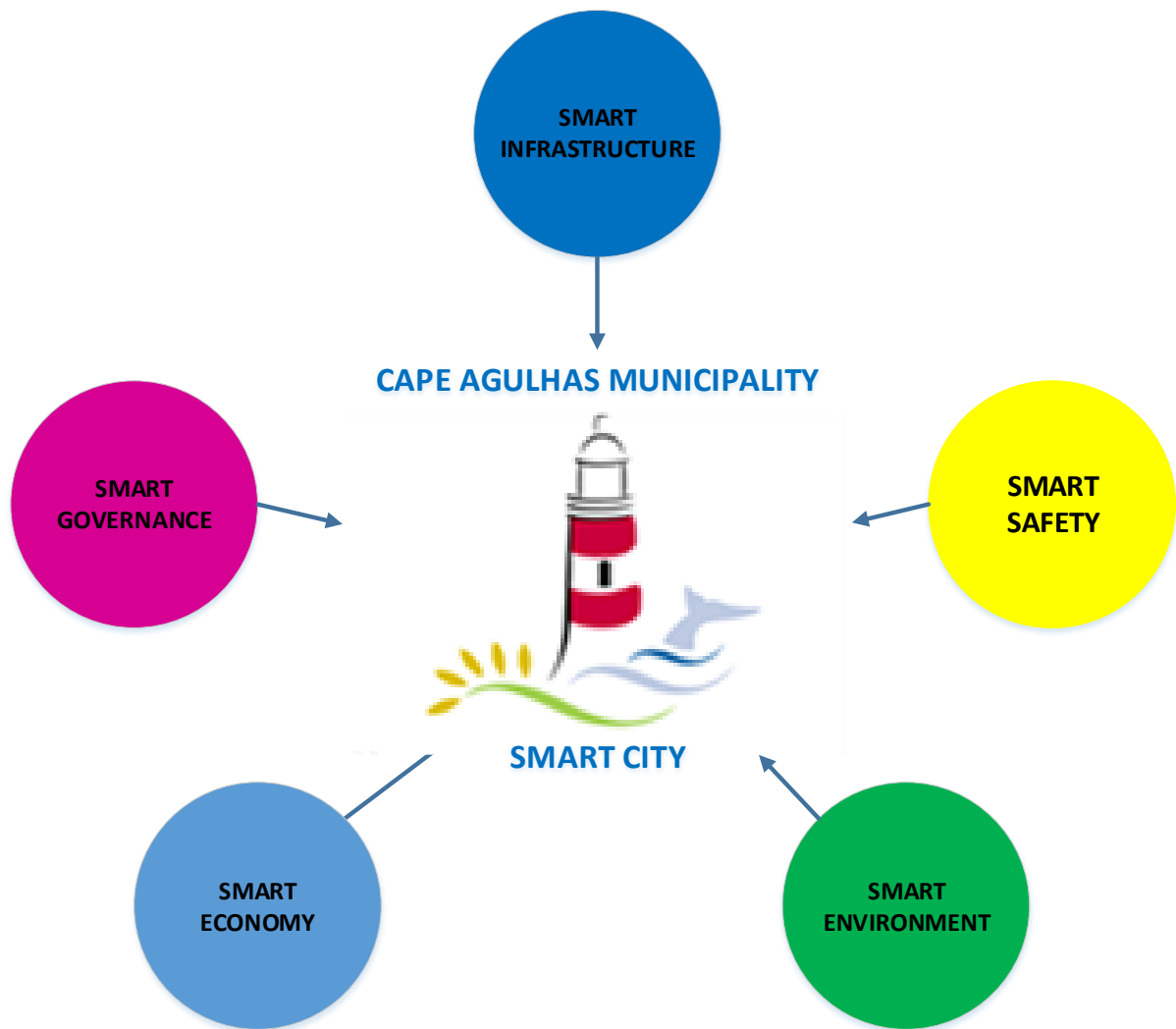
**Caragliuand Nijkamp**

*"A city can be defined as 'smart' when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic development and a high quality of life, with a wise management of natural resources, through participatory action and engagement."*

A smart city is not a one size fits all concept. Each city and town is unique and what works for one may not necessarily work for another. It is therefore imperative that the Cape Agulhas Smart City is responsive to the uniqueness of the Municipality. We see our Smart City as a sustainable connected environment that capitalises on available technologies to support the strategic objectives, functional mandate and institutional needs of the Municipality as well as the expectations of its community. A Smart city must be agile and be achievable over time, albeit in stages.

We identified the following five initiatives that are key to the Cape Agulhas Smart City:





#### 4 PROJECT OBJECTIVE, OUTCOMES AND PRINCIPLES

The primary objective of this project is to look at ways and means in which we can use ICT infrastructure, more specifically broadband connectivity as a foundation to fulfil our mandate in a smarter way and in so doing achieve the objectives of the Municipality as set out in the approved IDP and approved ICT Strategy. Smart thinking does however not only entail ICT, but also looks at how we can do other everyday things in a smarter way.

#### **SMART THINKING, SMART PRACTICES AND SMART MEASUREMENT**

The outcomes of the project are to ensure that we render an improved service to our community, and create an environment that is conducive to investment and economic growth, which will in turn ensure future financial sustainability and prosperity of the southernmost community in Africa. Closely linked to this is the improved management and utilization of our own resources to a point where we have a holistic view at all times of occurrences in our area.

These outcomes align to four principles:

- Putting our people first (A satisfied, empowered, informed, enlightened, knowledgeable community)
- Financial and institutional sustainability
- Socio economic development
- Environmental sustainability

<b>OUTCOME PRINCIPLES</b>			
Putting our people first	Socio economic development	Financial and institutional sustainability	Environmental sustainability

## 5 STRATEGIC AND POLICY ALIGNMENT

This strategy is aligned to the following strategic documents of the Municipality.

### 5.1 INTEGRATED DEVELOPMENT PLAN

The IDP is the principle strategic planning document of the Municipality, and all planning and development, as well as decisions relating to planning, and development in the Municipality must be based on the IDP. The vision and mission of the Cape Agulhas Municipality are as follows:

<p><b>VISION</b></p> <p>Together for excellence                  Saam vir uitnemendheid                  Sisonke siyagqwesa</p>
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<p><b>MISSION</b></p> <p>To render excellent services through good governance, public ownership and partnership in order to create a safer environment that will promote socio-economic growth and ensure future financial sustainability in a prosperous southernmost community</p>
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The strategic goals and objectives of the IDP are as follows:

STRATEGIC GOAL	STRATEGIC OBJECTIVE
SG1: To ensure good governance	SO1: To create a culture of good governance
	SO2: To create a culture of public participation and empower communities to participate in the affairs of the Municipality
SG2: To ensure institutional sustainability	SO3: To create an administration capable of delivering on service excellence.
SG3: To promote local economic development in the Cape Agulhas Municipal Area	SO4: To create an enabling environment for economic growth and development
	SO5: To promote tourism in the Municipal Area
SG4: To improve the financial viability of the Municipality and ensure its long term financial sustainability	SO6: To provide effective financial, asset and procurement management
SG5: To ensure access to equitable affordable and sustainable municipal services for all citizens	SO7: Provision of equitable quality basic services to all households
	SO8: To maintain infrastructure and undertake development of bulk infrastructure to ensure sustainable service delivery.
	SO9: To provide community facilities and services
	SO10: Development of sustainable vibrant human settlements
SG6: To create a safe and healthy environment for all citizens and visitors to the Cape Agulhas Municipality	SO11: To promote social and youth development
	SO12: To create and maintain a safe and healthy environment

## 5.2 CAPE AGULHAS MUNICIPALITY ICT STRATEGY AND IMPLEMENTATION PLAN 2017-2022

The Cape Agulhas Municipality ICT Strategy and Implementation Plan was approved on 7 December 2017. The intent throughout this document is alignment with the Municipal IDP, in order to give effect thereto.

The Municipality's ICT vision and mission are as follows:

MUNICIPAL ICT VISION STATEMENT
Deliver Municipal and community focused ICT products and services that are effective, secure, supportive and conducive of the vision of Cape Agulhas Municipality.

### **MUNICIPAL ICT MISSION STATEMENT**

The mission are to focus on closing the gaps identified and using the opportunities that exist to strategically position Cape Agulhas Municipality to better deal with the issues and needs affecting the Information users and communities, how best to use ICT to speed up municipal strategic goals and assist in the realize of IDP objectives in order to create a safer environment that will promote socio-economic growth and ensure future financial sustainability in a prosperous southernmost community.

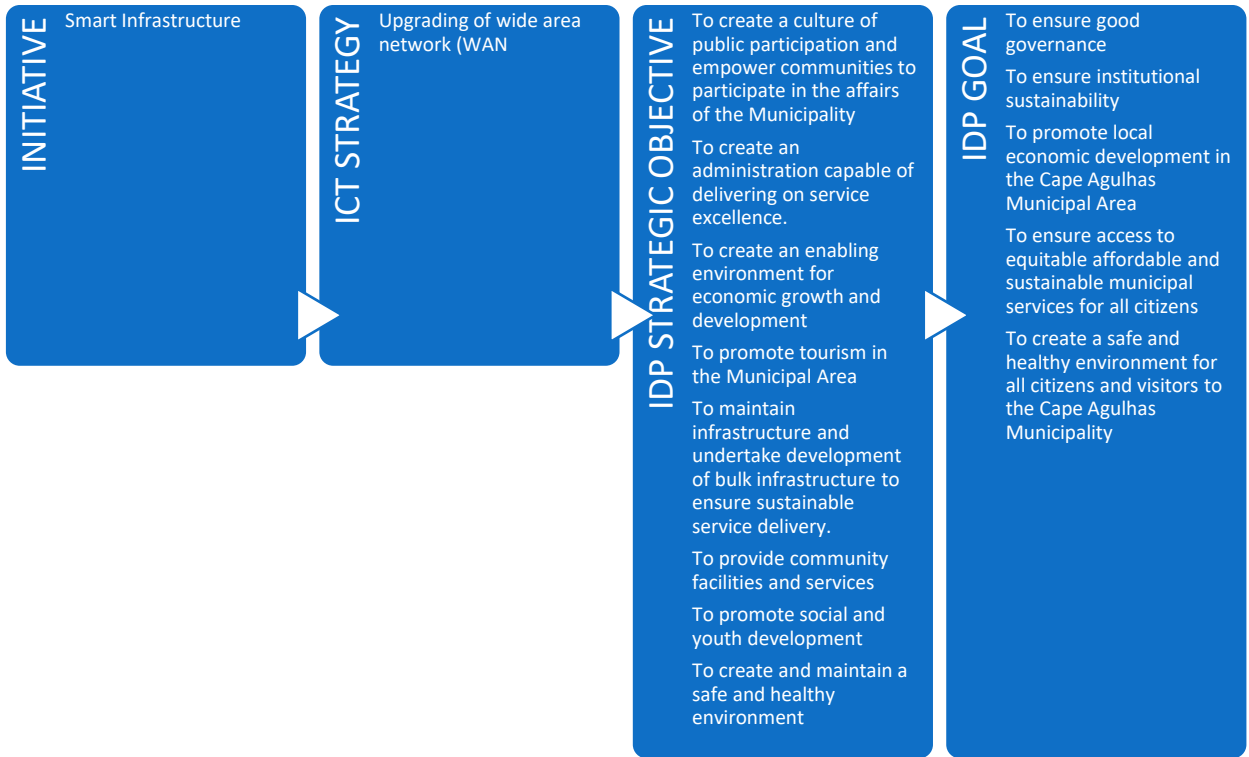
This document comprises fifteen initiatives that link to the IDP objectives. The Smart City Strategy will contribute to the achievement of the following four.

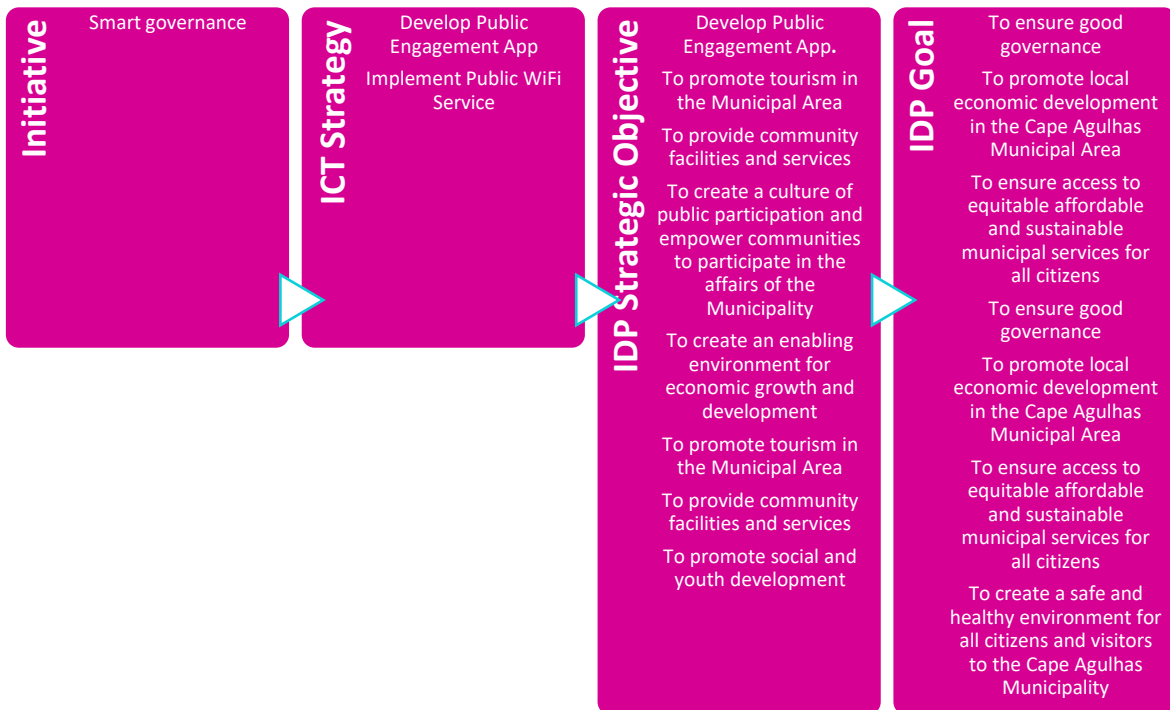
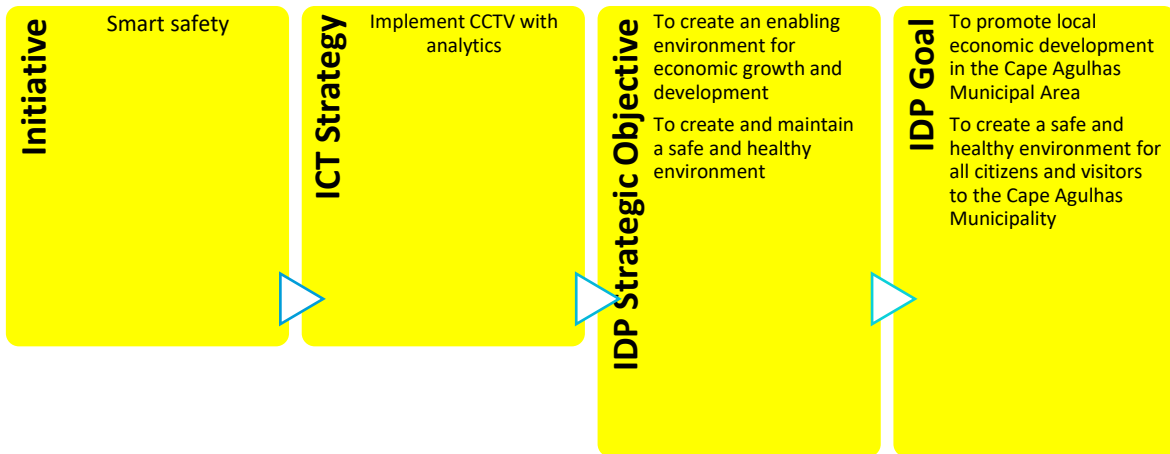
#### **ICT Initiatives 2017 - 2022**

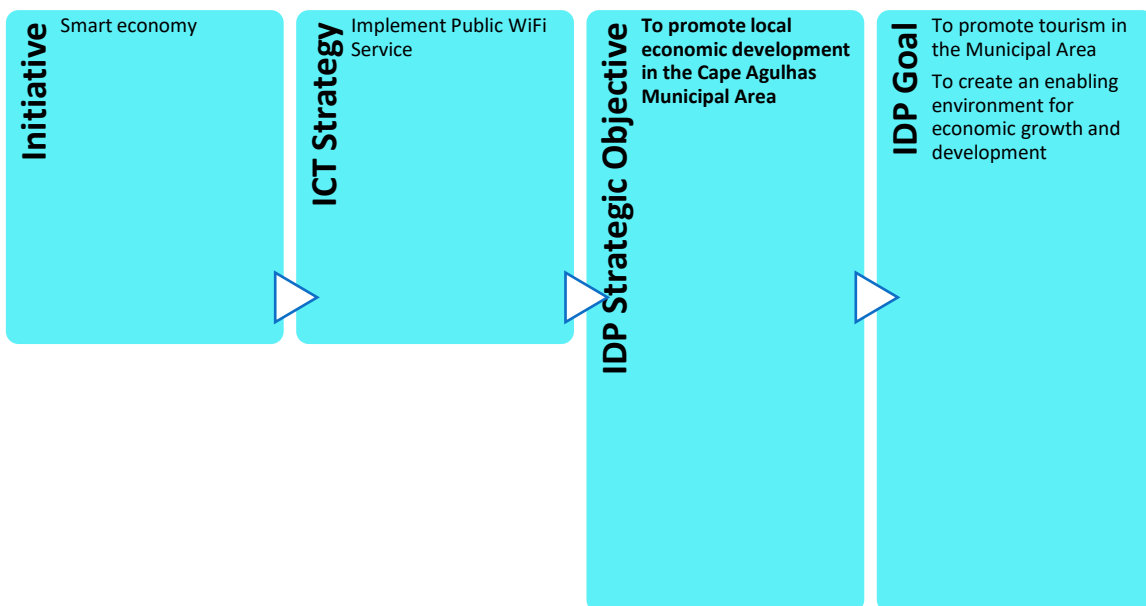
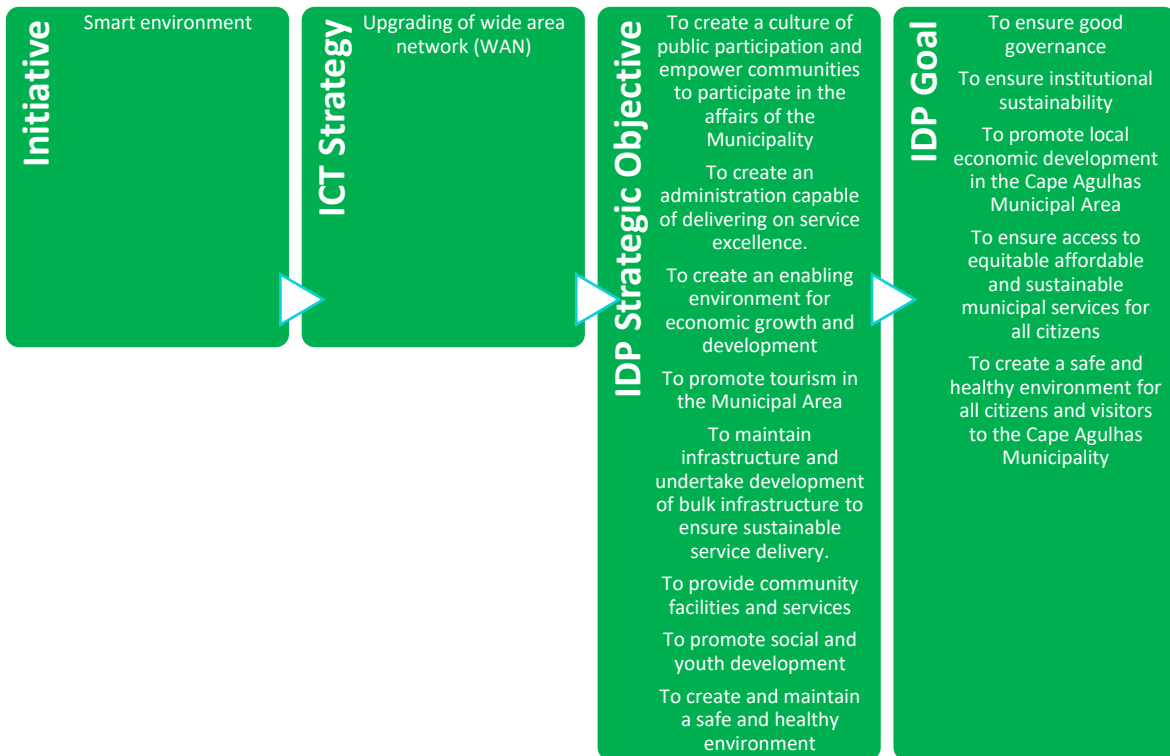
- 1 Implement Public Wi-Fi Service
- 2 Develop Public Engagement App
- 3 Implement CCTV with analytics
- 4 Upgrading of Wide Area Network (WAN)

### **5.3 ALIGNMENT OF SMART CITY INITIATIVES TO ICT STRATEGY AND IDP**

The alignment between these initiatives, the ICT Strategy and the IDP are demonstrated as follows:







## 6 SMART CITY VISION FOR THE FUTURE

Cape Agulhas Municipality, the southernmost municipality in Africa providing an agile, interconnected environment to enable a sustainable and prosperous community.

## 7 INITIATIVES AND BUSINESS CASE

This strategy comprises five initiatives, namely:

- Smart infrastructure
- Smart safety
- Smart environment
- Smart governance
- Smart economy

These initiatives each comprise a number of projects (business cases) which collectively contribute to the holistic objective of creating a smart city, but can also be implemented as stand-alone initiatives.

### 7.1 SMART INFRASTRUCTURE

**OBJECTIVE**  
**TO EFFECTIVELY MANAGE, MONITOR AND CONTROL MUNICIPAL RESOURCES AND**  
**INFRASTRUCTURE ESSENTIAL FOR BASIC SERVICE DELIVERY**

The Constitution (Section 152) requires Municipalities to ensure the sustainable provision of basic services to the community and promote social and economic development.

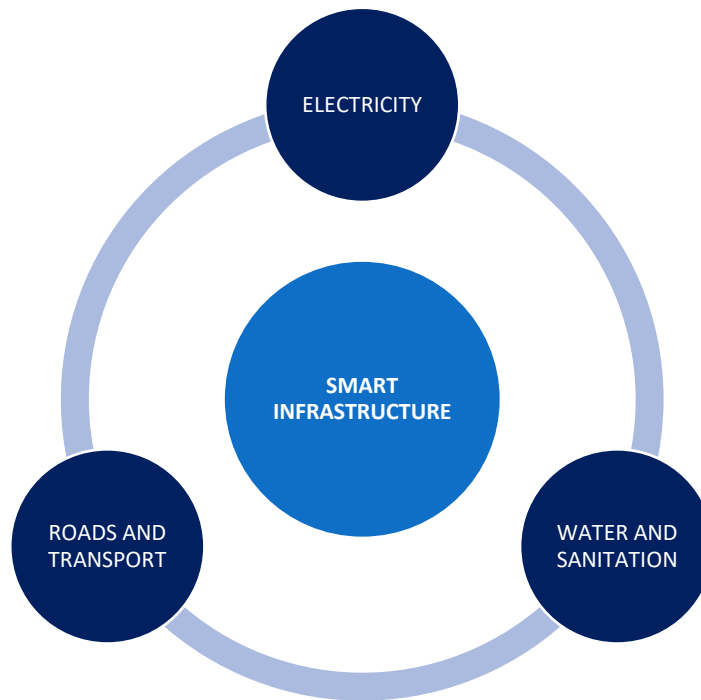
Basic services are a package of services necessary for human well-being and typically include water, sanitation, electricity and waste. (The latter is addressed under Smart Environment.)

Sustainable service provision is reliant on the existence of a well-maintained infrastructure network that has the capacity to provide for the Municipality's current and future developmental needs. The development and maintenance of the municipal infrastructure network, is one of the biggest cost drivers and accounts for the majority of municipal operational and capital spend. It is therefore essential that this strategy focus on ways in which the municipality can use smart thinking to reduce its infrastructure costs.

In order to promote economic development, municipalities must create a climate that is conducive to attracting investment and development, and the foundation of this is a sustainable infrastructure network.

Smart infrastructure comprises the following:





### 7.1.1 ELECTRICITY

#### A) SMART ELECTRICAL METERING

<b>Description</b>	Time of use, Demand Side Management (DSM) and remote reading and current limiting of meters.
<b>Scope</b>	<p>Time of use and demand side management entails the following:</p> <ul style="list-style-type: none"> <li>○ Encourage load shifting, move demand away from traditional peak times to reduce peak maximum demand and in so doing eliminate the need for Notified Maximum Demand increases for new developments.</li> <li>○ It allows consumers to use heavy demand processes in cheaper tariff times, which enables them to control expenditure and reduce manufacture/production costs.</li> </ul> <p>The remote reading and current limiting of meters will have the following benefits:</p> <ul style="list-style-type: none"> <li>○ Real time monitoring of meters, which will eliminate reading estimates.</li> <li>○ Effective loss control.</li> <li>○ Detection of malfunctions and faults.</li> <li>○ Remote current limiting of meters to facilitate demand side management and demand control on Eskom cold starts.</li> <li>○ Remote conversion of meters from post-paid to pre-paid.</li> <li>○ Reduce staff costs – meters can be read remotely (AMR).</li> <li>○ Telemetry.</li> <li>○ Alarms can be generated for abnormal conditions, including tampering.</li> </ul>
<b>Rationale</b>	Key challenges that the Municipality faces in terms of its electricity provision are limitations in relation to the capacity that Eskom can provide, as well as the financial sustainability of the service given the ongoing increases imposed by Eskom, together with an increasing SSEG installation market, eroding the revenue base of the municipality, which are not reflected in the tariff increases allowed by NERSA.

	Smart metering was identified as a possible solution to this, and in 2017, tenders were advertised for the roll out and managing of smart electrical meters. The tender was not awarded due to the financial implication of almost R 80 million over a period of 10 years, which could not provide a corresponding return on investment. Although implementation would have enabled the municipality to better manage its resources it just did not make financial sense as the largest part of the cost was related to network infrastructure. When discussions were initiated on the development of a resilient agile network, it was realized that the idea of smart electrical metering was a component of a bigger picture and warranted a review, especially given the fact that smart metering was one of multiple opportunities that such a network could provide. A project of this can lead to job creation in the conversion phase, as well as in house skills development.
<b>Directorate</b>	Infrastructure Services: Electro -technical
<b>Supporting Departments</b>	ICT Revenue
<b>Possible partnerships and funding sources</b>	D.O.E. SSEG program Greencape GIZ NCPD
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Socio economic development</li> <li>○ Putting our people first</li> </ul>

**B) PUBLIC LIGHTING**

<b>Description</b>	Smart public lighting in streets, sport facilities and other public places.
<b>Scope</b>	Remote control of public lighting.
<b>Rationale</b>	The remote control and monitoring of public lighting will have the following benefits: <ul style="list-style-type: none"> <li>○ Energy savings and reduction of emissions, which will contribute to climate mitigation and improved air quality. The National and Provincial Climate Change Response Framework requires municipalities to implement climate adaptation and mitigation measures. Mitigation measures include energy saving and efficiency.</li> <li>○ Reduction of personnel costs.</li> </ul>
<b>Directorate</b>	Infrastructure Services: Electro -technical
<b>Supporting Departments</b>	ICT Public services
<b>Possible partnerships and funding sources</b>	D.O.E. SSEG program Greencape GIZ NCPD
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Environmental sustainability (Climate mitigation)</li> <li>○ Financial and institutional sustainability</li> </ul>

**C) ELECTRICAL INFRASTRUCTURE CONTROL AND MONITORING THROUGH SCADA**

<b>Description</b>	SCADA (Supervisory Control and Data Acquisition) will enable the Municipality to Improve electrical master and maintenance planning.
<b>Scope</b>	Remote control and management of the electrical network and devices.
<b>Rationale</b>	SCADA will enable the Municipality to accumulate data and have a real time snapshot of its electrical systems and devices with alarm thresholds for emerging problems. This will enable us to improve control, planning and maintenance of our electrical infrastructure.
<b>Directorate</b>	Infrastructure Services: Electro -technical
<b>Supporting Departments</b>	ICT
<b>Possible partnerships and funding sources</b>	D.O.E.
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Socio economic development (job creation – installation of SCADA network)</li> <li>○ Putting our people first</li> </ul>

**7.1.2 WATER AND SANITATION**

**A) SMART WATER METERING**

<b>Description</b>	Smart water metering
<b>Scope</b>	<p>Smart water metering will have the following benefits:</p> <ul style="list-style-type: none"> <li>○ Real time monitoring of water meters through sensors.</li> <li>○ Remote flow limiting possibilities.</li> <li>○ Remote reading of water meters (AMR)</li> <li>○ Telemetry</li> </ul>
<b>Rationale</b>	<p>Key issues facing the municipality in terms of the sustainability of the water service are limited water resources, which have been exacerbated by the recent drought as well as high unaccounted for water, which at the end of the 2016/17 year was 22%. A substantial contributory factor to the water losses is the ageing infrastructure network and water meters.</p> <p>The remote control and monitoring of water metering will have the following benefits:</p> <ul style="list-style-type: none"> <li>○ Reading estimates will be eliminated</li> <li>○ Effective loss control through leak detection and pressure monitoring</li> <li>○ This initiative will also bring about a reduction of personnel costs, especially overtime.</li> <li>○ Possible job creation and in house skills development arising from the conversion of the water meters.</li> </ul>
<b>Directorate</b>	Technical Services – Water and sanitation
<b>Supporting Departments</b>	ICT Revenue
<b>Possible partnerships and funding sources</b>	DWA
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> </ul>

	<ul style="list-style-type: none"> <li>○ Socio economic development (job creation – installation of meters and in house skills development)</li> <li>○ Putting our people first</li> </ul>
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**B) MANAGEMENT OF WATER RESOURCES**

<b>Description</b>	Effective management of water resource and bulk water storage facilities
<b>Scope</b>	Real time monitoring of water storage through sensors
<b>Rationale</b>	Key issues facing the municipality in terms of the sustainability of the water service are limited water resources, which have been exacerbated by the recent drought. Water is a scarce resource, and although we cannot always control our natural water resources, we can through smart intervention monitor them. Water resources include dams, boreholes etc. The infrastructure used for the bulk storage of water also needs to be monitored and managed. It is envisaged that through this project the municipalities will have accurate data to effectively manage its water resources.
<b>Directorate</b>	Technical Services – Water and sanitation
<b>Supporting Departments</b>	ICT
<b>Possible partnerships and funding sources</b>	DWA
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Socio economic development</li> <li>○ Environmental sustainability</li> </ul>

**C) WATER INFRASTRUCTURE CONTROL AND MONITORING THROUGH SCADA**

<b>Description</b>	SCADA (Supervisory Control and Data Acquisition)
<b>Scope</b>	Remote control and management of the electrical network and devices.
<b>Rationale</b>	SCADA will enable the Municipality to have a real time snapshot of its water systems with alarm thresholds for emerging problems. This will enable us to improve planning and maintenance of our water infrastructure.
<b>Directorate</b>	Technical Services – Water and sanitation
<b>Supporting Departments</b>	ICT
<b>Possible partnerships and funding sources</b>	DWA
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Socio economic development Putting our people first</li> </ul>

**D) IRRIGATION**

<b>Description</b>	Smart Irrigation systems
<b>Scope</b>	Automated irrigations systems and sensors

<b>Rationale</b>	<p>The judicious management of water resources has come under the spotlight with the recent drought. The municipalities own consumption of water for the irrigation of gardens, parks and sport fields is water for which no revenue is generated.</p> <p>On the other hand, there is a need to maintain these facilities. There is a strong link between the appearance of our towns and local economic development, and beautification has been cited by the public as being of critical importance.</p> <p>There are sport fields in every town, which need to be maintained. Social and youth development was identified as a key issue by the community, and it is well known that sport is an effective way of keeping people, particularly the youth constructively occupied and away from the social ills that are prevalent in our Community.</p> <p>Smart irrigation systems will also have the following benefits:</p> <ul style="list-style-type: none"> <li>○ Water can be saved, if irrigation is only done when necessary (moisture levels drop below a specified level)</li> <li>○ Water can also be saved and irrigation done more effectively through automated timers. (Very early morning / late afternoon, when transpiration is at it's lowest.</li> <li>○ Reduction in personnel costs, especially overtime.</li> </ul>
<b>Directorate</b>	Management Services – Public Services
<b>Supporting Departments</b>	ICT Technical Services – Water and sanitation
<b>Possible partnerships and funding sources</b>	DCAS
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Environmental sustainability</li> <li>○ Financial and institutional sustainability</li> </ul>

#### **E) SANITATION**

<b>Description</b>	Smart management of sanitation systems
<b>Scope</b>	Real time monitoring of sanitation systems through sensors
<b>Rationale</b>	<p>Real time monitoring of sanitation systems will have the following benefits:</p> <ul style="list-style-type: none"> <li>○ Sewage flow can be monitored</li> <li>○ Levels of tanks can be monitored</li> <li>○ blockages or leaks can be detected</li> <li>○ Sewage pumps can be monitored</li> <li>○ Telemetry inflow / outflow</li> <li>○ Real time response to emergency situations</li> </ul>
<b>Directorate</b>	Technical Services – Water and sanitation
<b>Supporting Departments</b>	ICT
<b>Possible partnerships and funding sources</b>	DWA
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Environmental sustainability</li> </ul>

	<ul style="list-style-type: none"> <li>○ Consumer satisfaction and beneficiation</li> </ul>
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### 7.1.3 SMART ROADS AND TRANSPORT

#### A) MOBILITY

<b>Description</b>	Improved public mobility
<b>Scope</b>	<ul style="list-style-type: none"> <li>○ Database of service providers with routes, locations and timetables (APP)</li> <li>○ Online Booking APP</li> <li>○ Identification and training of extra service providers and routes</li> </ul>
<b>Rationale</b>	<p>Transport is a major challenge in the municipal area as a lack of mobility is hampering access to opportunities, especially between towns. The actual provision of transport is in the hands of the private sector, but is costly and irregular.</p> <p>The role of the Municipality at present is to provide transport infrastructure such as roads, parking, bus and taxi termini and shelters. There are potential economic opportunities in the transport sector which local entrepreneurs could take advantage of and the purpose of this initiative is to look at ways in which we can partner with the private sector to take advantage of these opportunities and in so doing also improve mobility within the Municipal Area.</p>
<b>Directorate</b>	Office of the Municipal Manager - Socio economic services
<b>Supporting Departments</b>	ICT LED Technical Services – Roads and Transport Management Services – Protection services
<b>Possible partnerships and funding sources</b>	DPW ODM Private sector Taxi Associations
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Socio economic development</li> <li>○ Environmental sustainability</li> </ul>

#### B) PARKING

<b>Description</b>	Smart parking facilities and services
<b>Scope</b>	Management of parking areas Electric car charging stations
<b>Rationale</b>	<p>The benefits of smart parking facilities and services are as follows</p> <ul style="list-style-type: none"> <li>○ The public can know where parking is available (particularly in coastal towns during holiday season)</li> <li>○ Lowered emissions due to road users not driving around unnecessary</li> <li>○ Accurate statistics of parking trends to determine future needs</li> <li>○ Possible additional revenue through parking</li> </ul> <p>Electric car charging stations can have the following benefits:</p> <ul style="list-style-type: none"> <li>○ Revenue generation</li> <li>○ Convenience to clients</li> </ul>
<b>Directorate</b>	Technical Services – Electro-technical Services and Roads and Transport
<b>Supporting Departments</b>	ICT Management Services – Protection services

<b>Possible partnerships and funding sources</b>	Private sector
<b>Outcomes</b>	<ul style="list-style-type: none"><li>○ Environmental sustainability</li><li>○ Financial and institutional sustainability</li><li>○ Putting our people first</li></ul>

## 7.2 SMART SAFETY

**OBJECTIVE**  
**TO CREATE A SAFE ENVIRONMENT FOR ALL CITIZENS THAT IS CONDUCTIVE TO ECONOMIC DEVELOPMENT**

Community safety is one of the cross cutting needs identified by the community during the IDP public participation process, and is a sad reality in our community which is exacerbated by poverty and unemployment.

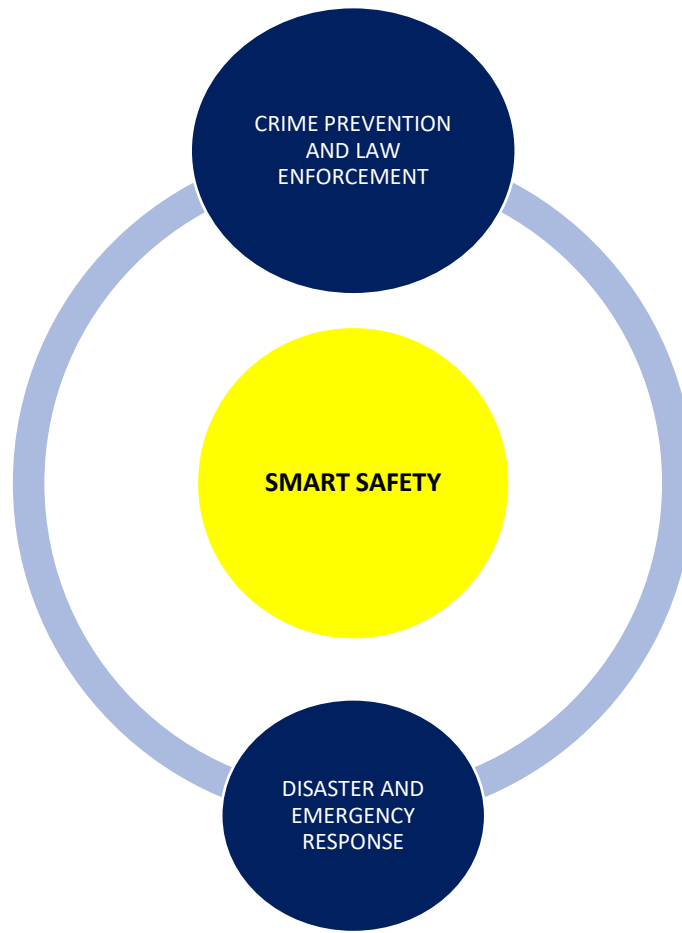
The extent of crime in South Africa does however not only have a significant impact on the livelihood of citizens, but also affects the general economy. Crime hampers growth and discourages investment and capital accumulation. If not addressed with seriousness, it has the potential to derail both social and economic prosperity.

Closely linked to safety is disaster response. The Municipality has a responsibility to mitigate disaster risks and respond to disasters within the Municipal Area. Disasters have a huge impact on humans and the environment and collaborative government intervention is required to prevent, respond to and mitigate the effect thereof.

The collaborative nature of Disaster Management requires that all spheres of government (on political and administrative levels, all sectors of society and NGO's work together to prevent, respond to and mitigate the impacts of disasters.

Smart safety comprises the following:





**A) CRIME PREVENTION AND LAW ENFORCEMENT**

<b>Description</b>	The installation of CCTV cameras at entrances, exits and strategic points within our towns.
<b>Scope</b>	CCTV Cameras Weight sensors
<b>Rationale</b>	<p>CCTV cameras are seen as a solution to the crime issues facing the Municipality in many of the Municipality’s wards. Initially, this may seem to be an expensive solution, but when one starts to consider this as part of a bigger project with multiple benefits the cost may be justified. When looking at CCTV solutions it needs to be determined what is wanted form such a system. We know that in order to get the best value we need a solution that can identify a threat or potential threat. We need to find a system that will ensure safer towns which will attract investment.</p> <p>Such a system will have the following benefits:</p> <ul style="list-style-type: none"> <li>○ Analytical behavioral analysis - suspect vehicles and activities</li> <li>○ Number plate recognition</li> <li>○ Enhanced revenue collection from fines, specifically identification of vehicles with outstanding fines.</li> <li>○ Speed control – average speed over distance</li> <li>○ Promotion of tourism</li> </ul>

	<ul style="list-style-type: none"> <li>○ Investor confidence</li> </ul> <p>An added benefit is the possible installation of weight sensors, which can be used in conjunction with the CCTV Cameras to detect vehicle overloading. This will also extend the lifespan of roads and reduce maintenance costs.</p>
<b>Directorate</b>	Management Services – Protection Services
<b>Supporting Departments</b>	ICT Revenue
<b>Possible partnerships and funding sources</b>	Neighbourhood watch Business sector SAPS
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Socio economic development</li> <li>○ Financial and institutional sustainability</li> </ul>

### **B) DISASTER AND EMERGENCY RESPONSE**

<b>Description</b>	Integrated disaster and emergency response and mitigation
<b>Scope</b>	The establishment of an integrated operational centre to respond to disasters and emergencies in the Municipal Area.
<b>Rationale</b>	<p>The Disaster Management Act states that “Disaster Management is a continuous and integrated multi-sectoral and multi-disciplinary process of planning and implementation of measures aimed at disaster prevention, mitigation, preparedness, response, recovery, and rehabilitation”</p> <p>An integrated approach to emergency and disaster response will ensure a co-ordinated response in terms of:</p> <ul style="list-style-type: none"> <li>○ Fire response</li> <li>○ Police response</li> <li>○ Traffic response</li> <li>○ Municipal response</li> </ul> <p>Possible mitigation measures or early warning systems that make use of ICT can also be considered, such as the installation of smoke detectors, fire alarms, pollution detection etc.</p>
<b>Directorate</b>	Management Services – Protection Services
<b>Supporting Departments</b>	ICT Client Services Protection Services
<b>Possible partnerships and funding sources</b>	ODM SAPS
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Putting our people first</li> <li>○ Socio economic development</li> </ul>

## 7.3 SMART ENVIRONMENT

<p style="text-align: center;"><b>OBJECTIVE</b></p> <p style="text-align: center;"><b>TO ENSURE A SUSTAINABLE ENVIRONMENT FOR FUTURE GENERATIONS</b></p>
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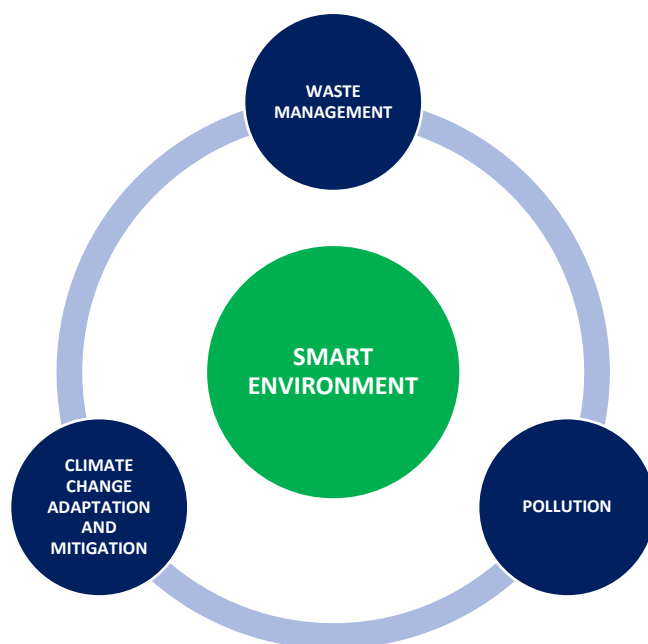
The Environment is a concurrent National and Provincial competency in terms of Part A of Schedule 4, of the Constitution. The Municipal Systems Act requires municipalities to work together with other organs of state to contribute to the progressive realisation of the right to environment (Section 23). The Bill of rights (Section 24) states that

*“Everyone has the right -*

- a) to an environment that is not harmful to their health or well-being; and*
- b) to have the environment protected, for the benefit of present and future generations through reasonable legislative and other measures that;
  - i. prevent pollution and ecological degradation*
  - ii. promote conservation*
  - iii. secure ecologically sustainable development and use of natural resources while**
- c) promoting justifiable economic and social development”*

One of the biggest attributes of this region is its natural environment which attracts thousands of tourists to this area on a daily basis. Our natural environment is the foundation of our tourism industry and also plays a key role in the agriculture industry and it is imperative that our planning and decision making support the principles of sustainable development.

Smart environment comprises the following:



### 7.3.1 WASTE MANAGEMENT

#### A) AWARENESS

<b>Description</b>	Waste minimisation awareness
<b>Scope</b>	Waste reduction awareness campaigns that target recycling and illegal dumping
<b>Rationale</b>	<p>The Municipality has a licensed landfill site in Bredasdorp and three Drop-Off areas (Napier, Waenhuiskrans and Struisbaai). The waste from the Drop-off's is collected and transported to the Bredasdorp landfill site. The Municipality has a recycling programme in place and the separation of waste takes place at source. Illegal dumping is also rampant. This holds the following challenges:</p> <ul style="list-style-type: none"> <li>○ The Bredasdorp landfill is nearing its capacity and the Municipality is in process of looking at an alternative</li> <li>○ Transport and vehicle maintenance costs are high</li> <li>○ High staff costs associated with waste collection and clearing of illegal dumping</li> <li>○ Lack of participation in recycling programme</li> <li>○ Health hazards - due to illegal dumping</li> </ul> <p>The key outcome of awareness campaigns will be the minimisation of waste that goes to the landfill.</p>
<b>Directorate</b>	Infrastructure Services – Waste management
<b>Supporting Departments</b>	ITC Strategic Services (Communication)
<b>Possible partnerships and funding sources</b>	DEADP
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Putting our people first</li> <li>○ Environmental sustainability</li> </ul>

**B) WASTE COLLECTION AND DISPOSAL**

<b>Description</b>	Smart refuse containers
<b>Scope</b>	The installation of sensors on wheelie bins and bulk refuse containers
<b>Rationale</b>	<p>Although various approaches to this project can be taken and there are various pros and cons, one has to consider how waste removal will change in the future, and the escalating costs of rendering the service.</p> <p>One should consider that certain areas, especially coastal areas may not always be populated during the off-season, there may be little to no need to remove refuse during these times.</p> <p>Other factors to consider are bulk containers that are emptied at scheduled times. They may not be full or may require emptying more frequently and this can be monitored remotely.</p> <p>By understanding waste patterns and utilize technologies to manage waste, we can ensure a healthy living environment and greener society and improve service delivery. This will also hold the following benefits:</p> <ul style="list-style-type: none"> <li>○ Better route planning</li> <li>○ Improve personnel utilisation</li> <li>○ Reduce collection time</li> <li>○ Cost saving benefits (Vehicle Maintenance)</li> <li>○ Reduce emissions</li> <li>○ Tracking of bins</li> </ul>
<b>Directorate</b>	Technical Services – Waste Management
<b>Supporting Departments</b>	ITC
<b>Possible partnerships and funding sources</b>	Community DEADP
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Environmental sustainability</li> </ul>

**7.3.2 POLLUTION (AIR AND NOISE)**

**A) POLLUTION MONITORING**

<b>Description</b>	Remote monitoring of air and noise pollution through sensors
<b>Scope</b>	<ul style="list-style-type: none"> <li>○ Remote monitoring of air pollution</li> <li>○ Remote monitoring of noise pollution</li> <li>○ Environmental data management</li> </ul>
<b>Rationale</b>	<p>When this project was looked at initially, we thought it was merely a spin off as one of the advantages of agile network. Once we started engaging with the relevant officials, we realized that this was not just an advantage but also a necessity due to limited capacity to perform air and noise pollution monitoring. The purpose of this project is to find cost effective ways to manage air pollution sources and in so doing improve the living conditions of our communities.</p> <p><b>Air pollution monitoring</b></p>

	<p>We then asked ourselves what is the data required to adequately measure air quality, how we will access the data, how often do we need the data, what will we do with the data and how can this data assist us to better take informed management decisions, especially if we can monitor occurrences as it happens.</p> <p>Although there are only a few industrial air pollution sources in Cape Agulhas Municipal Area, there are other sources in the Overberg that may affect our communities. Air pollution sources in the Overberg include the following:</p> <ul style="list-style-type: none"> <li>o Industrial operations especially clay brick manufacturing</li> <li>o Agricultural activities such as crop burning and spraying</li> <li>o Biomass burning (veld fires)</li> <li>o Domestic fuel burning (wood and paraffin)</li> <li>o Vehicle emissions</li> <li>o Waste treatment and disposal</li> <li>o Dust from unpaved roads</li> <li>o Other fugitive dust sources such as wind erosion of exposed areas</li> <li>o Lime dust</li> </ul> <p><b>Noise pollution</b></p> <p>Noise pollution, also known as environmental noise, is the propagation of noise with harmful impact on the activity of human or animal life. The impact that noise pollution may have on our communities and its surroundings is key to a safe and healthy environment.</p>
<b>Directorate</b>	Technical services – Building Control
<b>Supporting Departments</b>	ITC Strategic Services
<b>Possible partnerships and funding sources</b>	DEDAT
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>o Environmental sustainability</li> </ul>

### 7.3.3 CLIMATE CHANGE: MITIGATION AND ADAPTATION

#### A) RENEWABLE ENERGY

<b>Description</b>	Renewable power
<b>Scope</b>	<p>This could include:</p> <ul style="list-style-type: none"> <li>o Municipal buildings and plants powered by renewable energy</li> <li>o Solar power</li> <li>o Micro-Hydro power generation</li> <li>o Small wind generation</li> <li>o Wind farms</li> <li>o Biogas</li> </ul>
<b>Rationale</b>	<p>Eskom bulk capacity is a critical challenge, which poses a limitation on future developments. The Municipality will have to explore innovative ways to limit the demand in these towns and renewable energy is one such solution.</p>
<b>Directorate</b>	Technical Services – Electro-technical services

<b>Supporting Departments</b>	ITC Public Services
<b>Possible partnerships and funding sources</b>	<ul style="list-style-type: none"> <li>○ IPP's</li> <li>○ D.O.E</li> <li>○ Greencape</li> <li>○ CNPC</li> <li>○ SANEA</li> <li>○ GIZ</li> </ul>
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Environmental sustainability</li> <li>○ Financial and institutional sustainability</li> </ul>

**B) ENVIRONMENTAL DATA MANAGEMENT**

<b>Description</b>	Environmental data collection and management
<b>Scope</b>	<p>Collation and management of environmental data</p> <ul style="list-style-type: none"> <li>○ Climatic patterns</li> <li>○ Weather data</li> <li>○ Pollution data</li> </ul>
<b>Rationale</b>	<p>The collection of environmental data will enable us to create a platform where Management can make informed decisions. Understanding local weather patterns (rainfall, wind speed and direction, temperature) can assist in municipal planning decisions and climate adaptation.</p> <p>Climatic data can also be used effectively in settlement planning. Wind flow can affect the layout of streets and buildings to minimize unnatural heat disbursement in so lessening the need for artificial heating or cooling such as heaters or air conditioning or at least the time in lieu of using these mechanisms. Such information can also be made available to the public, specifically developers.</p>
<b>Directorate</b>	<p>Infrastructure services – Electro-technical</p> <p>Office of the Municipal Manager - Strategic planning and administration</p>
<b>Supporting Departments</b>	ITC Building Control Human Settlement
<b>Possible partnerships and funding sources</b>	Denel DEADP Private sector
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Socio economic development</li> <li>○ Environmental sustainability</li> </ul>

**C) GREEN IT**

<b>Description</b>	According to Melanie Pinola; Livewire, Green IT or green technology refers to initiatives to use technology in an environmentally friendly way.
<b>Scope</b>	Utilizing shared resources reduces energy consumption and expenditure (Capital and maintenance costs)
<b>Rationale</b>	<p>Green technology initiatives strive to:</p> <ul style="list-style-type: none"> <li>○ Use power more efficiently</li> </ul>

	<ul style="list-style-type: none"> <li>○ Reduce waste</li> <li>○ Limit the use of hazardous materials</li> <li>○ Create eco-friendly products</li> <li>○ Be sustainable</li> <li>○ Encourage telecommuting</li> <li>○ Promote teleconferencing tools</li> <li>○ Use cloud-based services and applications</li> </ul> <p>Some examples include:</p> <ul style="list-style-type: none"> <li>○ Renewable energy sources</li> <li>○ Distance training utilizing cloud-based-services</li> <li>○ Recycling tech products</li> <li>○ Green server technologies</li> <li>○ Electric Vehicles</li> </ul> <p>Although many of these examples are already covered elsewhere in this strategy, one can also look further at processes and the way we engage with the public.</p> <p>Internally, we started looking at the various processes that make use of paper and paper trails and how we can productively start to make use of systems to handle these processes electronically. In the near future one should investigate all business processes involving paper and other mediums that has a negative impact on the environment and how one can mitigate these impacts. Engaging with citizens also lead to some of these impacts and finding ways to service these citizens in a responsible, greener manner, can also investigated further, from opening accounts to sending statements etc. may have an adverse effect on these proposed initiatives.</p>
<b>Directorate</b>	Finance and IT
<b>Supporting Departments</b>	All Municipal Departments
<b>Possible partnerships and funding sources</b>	-
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Environmental sustainability</li> <li>○ Financial and institutional sustainability</li> </ul>



## 7.4 SMART GOVERNANCE

**OBJECTIVE**

***TO FACILITATE AN EMPOWERED, INFORMED, CONNECTED COMMUNITY***

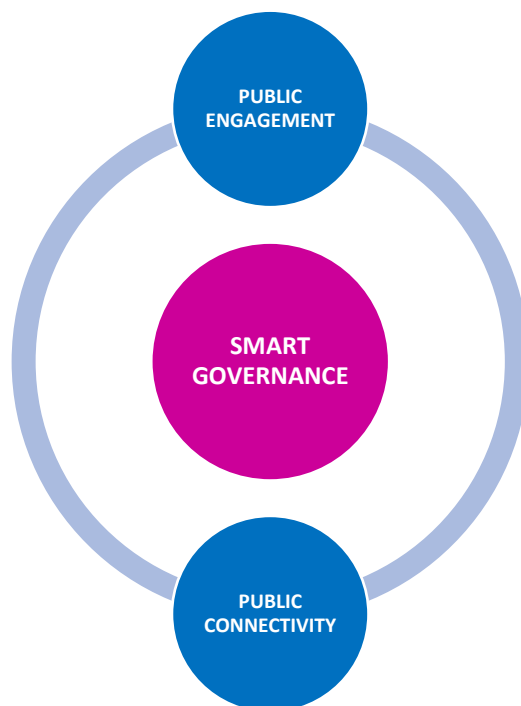
The Constitution (Section 152) sets out the objects of local government, one of which is the provision of democratic and accountable government to local communities. This is reiterated by Section 15 (b) of the Municipal Systems Act, which requires a municipality to establish and organise its administration to facilitate a culture of accountability amongst its staff.

A second constitutional objective is the encouragement of local community and community organisation participation in the matters of local government. This is reiterated by Chapter 4 of the Municipal Systems Act, which deals exclusively with community participation. A Municipality is required to develop a culture of community participation and develop a system of participatory municipal governance that compliments formal representative governance. The Municipality is also required to supply its community with information concerning municipal governance, management and development.

The Promotion of access to information Act (Act 2 OF 2000) gives effect to the Constitutional right of citizen to access information held by organs of state. The Municipality has a PAIA manual that regulates how this is to be done.

This initiative seeks to look at ways in which we can use ICT technology to put our people first, improve efficiency and performance by providing reliable, responsive, competent, accessible, courteous, confidential and secure services to the ratepayers of Cape Agulhas Municipality.

Smart governance comprises the following:



### 7.4.1 PUBLIC ENGAGEMENT

#### A) ACCESS TO INFORMATION

<b>Description</b>	Information management, disseminate and provide access to municipal information
<b>Scope</b>	<ul style="list-style-type: none"> <li>○ Information dissemination on municipal matters</li> <li>○ Knowledge management</li> <li>○ Public access to municipal information</li> <li>○ Data governance</li> </ul>
<b>Rationale</b>	<p>An informed community is an empowered community. Very often one finds that transgressions of Municipal By-laws, policies and procedures is a result of ignorance thereof and not deliberate transgression. This initiative seeks to make municipal information more available to the public in a way that is easy to understand</p> <p>The availability of municipal information such as by-laws, policies, investment opportunities, and filming opportunities can also contribute to attracting investment, which will boost the local economy.</p>
<b>Directorate</b>	Office of the Municipal Manager – Strategic Planning and Administration (Communication)
<b>Supporting Departments</b>	ITC Strategic Planning and Administration – Planning / Client Service / Public participation
<b>Possible partnerships and funding sources</b>	WESGRO ODM All Departments to make information available
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Putting our people first</li> <li>○ Socio economic development</li> <li>○ Financial and institutional sustainability</li> </ul>

**B) CLIENT SERVICES**

<b>Description</b>	On line services and customer apps
<b>Scope</b>	<ul style="list-style-type: none"> <li>○ Digitization platform for reporting municipal matters</li> <li>○ On line vending – water / electricity / resort bookings /Building plan fees / Planning fees etc</li> </ul>
<b>Rationale</b>	<p>This initiative addresses ways in which we can improve our customer service. The Municipality has a client services charter that provides the public with service standards that we are required to adhere to, and an initiative of this nature will make it possible for us to monitor and measure our performance in terms of the standards.</p> <p>The initiative also aims to make it easier to do business with us (Red tape reduction) through improved on line services. It is also conceivable that creating easier ways for account payments etc will enhance our revenue base.</p> <p>Customer Service Apps will make it easier for customers to inform us of complaints and other aspects of service delivery that need to be addressed, and make it possible for us to communicate with customers regarding service delivery interruptions etc. There is even the possibility of using this as a marketing tool for tourism and generating revenue through paid advertisements.</p>
<b>Directorate</b>	Office of the Municipal Manager – Strategic Planning and Administration (Client Services)
<b>Supporting Departments</b>	ITC All Departments working with the public
<b>Possible partnerships and funding sources</b>	Western Cape Provincial Government GCIS
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Putting our people first</li> <li>○ Financial and institutional sustainability</li> </ul>

**7.4.2 PUBLIC CONNECTIVITY**

**A) PUBLIC WIFI**

<b>Description</b>	Public Wifi
<b>Scope</b>	Access to affordable public Wi-Fi.
<b>Rationale</b>	<p>One of the community needs is public Wi-fi services. We had to find a model that makes this beneficial to both users and providers of the service. Although free public Wi-Fi is a novel idea, the fact remains that nothing is free and at some stage somebody will need to pay for the availability of such a services.</p> <p>During the December / January 2016/2017 holiday the ICT division with the assistance of the current services provider, embarked on a “Proof of concept” (POC) projects in the Municipal resorts to ascertain the feasibility of a public Wi-Fi projects. During this timeframe a few challenges and observations were made;</p> <p>The purpose of the POC was to determine that if we were to not only provide free Wi-Fi to certain resources on the internet, but also have the ability to provide a model where individuals can buy additional unrestricted internet at an affordable price, if it will be feasible.</p>

	<p>A challenge we may find with this, is the speed at which we provide these services as we may be competing with the major cell service providers and other ISP companies.</p> <p>Firstly, we need to identify our target market, in other words, who we think will be the communities most likely to utilize such a service. Secondly, we need to identify the purpose of such a service other than the financial implication thereof. How do we make use of this service to empower our communities, and use it as a driver of economic development and a catalyst for social and youth development?</p> <p>This initiative can also be used to enhance debt collection, and can be used to create a culture of public participation and empower communities to participate in the affairs of the Municipality.</p>
<b>Directorate</b>	Finance and IT - ITC
<b>Supporting Departments</b>	Strategic Services and Planning - Communication
<b>Possible partnerships and funding sources</b>	The Community
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Socio economic development</li> <li>○ Putting our people first</li> </ul>

**B) PHONE SYSTEM (ISP)**

<b>Description</b>	Phone system (ISP) – toll free calls
<b>Scope</b>	Provision of ISP services to communities, which include households and or individuals as well as businesses within the boundaries of the Municipality.
<b>Rationale</b>	<p>It is believed that improved and free communication services (Internet, email, telephony, etc.) could enhance our revenue and provide affordable solutions for the benefit of our communities.</p> <p>What if we can provide affordable stable internet to named parties at better market related cost or telephone systems where individuals on the same network can communicate at a zero call rate?</p> <p>It is believed that this will contribute to the enhancement of our revenue collection, as it will make it easier for people to get in contact with us regarding their accounts, water leaks etc. It will also make it easier for people to report service delivery aspects such, illegal dumping etc.</p>
<b>Directorate</b>	Finance and IT - ITC
<b>Supporting Departments</b>	Strategic Services and Planning - Communication
<b>Possible partnerships and funding sources</b>	The Community
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Socio economic development</li> </ul>

- Putting our people first
- Financial and institutional sustainability

## 7.5 SMART ECONOMY

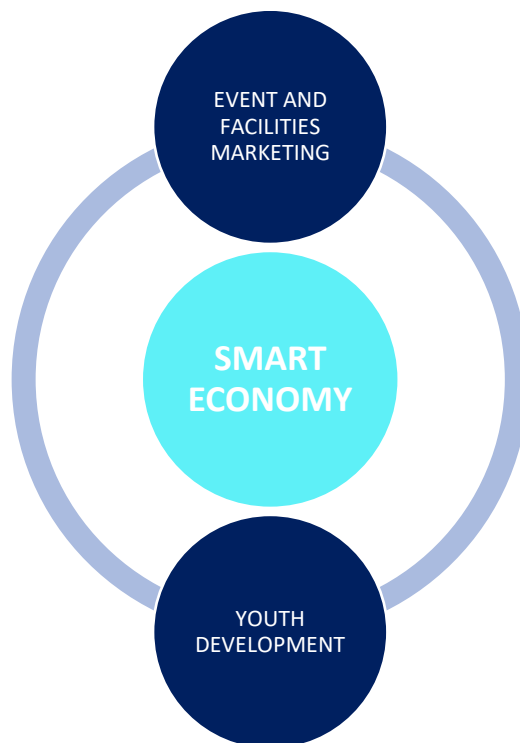
**OBJECTIVE**  
**TO CREATE AN ENVIRONMENT THAT IS CONDUCIVE TO ECONOMIC DEVELOPMENT AND  
BETTERMENT OF SOCIAL CIRCUMSTANCES**

Section 152 (1) of the Constitution requires municipalities to promote social and economic development.

LED is not one particular strategy, but encompasses a wide range of activities that are implemented at local level in response to local developmental needs. It can be described as a locally driven process designed to identify, harness and utilize local resources to stimulate the economy and create new employment opportunities. It is therefore a process by which public, business and non-governmental sector partners collectively (or independently) work together to create better conditions for economic growth and employment creation. CAM’s role is to create an enabling environment for the various stakeholders to contribute or work together to promote local economic development.

Social Development is inextricably linked to economic development, in that many of our social ills are borne from poverty, which in turn is linked to unemployment. One of the key outcomes of economic growth is job creation which will lead to better standards of living, better education, better opportunity etc.

Smart economy comprises the following:



**A) EVENT AND FACILITIES MARKETING**

<b>Description</b>	Marketing of events and facilities
<b>Scope</b>	<ul style="list-style-type: none"> <li>○ Facilitate Provincial events (TV coverage, exposure of region)</li> <li>○ Marketing of the area to tourists, investors, film makers</li> <li>○ Additional revenue (Entry fees and leasing of the facilities and secondary economic spin-offs)</li> </ul>
<b>Rationale</b>	<p>The establishment of an agile network in the area with additional ICT resources, such as internet bandwidth, can facilitate easier exposure of the Municipal Area, through TV broadcasting, social media etc.</p> <p>Tourism is high on the agenda of Cape Agulhas Municipality and promoting and marketing our region is one of the key considerations for this initiative. In order to attract visitors to our area, we need high standard facilities that can attract event organisers, participants and other visitors. We are not that far from Cape Town, and it is possible for us to host sporting or social events, which in turn can contribute to tourism in the area, i.e. restaurants and accommodation. Events of this nature can also open opportunities for job creation and youth development.</p>
<b>Directorate</b>	Office of the Municipal Manager – Socio economic
<b>Supporting Departments</b>	ICT Strategic Services and planning - communication
<b>Possible partnerships and funding sources</b>	Event organisers Community DCAS WESCRO DEDAT
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Financial and institutional sustainability</li> <li>○ Socio economic development</li> </ul>

**B) EDUCATION AND RESEARCH**

<b>Description</b>	Easier access to education and research
<b>Scope</b>	<ul style="list-style-type: none"> <li>○ Free access to educational content</li> <li>○ Online training opportunities</li> <li>○ Access to youth development programs</li> <li>○ Entrepreneur development</li> </ul>
<b>Rationale</b>	<p>Youth development is one of the municipality’s key focus areas, as we need to empower tomorrow’s leaders by exposing them to opportunities that are available through technology. This can be done by:</p> <ul style="list-style-type: none"> <li>○ Provide platforms for research</li> <li>○ Create youth entrepreneurial spaces on line</li> <li>○ Encourage institutions to uplift youth through smart programs</li> <li>○ Encourage industry and tertiary institutions to launch research programs in a smart environment</li> </ul> <p>Internet based applications can benefit the entrepreneurs in our communities especially the lower income groups, who through the availability of a connection can start their own business, either by utilizing the internet for email and research purposes. The possibility also exists of starting online business supported by the LED department.</p>

	These aforementioned ROI opportunities identified and as previously mentioned are set on the set goals, policies and risk relating to the Municipality. Each opportunity has the potential to add value to various sectors of the organization and spin offs that may come from these could be a great deal.
<b>Directorate</b>	Office of the Municipal Manager – Socio economic
<b>Supporting Departments</b>	ICT Strategic Services and planning - communication
<b>Possible partnerships and funding sources</b>	DCAS DOE DSD All other Provincial Departments with youth programmes Tertiary institutions
<b>Outcomes</b>	o Socio economic development

## 8 STRATEGY IMPLEMENTATION

This Smart City Strategy is a high- level long term strategy. Initiatives should be divided into short, medium and long term.

With the approval of this Strategy a detailed implementation plan will be developed in line with the aforementioned business cases. We have to consider that the success of such an implementation plan is highly reliant on funds available and should be developed, cognisant of this fact.

The next step will be the development of a business plan for each initiative in order applications can be submitted for funding.

## 9 STRATEGY REVIEW

This strategy shall be reviewed on an annual basis.



## ABBREVIATIONS AND ACCRONYMS

CNPC	Cleaner National Productivity Centre
DCAS	Department of Culture, Art and Sport
DEADP	Department of Environment and Development Planning
DEDAT	Department of Economic Development and Tourism
DOE	Department of Energy
DOE	Department of Education
DSD	Department of Social Development
DSM	Demand Side Management
DWA	Department of Water affairs
GCIS	Government Communication and Information Systems
GIZ	The Deutsche Gesellschaft für Internationale Zusammenarbeit ( <b>GIZ</b> ) GmbH
IDP	Integrated Development Plan
IPP	Independent Power Producers
ODM	Overberg District Municipality
PAIA	Promotion of Access to Information Act 2000
SANEA	South African National Energy Association
SSEG	Small Scale Embedded Generation