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Konza Technopolis 2016-2020 Strategic Plan

Laying the Foundation for Konza: An Area of Innovation Contained in a Smart City



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FOREWORD

The 21st Century has commenced on one side with serious challenges confronting the world on the economic and security fronts, and a realization that nations need to work smarter in order to grow and thrive. We are also living in extremely exciting times where technology and innovation are the major drivers of the global agenda. Kenya through its Vision 2030 and related flagship projects has fully embraced these elements as it strives towards being a middle income nation.

The Konza Technopolis Development Authority (hereinafter referred to as 'the Authority') was established to manage and oversee the implementation of the Konza City Master Plan. In this first strategic plan, the strategic direction and expected results are defined for 2016 to 2020. This strategic plan outlines the building blocks that will be put in place as well as critical strategic objectives and outcomes to be pursued in the development and management of Konza Techno City. Specifically, our vision is 'a global technology hub' while our strategic objectives are to:

- a) Develop and manage a world class smart city with a vibrant, safe and secure, healthy and sustainable ecosystem.
- b) Form partnership with other actors in the National Innovation System, to recruit, attract, and develop high-end talent as well as create relevant, and smart innovative solutions and commercialize them.
- c) Mobilize adequate and sustainable funding to meet the Authority's mandates and changing needs of the business community and residents.
- d) Create a strong brand and image of Konza that will attract, facilitate and retain investors.
- e) Ensure that the Authority has adequate institutional capacity to fulfill its mandate.

The strategic plan has been developed recognizing critical steps have been pursued towards the development of Konza smart city including the establishment of MDP 1 and MDP 2, with the latter's activities and goals being integrated into the initial phase of this plan. It recognizes the key role played by KonzaTechno City as a Vision 2030 key flagship project, in contributing \$1.3 billion annually to the Nation's GDP by 2020 and in creating jobs in a wide range of salaries.

The strategic plan identifies risks that might negate the accomplishment of the outcomes and targets as established in the implementation matrix. It is our joint responsibility to monitor these risks and implement mitigation strategies as proposed. Finally, I would like to appeal to the Board, Management and staff to work together to successfully implement this strategic plan. I promise to provide the required leadership and guidance to make this a reality.

Dr. Reuben Mutiso

Chairman, Board of Directors

ACKNOWLEDGEMENT

Konza Techno City is a key flagship project of Kenya's Vision 2030 economic development portfolio. Konza will be a world-class city, powered by a thriving information, communications and technology (ICT) sector, superior reliable infrastructure and business-friendly governance systems. Konza Technopolis is being designed as a smart city, with built-in sustainability concepts to support a model of work-life balance all within a walkable area.

The Government and the people of Kenya recognize ICT as a foundation for economic development. Kenya's vision of a knowledge based economy aims at shifting the current industrial development path towards innovation – where creation, adoption, adaptation and use of knowledge remain the key source of economic growth. ICT is a critical tool for expanding human skills and rests largely on a system of producing, distributing and utilizing information and knowledge that in turn plays a great role in driving productivity and economic prosperity.

The Konza Technopolis Development Authority was established to manage and oversee the implementation of the Konza Technopolis Master Plan. This strategic plan presents the Authority's vision for Konza in 2020, and describes the path towards fulfilling that vision from where we are in 2016. Konza Technopolis is no longer a dream nor a figurative future development; it is a work-in-progress. Phase 1A has already been rolled out with the completion and installation of core infrastructure. However, a strategic plan is needed to define the path through the next five years.

This strategic plan presents the Vision, Mission, and Core Values, which form the foundation upon which the Authority will use to develop the city. In addition, it lays out the strategic objectives and strategies that the Authority will pursue and the outcomes and outputs that the Authority will accomplish over the next five years, appropriately informed by lessons learned from other smart cities. Finally, the strategic plan provides an implementation plan that clearly shows the key performance indicators (KPI) to be monitored, the targets to be achieved year-on-year, the key initiatives to be implemented, the estimated budget for each year and the offices responsible for implementation.

I am confident that the total Konza team will work together to realize the Konza Technopolis dream and help redefine Africa's Cities of the future. I covenant to ably lead the team towards realizing this dream.

Eng. John Tanui

Chief Executive Officer



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ACRONYMS/ABBREVIATIONS

AGOA Africa Growth and Opportunity Act

BPO Business Processing Outsourcing

CAGR Compound Annual Growth Rate

CEO Chief Executive Officer

CMA Capital Markets Authority

CoE Centre of Excellence

COMESA Common Market for Eastern and Southern Africa

DI **Direct Investment**

EAC East African Community

EPCF Engineering, Procurement, Construction and Finance

FDI Foreign Direct Investment

FTA Free Trade Area

GCR Global Competitiveness Report

GDP Gross Domestic Product

GoK Government of Kenya

GRP Gross Regional Product

HIV/AIDS Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome

IASP The International Association of Science Parks and Areas of Innovation

ICT Information, Communications and Technology

IFC International Finance Corporation

IPR Intellectual Property Right

ITES Information Technology Enabled Services

KAM Kenya Association of Manufacturers

KENIA Kenya National Innovation Agency

KEPSA Kenya Private Sector Alliance

KPDA Kenya Private Developers Association

KoTDA Konza Technopolis Development Authority

KPO Knowledge Process Outsourcing



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KTA Konza Technopolis Authority

MDP 1 & 2 Master Delivery Partner 1 and 2

MNCs Multi-National Corporations

MoEST Ministry of Education, Science and Technology

MTP Medium Term Plan

MW Mega Watt

NACOSTI National Commission for Science, Technology and Innovation

NIC Newly Industrialized Country

NEMA National Environmental Management Authority

NRF National Research Fund

NSE Nairobi Stock Exchange

OECD Organization for Economic Co-operation and Development

PCT Patent Cooperation Treaty

PESTEL Political, Economic, Social, Technology, Environment and Legal

PPPs Public Private Partnerships

R&D Research and Development

SADC Southern Africa Development Cooperation

SEZ Special Economic Zone

SME Small and Medium Enterprises

S&T Science and Technology

STEM Science, Technology, Engineering & Mathematics

ST&I Science, Technology and Innovation

STISA Science, Technology and Innovation Strategy for Africa

WHO World Health Organization

1.0 INTRODUCTION

1.1 BACKGROUND

The 21st Century has seen world economies operate in a more integrated and almost borderless manner than ever before driven by technologies and facilitated to a great extent by ICT. In order to stay relevant and competitive and to attract foreign and local investment opportunities, nations are pursuing all manner of innovative approaches.

One such approach is the establishment of smart cities. Information and communications technology (ICT) is a key enabler for cities to address emerging challenges in a 'smart' manner. Kenya in its quest to not only stay competitive, but to become a key economic driver on the continent, is determined to pursue a multiplicity of strategies including the establishment of a smart city. Konza Technopolis is a key flagship project of Kenya's Vision 2030 economic development portfolio whose establishment is envisioned to create a world-class smart city and area of innovation. Konza Technopolis will feature a robust information technology (IT) platform, superior reliable infrastructure and business friendly governance systems.

The world is moving towards a new 'knowledge-based economy' in which the role and significance of knowledge as an input to economic processes has fundamentally changed. According to the Organization for Economic Co-operation and Development (OECD), knowledge is now recognized as the driver of productivity and economic growth. This driver leads economies to a new focus on the role of information, technology and learning in economic performance. According to the World Bank, knowledge economies are defined by four pillars. These are:

- 1) Institutional structures that provide incentives for entrepreneurship and the use of knowledge,
- 2) Skilled labour availability and good education systems,
- 3) ICT infrastructure and access to the ICT infrastructure, and
- 4) A vibrant innovation ecosystem that includes academia, the private sector and civil society.

Moreover, Konza is set up as a Knowledge city (an entire new area designed outside a city though not far from them, consisting of relatively large spaces for work, living, culture, lifestyle and may even include a University or related facilities) which allows it to be classified by the Association of Science Parks and Areas of Innovation (IASP) as an Area of Innovation¹.

¹ Defined as a designated territory (district,city,ad hoc zone) with its own specific management team, whose main objectives include economic development via the promotion and attraction of selected innovative businesses for which specific services are provided or made available, and that may also include residential and cultural zones or facilities, or be embedded in urban spaces having such facilities...(IASP, 2016)

1.2 HISTORY OF KONZA

Konza was inspired by the rapid development of global Business Processing Outsourcing (BPO) enterprises. The global offshore BPO/ITES revenue was estimated at US\$ 110 billion in 2010 and projected to reach US\$ 300 billion by 2015. However, statistics indicate that Africa only attracts about 1% of the total revenues accruing from this growing industry, with only a handful of African countries - South Africa, Egypt, Morocco, Ghana and Mauritius - having made an effort to develop this industry by launching national programs to grow BPO/ITES.

In 2009, the Government of Kenya (GoK) hired the firm, International Finance Corporation (IFC) as transaction advisors for the development of Konza Technopolis. The IFC commissioned feasibility studies on the viability of the project and concluded that the development of Konza Technopolis would immensely contribute to economic development if successfully implemented. Studies were carried out to determine the requirements for the project's success. These included Strategic Environmental and Social Assessment; Legal and Regulatory Due Diligence; Demand Assessment; and the development of a Conceptual Master Plan.

Several key industries were identified as possible drivers of growth for Konza Technopolis, including:

- Business Process Outsourcing (BPO);
- Software Development;
- Data Centers:
- Disaster Recovery Centers; and
- Light Assembly Manufacturing Industries.

Konza project was established based on these studies, and the government purchased 5,000 acres from Malili Ranch, south east of Nairobi for its development. The initial vision of Konza was to develop an ICT park focusing on business process outsourcing. It was later widened to a smart mixed-use city with a system of innovations that combines the industry, research and development centres and universities with a view to contributing towards a knowledge economy.

The Ministry of Information and Communications (Kenya) and the IFC engaged Master Delivery Partner 1 (MDP 1) in August 2012 to prepare a detailed business plan and master plan for implementation of the first phase. MDP1 conducted a tenant outreach strategy and concluded, empirically, that with the right environment (especially infrastructure and relevant approvals), Konza has the ability to generate 17,000 direct jobs by the end of 2017, with at least 30,000 residents. Direct jobs will largely be in **construction**, **engineering**, **health care**, **manufacturing**, **retail**, **hotel**, **education**, **and commerical sectors**. Indirect jobs are alsp anticipated to be generated through the suppliers of goods and services supporting the direct industries in Konza Technopolis.

The role of MDP2 is mainly to oversee the development of Phase 1 (2014-2018) to world class smart-city building standards as defined by MDP1. The MDP2 tasks have been planned in detail, including man-hours needed for each task and number of days to achieve it untill 2018.

1.3 OBJECTIVES AND MANDATE OF KONZA TECHNOPOLIS AND ITS ROLE IN NATIONAL DEVELOPMENT

Science, technology and innovation (ST&I) contributes to the Kenyan Economy through various ways including: Education and Training which focuses on promotion of experiential learning, innovation and creativity. ST&I also contributes through coordinated programmes in education; and Research and Development (R&D) and training in all aspects of technology management. The national system of innovation in its broadest conception is the means through which Kenya seeks to acquire, exploit and diffuse knowledge for the achievement of individual and collective goals. The accuracy and effectiveness of the national system of innovation will depend on how well knowledge, technologies, products and processes are converted into increased economic growth. The resulting exonomic growth will yield an improved quality of life and enhanced economy for Kenya.

The role of Konza in the realm of ST&I will be to enhance utilization of the contemporary scientific revolution in improving production and productivity in all sectors. KTC is a key flagship project of Vision 2030. The major objectives are:

- a) To position Kenya as a Knowledge based economy and a preferred ST&I destination;
- b) To foster the growth of the technology industry in Kenya;
- c) To generate 17,000 direct jobs at the end of phase 1 and have 200,000 residents in the City at the end of 2030;
- d) To be a sustainable, world-class technology hub and a major economic driver for the nation, with a vibrant mix of businesses, workers, residents, and urban amenities;
- e) To develop world class infrastructure and technology to facilitate research, education and business through Information Technology Enabled Services (ITES); and
- f) To attract wide-spread investment from both local and international entities to establish themselves in the new smart city.

The Government of Kenya (GoK) established Konza Technopolis Development Authority to oversee the establishment and management of the program. The mandate of the Authority includes to market and promote Konza; control, regulate and administer the development of Konza; secure and manage finances for the project; oversee the real estate development and fund physical infrastructure; as well as to manage procurement processes and Public Private Partnerships (PPPs). To do this, the Authority aims to transform Kenyan industry while creating a clean and secure environment.

The Ministry of Information and Communications and the IFC engaged the Master Development Partner 1 (MDP1), a consortium of specialist (HR&A, Dalburg, SHOP, Tetra Tech, and OZ Architecture), to move the Vision 2030 forward. MDP1 was charged with breaking the vision of Konza Technopolis into a series of plans to facilitate the implemmentation of Phase 1. The MDP1 plan captured the near-term economic opportunities and steps to catalyze future phases.

The work began with an exercise by MDP1 to step down the existing Concept Master Plan prepared by Pell Frischman into a Local Physical Development Plan (LPDP) for the 2,058 Hectares (or 5,000 acres) of Konza Technopolis. The LPDP was prepared under the Physical

Planning Act (PPA, Cap 286) as the principle legislation supported by other legal frameworks. MDP1 finalized the LPDP and engaged the necessary stakeholder consultations to seek necessary approvals.

The LPDP was followed by work to develop a front-end strategy, business case and detailed planning for the first phase of the project. The implementation plan consisted of the following sub-reports and plans:

- Infrastructure Report and Plan
- KPI Framework Report
- Phase 1 Cost Estimate
- Program and Phasing Report
- Partnership Plan
- Sector Strategy
- Tenant Outreach

The Government of Kenya later commissioned the second consortium of master developers (MDP2) to implement the master plan developed by MDP1.

The key clusters identified to drive the growth of the techno city include: Information Communication and Technology & Information Technology Enabled Services (ICT/ITES); Life Sciences and Engineering as outlined below.

1.3.1 Information and Communication Technology/ IT Enabled Services

The Information, Communications and Technology/Information Technology Enabled Services (ICT/ITES) are developing as a key sector in promoting economic growth in Kenya. Konza is developing an ICT ecosystem by creating specialised locations that bring together the various stakeholders within the technology industry to ensure efficient collaboration and an increased presence of technology exports from Kenya and the private sector, and as well as an increase in government spending on ICT/ITES. The sector has immense potential for job creation, investment attraction and revenue generation for the country.

1.3.2 Life Sciences

Globally, the life science sector is rapidly changing and as such, opportunities and challenges are presented to economies. In Africa, a lot of focus has been put on reactive care rather than proactive. Research has indicated that infrastructure in Africa will remain inadequate unless policies and reforms are put in place to initiate changes in the prevention of disease and the preservation of life. Deaths in Africa are being caused by diseases that have either been eradicated or kept largely under control in most other parts of the world. According to the World Health Organization (WHO), HIV/AIDS, tuberculosis and malaria together caused nearly 1.9 million deaths in Africa in 2012, representing some 20% of all deaths.

In addition Africa still has a rapidly urbanising population that has traditionally depended on Agriculture. The pressure to produce more adequate food efficiently will create demand for new Agriculture-related technology.

The Konza Techno City Life Science band will provide an enabling environment for scientific breakthroughs related to bioscience and new ways of working with health providers and industry. The band will seek to position Kenya as a leader in life Science in Africa. The Life Science band will host expertise in;

- · Medical technology
- Medical biotechnology
- · Agricultural biotechnology
- · Industrial biotechnology
- Pharmaceutical sector

In addition, the Life Science section of Konza Technopolis will bring together academia and industry into an ecosystem resulting in interdisciplinary collaboration. Collaboration has repeatedly illustrated significant contributions to new scientific inventions and breakthroughs. The life science band in Konza will provide researchers in different fields with a collaborative platform where key enabling technologies can be spread through the value chain. For instance, experts in diagnostics will be working hand in hand with biochemists and other disciplines in developing effective personal care solutions. Research will be turned into commercially-viable practical solutions.

1.3.3 Engineering

World economies are rapidly changing as innovation has become the driver of economic growth and societal progress. Industries are becoming knowledge-intensive and as such, research shows that a knowledge-based economy results in new and increased employment opportunities. To build such an economy requires a workforce that is high skilled, dynamic and efficient. Such a workforce will subsequently build productivity and boost economic growth and development.

The role of engineering in the building of a knowledge based economy continues to be critical. We have seen an increase in competition globally with countries competing on S&T which has resulted in many countries meeting and leaping over the technology expertise of the original industrial power.

Kenya needs to encourage the development of an understanding of the engineering profession. This profession supports the application of science to practical applications and solutions to problems, the domain of engineering. Konza will provide a platform to attract companies with skilled and able labor. Konza Technopolis will also be charged with retaining these companies as their investments are felt by the entire country. The sector will create new jobs for Kenyans in the global economy and expand industry collaboration with the private sector in the technological development and the applications of engineering.

1.4 RATIONALE FOR DEVELOPMENT OF THE STRATEGIC PLAN

The Authority was established in 2012 via a Legal Notice No. 23. It had challenges in its early formation but has now been formally in operation for almost three (3) years without a strategic plan. This strategic plan identifies the Authority's vision, mission, values and strategic themes of focus for 2016-2020. It also identifies the strategic objectives, strategies and the outcomes

that the Authority will accomplish over the next five years. In summary, the plan sets the direction for the future and the provides an implementation plan to realize that future. The realization of the plan will in turn contribute towards the Government of Kenya's Vision 2030 and sustainable development goals. It will be through implementation and accountability that the strategic plan will be achieved.

1.5 METHODOLOGY

The strategic plan was developed through an inclusive process. The data to develop this strategic plan was collected by reviewing relevant documents at the national level and in the Authority, interviewing key personnel in the Authority and selected external stakeholders. In addition, relevant documents found on the internet were reviewed. The persons interviewed and the participation in the various workshops are shown in Annex 1. The documents reviewed are shown in Annex 2. Once a draft strategic plan was ready, it was presented to the Board for initial comments and then subjected to internal stakeholders for validation and additional input. It was also presented to external stakeholders for validation and input. The draft strategic plan was then discussed by the Board of Directors' Committee responsible for strategy. Finally, it was presented to the Board of Directors for discussion and formal approval. The steps undertaken are summarised below:

- 1) Data collection
- 2) Development of draft strategic plan
- 3) Board presentation and input
- 4) Internal stakeholder workshop for validation and value addition
- 5) External stakeholder validation and input
- 6) Board Committee input and recommendation to the Full Board of Directors
- 7) Formal Board approval

1.6 KEY DEFINITIONS

In this section, we define the key terms that are relevant to understanding what Konza Techno City is. These are Smart City, Areas of Innovation, Science Park and Triple Helix.

- a) **Smart City** This can be defined as '...one with at least one initiative addressing one or more of the following six characteristics: Smart Governance, Smart People, Smart Living, Smart Mobility, Smart Economy and Smart Environment' or simply as 'a city seeking to address public issues via ICT-based solutions on the basis of a multi-stakeholder, municipally based partnership' (Mapping smart cities in the EU)².
- b) Areas of Innovation The International Association of Science Parks and Areas of Innovation (IASP) defines Areas of Innovation as '... places designed and curated to attract entrepreneurial-minded people, skilled talent, knowledge-intensive businesses and investments, by developing and combining a set of infrastructural, institutional,

²http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/507480/IPOL-ITRE_ET(2014)507480_EN.pdf



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scientific, technological, educational and social assets, together with value added services, thus enhancing sustainable economic development and prosperity with and for the community'.

- c) Science Park The International Association of Science Parks and Areas of Innovation (IASP) defines a Science Park as '...an organisation managed by specialised professionals, whose main aim is to increase the wealth of its community by promoting the culture of innovation and the competitiveness of its associated businesses and knowledge-based industries. To enable these goals to be met, a Science Park stimulates and manages the flow of knowledge and technology amonst universities, R&D institutions, companies and markets; it facilitates the creation and growth of innovation-based companies through incubation and spin-off processes; and provides other value-added services together with high quality space and facilities'.
- d) Triple Helix –Triple Helix refers to the interactions between universities, industries and government to create innovations in a knowledge-based economy. These interactions are largely conceptualised in the form of "knowledge flows" among the three. Increasingly, NGOs and civil society have been recognised as critical in the transfer of technologies into societies, especially in emerging economies, and have therefore been conceptualised to form part of the helix.

2.0 VISION, MISSION AND CORE VALUES

2.1 VISION

Our vision is:

To be a leading global technology and innovation hub

2.2 MISSION

Our mission is:

To develop a sustainable smart city and an innovation ecosystem, contributing to Kenya's knowledge-based economy

2.3 CORE VALUES

Our core values are:

- **a) Simplicity.** Through innovation and guided by clarity and consistency, we deliver simple, elegant and quality solutions to our customers and stakeholders.
- b) Professionalism. We are a qualified, skilled and committed team striving to always deliver exceptional services to our customers, driven by independence, objectivity, best practices, always acting with integrity and keeping our promises while treating others with respect.
- c) Passion for excellence. We are passionate on delivering a better Konza to live, work and play through innovative and creative solutions inspired by outstanding services in time.
- **d) Agility.** We are a vibrant and dynamic team that identifies and responds to emerging issues in an ever-changing globally competitive environment, hence giving our customers a competitive edge.
- **e) Collaboration.** We optimize results by working smarter together. We multiply our contribution through partnerships and deliver with speed, trust and respect.



3.0 STRATEGIC ANALYSIS

3.1 GLOBAL CONTEXT ANALYSIS

3.1.1 Overview of Other Smart Cities

Table 3-1 shows a summary of selected smart cities in other parts of the world³.

Table 3-1 Summary of Selected Smart Cities

City, Country	Size	Start Date	Population	Primary Purpose	Secondary Purpose	Summary
Songdo, South Korea	600 Ha	2005	252,500 residents on completion	Commercial and residential	Knowledge city	 Songdo International Business District is a new smart city built from scratch on 600 hectares of reclaimed land along Incheon's waterfront The estimated capital cost is USD 35 Billion for a full build out by end of 2015 Three university campuses are to be set up in Songdo to promote academia, research and the growth of knowledge economy Key partners are Cisco, Posco, 3M and u.Life Solutions.
Skolkovo Innovation Center, Russia	2,000 acres	2010	Currently 1530 resident companies	Global Technology Hub Diversification of the Russian economy Conversion of	Academia/ Research/ Knowledge, Commercial City	 Aims to be a highly modern complex created to encourage science and technology companies Tasked with the development of technology start-ups but also marketing them correctly. As corporations and individuals become "residents" of the city, with proposed projects and ideas receiving financial assistance.

³ From Cityquest Cities Summary, 2015 plus other data from the internet



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City, Country	Size	Start Date	Population	Primary Purpose	Secondary Purpose	Summary			
						 SK foundation: Charged with providing the catalyst for the diversification of the Russian economy, the Skolkovo Foundation's overarching goal is to create a sustainable ecosystem of entrepreneurship and innovation, engendering a startup culture and encouraging venture capitalism. SK Technopark: will establish a vibrant ecosystem of technology innovation and entrepreneurship Skoltech: a new graduate research University established in collaboration with the Massachusetts Institute of Technology, and Skolkovo city, located near Moscow. 			
The Research Triangle Regional Partnership NC, USA	7,000 acres	2003/ 2004	Over 2 million	Initially as a Research Park	Commercial	 Partnership with three of the best universities in the world Involves 13-county region in north-central North Carolina Outputs: 245 start-up companies; 3,256 patents; 1,970 trade marks It has received many accolades, including no. 1 high-tech region, no. 1 business climate, no. 1 region for biotechnology, etc. 			
Masdar City, Abu Dhabi	1,400 acres	2008	40,000 residents on completion	Renewable energy and sustainable technology hub	Academia/ Commercial/Res idential	 Masdar city is built with a primary goal of enabling innovation and sustainable urban development in a modern clean technology cluster and free economic zone Masdar Institute of Science and Technology is Masdar City's nucleus extending a spirit of innovation and entrepreneurship throughout the city Key tenants in Masdar are: International Renewable Energy Agency (IREA), Siemens, General Electric, Mitsubishi Heavy Industries and Lockheed Martin. 			
Cyberjaya, Malaysia	6,960 acres	1997	80,000 residents 40,000 Knowledge workers 210,000 residents by 2020	Global Technology Hub	Commercial	 Cyberjaya was launched in the year 1997 with a dream of developing Malaysia's first intelligent cyber city Currently, Cyberjaya has developed 71% of the total land mass It is now home to more than 800 companies, both global and regional multinationals It has strong support from the government, has Multi-media University and science parks around the city Cyberjaya's success is attributed to its sustainable and open ecosystem Cyberjaya is now under transformation from an ICT hub to a Global Technology Hub focusing on Information Security, Creative 			



City, Country	Size	Start Date	Population	Primary Purpose	Secondary Purpose	Summary
Sountry		Bate		T dipose	r urposc	Content, Mobile Internet, Green Technology, Big Data Analytics, Cloud Computing, Biotechnology, Wearable Technologies and Smart Grid Technology.
King Abdullah Economic City (KAEC), Kingdom of Saudi Arabia	181 km²	2005	Currently at 5,000 residents and workers	Economic City/ Port/ Industrial	Alternative residential/ living community/ tourist	 KAEC was inaugurated in 2005 by the late King Abdullah of Kingdom of Saudi Arabia with an estimated capital cost of USD 80 Billion KAEC was envisaged as a strategic city for Saudi Arabia, The Middle East and the world at large due to its strategic location The city is divided into six major areas of development: Industrial Valley, King Abdullah Port, Residential Address, Sea Resort, Educational Zone and Central Business District Multinationals in KAEC include Mars, Pfizer, Total, Volvo, DHL and IKEA
Yachay, Ecuador	4,489 Ha	2013	Currently at 5,000	Academia/Res earch/Knowled ge City	Technology hub	 Also known as The City of Knowledge, Yachay is a planned city for technological innovation and knowledge intensive businesses to create worldwide scientific applications necessary to achieve Good Living Yachay will be built on smart criteria with four main sectors: Agricultural and Biotechnological Sector, Knowledge Sector, Industrial Sector and Entertainment Sector The University of Experimental Technological Research will be central to Yachay in developing the first Latin American hub of knowledge Yachay's city planning focuses on a connected, walkable, inclusive, sustainable, alive and democratic city
Rawabi, Palestine	1,600 acres	2010	40,000 residents	Alternative residential/ living community	Commercial/ ICT Hub	 Rawabi is the first planned Palestinian City Rawabi will provide Palestinian families with opportunities for affordable home ownership, employment, education, leisure and an attractive environment to live, work and grow Rawabi is already up and running with residential and other social amenities constructed and operational To grow as an ICT hub, Rawabi is offering incentives such as 5 year tax exempt operations, attractive lease terms, legal and regulatory support to Technology firms



City,	Size	Start	Population	Primary	Secondary	Summary
Country		Date		Purpose	Purpose	
Sejong City, Korea	72.91 km2	2006	500,000	Govern-ment Admini-stration	Academia/resea rch/ industry cluster	 Sejong is an administrative city that was built to address the challenges of excessive concentration in the capital city Launched in 2012 as as a special self-governing city, Sejong has diverse functions such as industry, culture, housing and education Central administrative organizations of the Government are being relocated to Sejong Sejong is labelled the "City of Joy and Happiness" with activities that promote togetherness and a vibrant social life Sejong is divided into six zones; Central Administrative, Urban Administrative, Cultural International Exchange, University Research, Medical Welfare, and High Tech Knowledge Zone
GIFT, India	886 acres	2007	50,000 residents, 600,000 commuters	International Financial hub	Technology hub	 Gujarat International Finance Tec-City (GIFT) joint venture between Gujarat Urban Development Company Limited (GUDC) and Infrastructure Leasing & Financial Services Limited (IL&FS) It aspires to cater to India's large financial services potential by offering global firms world-class infrastructure and facilities It is estimated that GIFT would provide 500,000 direct and an equal number of indirect jobs It will have a special economic zone (SEZ) aimed at increasing FDI, international education zone, integrated townships, an entertainment zone, hotels, a convention centre, an international techno park, Software Technology Parks of India (STPI) units, shopping malls, stock exchanges and service units GIFT hosts some large technology firms and banks such as Oracle and HDFC respectively GIFT is also home to India's first ever International Financial Service Centre (IFSC) GIFT is estimated to cost USD 11 billion
Ebene CyberCity, Mauritius	No data	No data	1,001 (2012)	IT hub	Link between African and Asian markets	 Home to AfriNic, the regional internet registry for Africa; HSBC Bank (Mauritius); Liquid Telecom; African Alliance; Emtel; and a host of other companies Has world class facilities Has ubdersea cable landing of the SAFE submarine high-speed cable

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City, Country	Size	Start Date	Population	Primary Purpose	Secondary Purpose	Summary
Ethio ICT Village, Ethiopia	No data	2015	None	ICT park	No data	 Aim is to develop Ethiopia's ICT sector, attract FDI and create jobs Has comprehensive investment incentives
Stellenbosc h Innovation District, S. Africa	No data	2012	No data	Innovation, entrepreneur- ship and enterprise development for a smart & sustainable world	No data	 The SID hopes to turn Stellenbosch into a smart and sustainable town by 2020 Its purpose is to design networks and eco-systems will be developed to enable collaboration of existing and new projects and bridge the gap between communities in the area.
Kigali Innovation City (KIC), Rwanda	No data	2016	None	Technology city	No data	 A dynamic ecosystem of technology clusters in which companies will innovate and deliver products and services for the global market KIC located in Kigali SEZ, 10km East of Kigali CBD Carnegie Mellon University – Rwanda and African Institute for Mathematical Sciences are educational anchor tenants Ericcson will be a technology anchor tenant Will cost approx. USD 1.9 billion Started construction of the Centre of Excellence (where CMU-R will be) with funding from AfDB

From Table 3-1, we can draw the following as key lessons:

- a) The establishment of the smart cities is linked to national objectives;
- b) Most cities focus on a few priority sectors or industries;
- c) The presence of global quality universities or university campuses as anchor tenants is critical for the knowledge component;
- d) The attraction of global or multi-national companies is crucial;
- e) Common outputs include new companies created or established, jobs created, residents and knowledge workers, FDI, etc.
- f) The cost of developing a smart city is high; and
- g) Smart cities evolve over time.

3.1.2 Kenya as an Investment Destination

According to the summary of key investment opportunities in Kenya (Republic of Kenya, 2016), the following are the reasons which make Kenya an attractive investment destination for investors.

- a) Kenya is ranked the fourth largest economy in Sub-Saharan Africa with a GDP of over USD 60 billion.
- b) The World Economic Forum's country competitiveness report (2015) ranks Kenya number one in Africa in quality of human capital and availability of research and innovation.
- c) Kenya has one of the highest rates of internet penetration in Africa, with 72% of its population having access to the internet, making it ideal for investment in internet driven and knowledge economy.
- d) Kenya has the second largest population within the EAC at 44.2 million and is growing at a rate of 2.7% per annum. The country has a rising middle class with increasing urbanisation, which is contributing to an increase in consumer demand for high value goods and services. This trend is forecasted to continue, with 50% of the population expected to live in urban areas by 2050. The country's income per capita has also increased at a Compound Annual Growth Rate (CAGR) of 2% over the past 10 years.
- e) Kenya is the dominant economy in the East Africa Community, contributing approximately to 50% of the region's GDP and is centrally located within it, providing investors access to the wider consumer market of up to 400M people in the EAC/COMESA region.
- f) Kenya's investment climate is the strongest in the EAC, with Foreign Direct Investment (FDI) flowing in from emerging and developed markets and a high number of multinational companies with regional and continent-wide presence, having their headquarters in the country.
- g) Kenya is firmly interconnected through a network of roads, railways, ports, airports, waterways and telecommunications. For example, Kenya's Jomo Kenyatta International Airport and Mombasa Port are the second busiest in Africa.
- h) Kenya is a member of several trade arrangements and a beneficiary of trade promotion schemes that include the Africa Growth and Opportunity Act (AGOA), World Trade Organisation and EAC-EU Trade Agreement. It is also a member of East Africa Community (EAC), Common Market for Eastern and Southern Africa (COMESA) and Southern Africa Development Cooperation (SADC) regional bloc that will soon be a Tripartite Free Trade Area (FTA) cooperation creating a potential market of over 600 million people.

- i) Kenya's Financial Sector development continues to support economic growth through mobilisation of large savings to finance investment needs. In the 2015/16 World Economic Forum Global Report, Kenya ranked number 42 in the world out of 140 countries for financial market developer. In 2015, the country was ranked position one in the world for leveraging technology to drive inclusion by Brookings Financial and Digital Inclusion Project (FDIP).
- j) Kenya has an extensive and relatively well developed banking industry. Serving the domestic, regional and international markets. There are 44 banks registered in Kenya. They include global names such as Barclays, Citibank and Standard Chartered Kenya. Kenya is currently ranked 28 out of 151 countries in the ease of accessing credit in the World Bank Ease of Doing Business Report 2016.
- k) Kenya has the most developed stock market in the Eastern and Central African region i.e. the Nairobi Stock Exchange (NSE) with market capitalisation of about KSh. 1.992 trillion (approximately USD 19.48 billion).
- I) Kenya is positioned to improve its power generation capacity through focus on geothermal energy and other green energy and cost effective energy sources. The country's second medium term plan (2013-2017) has targeted generation of 5000+MW. To date, 615 MW of power have been added to the national grid and this has significantly reduced the cost of power. An additional 300MW of power from wind is expected to be added to the national grid in the next one year with the ongoing works at Lake Turkana Wind Project. These resources are expected to increase our clean energy mix cementing Kenya's position as world leader in renewable energy. These, and other ongoing power projects, will ensure adequate power supplies and significantly reduce cost of doing businesses.

In addition, recent research by DCI on FDI has highlighted the following:

- a) The top five sources countries for investment into Kenya were the US, UK, India, Japan and South Africa, accounting for half the FDI from 2003-2016. The next five are UAE, Germany, South Korea, China and France. These ten countries, especially the first five, represent the sources of investment for Konza Technopolis.
- b) In terms of sectors, the top five were financial services, communications, business services, software and IT services, and food and tobacco. The next four were transportation, automotive, consumer electronics and alternative/renewable energy. Financial services was the top sector, alternative/renewable energy had both the highest total and highest average investment, while food and tobacco generated the highest number of jobs. The top sectors align fairly well with the focus of Konza Technopolis.
- c) In terms of destination cities, Nairobi dominates, accounting for almost 60% of the FDI projects. Given the proximity of Konza to Nairobi, it is possible to funnel investment in Konza Technopolis.
- d) In Africa, the key competitors for FDI are Egypt, South Africa and Morocco. It would be interesting to establish the FDI destination trends.

3.2 NATIONAL CONTEXT ANALYSIS

3.2.1 Policy Environment

3.2.1.1 Vision 2030

The Vision 2030 is the national long-term development blue-print. The aim of Kenya Vision 2030 is to create a "globally competitive and prosperous country with a high quality of life by 2030". It aims at transforming Kenya into a newly industrializing middle income country providing a high quality of life to all its citizens in a clean and secure environment. The Vision is being implemented through a succession of five year Medium Term Plans (MTPs). The first MTP (2008-2012) implemented the first five years of the Vision. The Vision comprises of three key Pillars: Economic, Social and Political. These pillars are anchored on macroeconomic stability, continuity in governance reforms, enhanced equity and wealth creation opportunities for the poor; infrastructure, energy, science, technology and innovation (ST&I); land reform, human resources development, security and public sector reforms. The economic pillar aims to achieve an average economic growth rate of 10 per cent per annum and sustaining the same until 2030. The social pillar seeks to engender just, cohesive and equitable social development in a clean and secure environment, while the political pillar aims to realize an issue-based, people-centered, result-oriented and accountable democratic system.

The theme of the second MTP, (2013-2017) which coincides with the coming into power of a new Government after the 2013 elections, is "Transforming Kenya: Pathway to Devolution, Socio-Economic Development, Equity and National Unity". The MTP gives priority to devolution as spelt out in the Kenya 2010 constitution and to more rapid socio-economic development with equity as a tool for building national unity. The Second MTP also aims to build on the successes of the first MTP, particularly in increasing the scale and pace of economic transformation through infrastructure development, and strategic emphasis on priority sectors under the economic and social pillars of Vision 2030.

The Vision recognises the role of science, technology and innovation (ST&I) in a modern economy, in which new knowledge plays a central role in wealth creation, social welfare and international competitiveness through effective exploitation of knowledge, an effective innovation system and flourishing entrepreneurship, among others.

The Vision 2030 proposes intensified application of science, technology and innovation to raise productivity and efficiency levels across the three pillars and recognises the critical role played by research and development (R&D) in accelerating economic development.

ICT is one of the foundations for economic development in the second MTP of Vision 2030, with the theme, "strengthening the foundation for a knowledge economy". ICT is a critical tool in Kenya's vision of knowledge based economy, which aims at shifting the current industrial development path towards innovation where creation, adoption, adaptation and use of knowledge as the key source of economic growth are key. As a foundation of the second MTP, ICT would be concerned with:

- a) upgrading the national ICT infrastructure:
- b) improving public service delivery;
- c) developing the ICT industry; and
- d) upgrading ICT capacity.

3.2.1.2 Science, Technology and Innovation Strategy for Africa

The Science, Technology and Innovation Strategy for Africa - 2024 (STISA-2024) is the first of the ten year incremental facing strategies to respond to the demand for ST&I as an important component of development across all the critical sectors of the African economy. The strategy is designed to respond to the need of transforming Africa into a knowledge based and innovation led society.

Konza Technopolis will contribute to the above policies by developing adequate ST&I infrastructure and providing an enabling environment for innovation, entrepreneurship and development of technical competencies of ST&I.

The Global Competitiveness Report (GCR), an annual report published by the World Economic Forum, ranks countries based on an Index that integrates the macroeconomic and the micro/business aspects of competitiveness.

By providing smart reliable infrastructure, Konza Technopolis will be able to contribute to better quality of transport, electricity and communication infrastructure. Konza will host a number of smart secondary and higher learning institutions that will focus on Science, Technology, Research and Innovation. This will contribute positively to improving quality of education in math and science, increase in enrolment, better management schools, internet access in schools, and specialized training services.

As Konza is set to be a Techno city and the go to place for all matters technology and innovation in Kenya and the region, the city is set to contribute to the Technological Readiness of Kenya around availability of latest technologies, firm-level technology absorption, foreign direct investment (FDI) on tech and technology transfer, percentage of individuals using fixed and mobile broadband and internet bandwidth in the country. Konza is being built to be the melting pot for research and development with an ecosystem that spurs innovation.

Konza will play a major role in increasing capacity for innovation, quality of scientific research institutions, spending on R&D, university-industry collaboration in R&D, Government procurement of advanced technology products, availability of scientists and engineers, and Patent Cooperation Treaty (PCT) patents from Kenya.

3.2.1.3 **National ICT Policy**

Kenya produced its first National ICT Policy in 2006. Its vision is a prosperous ICT-driven Kenyan society, while its mission is to improve the livelihoods of Kenyans by ensuring the availability of accessible, efficient, reliable and affordable ICT services. This policy was guided by the need for infrastructure development, human resource development, stakeholder



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participation and appropriate policy and regulatory framework. It focuses on IT, broadcasting, telecommunications, postal services, radio frequency spectrum, universal access and institutional framework for implementation.

The country has not updated this policy for close ten years, a period when the world has witnessed various technological developments and many changes have taken place in the ICT sector in Kenya. The Ministry of ICT has produced a draft National ICT Policy 2016, which is going through stakeholder engagement. The Authority needs to give comments and ensure that its role in science and technology innovation is entrenched in this policy. The consultant has already sent comments to reflect this but the more comments are received from many diverse sources, the more chances of getting the input reflected in the final policy document.

3.2.1.4 Science, Technology and Innovation Policy

The vision of the National Science, Technology & Innovation policy is "to be a nation that harnesses science, technology and innovation to foster global competitiveness for wealth creation, national prosperity and a high quality of life for its people". The goal of policy is to build critical capacity and capability in ST&I that will create change and transform Kenya into a Newly Industrialized Country (NIC) through the utilization of knowledge as the driving force. In this respect, the Government will promote ST&I as the means to making Kenyan products and services globally competitive.

The policy defines that national innovation system and recognizes universities and research institutions as critical drivers of the innovation system. The identified areas of priority that will be leveraged upon to transform the economy and achieve the growth and development targets in Vision 2030 are space science technologies; nano-sciences and nano-technologies; energy technologies; bio-technology and bio-sciences; telecommunications; electronics and computer technologies; natural products; indigenous knowledge; Science, Technology, Engineering & Mathematics (STEM); and co-ordination of technology, innovation and commercialization.

In order to implement the ST&I policy, five relevant strategies identified by the government and are relevant to the Authority are:

- a) Establish and sustain a network of innovation Centres of Excellence in the national priority areas with specific deliverables;
- b) Promote the formation of new technology-based firms through the establishment of ST&I Parks;
- c) Develop globally benchmarked ST&I infrastructure to support intervention in strategic priority areas;
- d) Create incentives for industry and other stakeholders to co-fund the innovation and commercialization; and
- e) Develop IPR programmes that effectively harness ST&I utilization for the rapid commercialization of intellectually protected products and services locally and internationally to maximize on public good and interests.



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The Authority will help to implement these strategies and enable Kenya to position itself as a major regional and international hub for ICT innovation, and in turn achieve Vision 2030 through the establishment of Konza Technopolis.

The ST&I policy however did not recognise the role of the Authority in the Kenyan innovation system, largely because the Authority had not been created when the policy was being developed. In addition, the policy has remained in draft form since it was finalised in 2012, just before the 2013 general elections. The Ministry of Education, Science and Technology plans to review the draft ST&I policy and the 2013 ST&I Act. The Authority should therefore position itself to contribute to the final document and ensure its role in the Kenyan innovation ecosystem is well enshrined in the policy and revised Act.

3.2.1.5 National ICT Masterplan

The National ICT Master Plan was launched in April 2014. Its vision positions Kenya's evolution into a regional ICT hub and a globally competitive digital economy. The Masterplan highlights a number of pillars with objectives and strategies for achieving them. One of the pillars of this Master Plan is 'developing ICT businesses'. This is concerned with the development of Kenyan ICT businesses that can produce and provide exportable quality products and or services that are comparable to the best in the world. A key strategy in the technology innovation area of this pillar is to 'establish innovation centres of excellence (CoEs), as well as science and technology (S&T) parks for R&D. Together, the CoEs and S&T parks will lead to the development of ICT applications and services. This strategy recognises that one of the innovation clusters will be in Konza, linked physically and virtually to other ICT innovation clusters in the country. Indeed, one of the flagship projects in the Masterplan is to build a S&T park and ITES centre in Konza Technopolis.

The ICT Masterplan thus positions Konza as perfect ground for establishing global brand universities which will offer postgraduate ICT programmes. These programmes will enable the building of the ICT human capital and workforce required to create the innovations in Konza and elsewhere. The Authority must therefore align itself to this strategy by establishing universities and R&D centres in Konza Technopolis and linking them physically and virtually to other ICT innovation clusters in universities, innovation hubs and R&D centres in the country and globally.

The Authority will also contribute to the following strategies under the 'developing ICT businesses' pillar of the ICT Master plan:

- a) Create programs to support commercialization of innovations;
- b) Promote Intellectual Property Rights (IPR) to safeguard innovations;
- c) Develop the ITES industry to go international; and
- d) Form effective partnerships to create an excellent growth environment for local ICT companies.

3.2.1.6 Industrialization Policy and Programme

By recognizing the mutual relationship between industry and agriculture, Kenya's industrialization policy has pursued the development of both sectors simultaneously on the understanding that a productive and vibrant agricultural sector is a sound foundation for

industrialization. Development policies in Kenya have over time, therefore, given uniform encouragement to both sectors as the twin engines of development.

In 1972 agriculture contributed 36% of GDP while industry contributed 17% with services contributing the balance, by 1996 the contribution of agriculture had declined to 27% of GDP while that of industry had increased to 18%, with services contributing up to 55% of GDP. By 2015, it was projected at about 30% as shown in

Table 3-2 for the last five years.

Table 3-2 Sector Contribution to GDP

Sector		2011	2012	2013+	2014+	2015*
1. Agriculture, fore	stry and fishing	26.3	26.1	26.4	27.3	30.0
2. Mining and quar	rying	0.9	1.1	0.9	0.8	0.9
3. Manufacturing		11.8	11.0	10.5	10.0	10.3
4. Electricity supply	у	1.0	1.1	1.1	1.0	1.0
5. Water supply, so management	ewerage & waste	0.9	0.9	0.9	0.8	0.8
6. Costruction		4.4	4.5	4.5	4.8	4.8
7. Wholesale and	etail; repairs	8.1	7.8	8.0	8.0	7.5
8. Transport and s	torage	7.1	8.0	7.9	8.6	8.4
Accommodation activities	and food services	1.3	1.3	1.2	0.9	0.8
10. Information and	communication	1.6	1.6	1.4	1.2	0.9
11. Financial and in	surance activitues	5.7	5.9	6.6	6.8	6.9
12. Real estate		8.1	8.0	7.9	7,9	7.6
13. Professional, sc activities	ientific and technical	1.0	1.0	1.0	1.0	0.9
14. Administration a activities	nd support service	1.3	1.3	1.2	1.1	1.0
15. Public administr	ation and defense	4.3	4.4	4.4	4.4	4.0
16. Education		5.3	5.4	5.3	4.2	5.0
17. Human health a activities	nd social work	1.8	1.7	1.6	1.7	1.7
18. Arts, entertainm	ent and recreation	0.2	0.1	0.1	0.1	0.1
19. Other service ac	ctivities	0.6	0.6	0.6	0.6	0.6
20. Activities of housemployees	seholds as	0.6	0.6	0.5	0.5	0.5

Key:

- + Revised
- * Provisional

The performance of the manufacturing sector has continued to decline, largely due to low capitation, use of obsolete technologies and high cost of doing business as a result of poor infrastructure, limited access to finance, limited R&D, poor industrial framework and inadequate managerial, technical and entrepreneurial skills. It has stagnated at between 10% and 11% for the last four years.

It is against this background that the industrialization policy was developed as a framework to synchronize and coordinate the various policies, strategies and activities within Kenya's industrialization process. The Kenya Industrialization policy recognizes that while Kenya is primarily an agricultural-based economy it is also endowed with the natural resources that can be tapped through value addition for the benefit of the whole country, especially with the evident decelerated agricultural productivity.

In 2015, the Ministry of Industry, Trade and Cooperatives developed the Industrial Transformation Programme. This is a strategic, comprehensive and integrated programme to guide Kenya on its journey to industrialization and is linked to Vision 2030. This programme has identified opportunities that will more than double the amount of current formal manufacturing sector jobs to approximately seven hundred thousand and add USD 2 to 3 billion to our GDP. In order to realise these opportunities, the programme identifies six challenges to overcome: infrastructure and land availability, skills and capabilities in priority sectors, quality of inputs, cost of operation, access to markets and investor-friendly policies. It then develops a five-point strategy to capture these opportunities over the next ten years, which are:

- 1. Launch sector-specific flagship projects in agro-processing, textiles, leather, construction services and materials, oil and gas and mining services and IT related sectors that build on Kenya's comparative advantages
- 2. Develop Kenyan small and medium enterprises (SMEs) by supporting rising stars and building capabilities with model factories
- 3. Create an enabling environment to accelerate industrial development through industrial parks/zones along infrastructure corridors, technical skills, supporting infrastructure and ease of doing business
- 4. Create an industrial development fund
- 5. Drive results through the newly formed Ministerial Delivery Unit

Konza's strategic plan is aligned to this programme in that there is a focus on the ICT related sectors, that there is a strategy to develop and scale SMEs and that Konza is a special economic zone.

3.2.2 Legal Environment

3.2.2.1 Konza Legal Framework

The Government of Kenya established the Konza Technopolis Development Authority (KoTDA) as a special purpose entity to facilitate the development of the Konza Techno City. The Authority was established vide Legal Notice No 23 of 2012 (the Konza Technopolis Development Authority Order).

This order was perceived to be insufficient and a legislation was sought. The key reasons for creating an act of parliament is to assure stakeholders that the Authority is there for the long term, to secure incentives and standards via legislation, and to institutionalise the Authority as a public enterprise.

The mission of the Authority is to ensure that Konza Techno City grows into a sustainable, world-class technology hub and a major economic driver for the nation, with a vibrant mix of



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businesses, workers, residents, and urban amenities. The Authority is responsible for overseeing the development and management of Konza Techno City, and for establishing a strong value proposition for businesses to locate and expand in Konza Techno City.

The specific functions of the Authority are to:

- a) Regulate, control and administer the development of the Konza Technopolis including the development of high technology, industrial, commercial, civic, educational, residential, recreation and other related and incidental facilities and infrastructure;
- b) Provide a "One-Stop-Shop" center through which persons wishing to invest and or conduct business in the Konza Technopolis may apply for any permits, approvals, consents and licenses required under this Act or any other written law and coordinate with the relevant Government agencies in the processing and issuance of such permits, approvals, consents and licenses;
- c) Promote scientific and technological research and development and encourage the establishment and development of industries using high technology or producing goods or providing services involving high technology within the Konza Technopolis;
- d) Establish a knowledge innovation subsystem with research institutions and universities as elements of a collective system of knowledge creation in high technology with the objective of promoting their integration into the commercial ecosystem;
- e) Identify, map and make available to investors and developers land in the Konza Technopolis by way of lease, sub-lease, sale, licence or such other means and at such rental, price or fee, as the case may be, as the Authority shall in its discretion determine:
- f) Develop and determine the criteria for selection of investors and providers of services in Konza Technopolis;
- g) Develop and determine the criteria on the basis of which land will be made available to investors and any other users in Konza Technopolis;
- h) Conduct inquiries, carry out surveys, collate, analyze and publish data and information on factors influencing or relevant to development, business or investment and to disseminate such data and information to investors or potential investors, whether local or foreign in the Konza Technopolis;
- In consultant with other legally designated relevant government entities, regulate and administer incentives in relation to taxes, customs and excise duties and other fiscal and regulatory incentives that are provided to all persons operating in the Konza Technopolis;
- j) Promote, stimulate, facilitate and undertake in Konza Technopolis, either by itself or through public, private or public-private-partnerships:

- Economic and social development:
- The development of infrastructure as well as technology, industrial, commercial, and residential development;
- The development of art, culture, sport, civic, and recreational activities;
- Public education including the development of educational facilities; and,
- Public health including the development of health and medical facilities.
- k) Act as the focal point for coordination of both public and private sector efforts in the development of high technology:
- I) Liaise with the National Commission for Science, Technology and Innovation (NACOSTI), the Kenya National Innovation Agency (KENIA) and the National Research Fund (NRF) to ensure funding and implementation of prioritized research programs within the Konza Technopolis; and
- m) Make recommendations to the National Treasury on appropriate fiscal tax and other investment incentives that the Authority deems necessary to encourage private sector investment and participation in the development of Konza Technopolis.

The Bill contains a number of incentives for any enterprises licensed by the Konza Technopolis, including:

- a) The full protection of its property rights:
- b) The right to repatriate all capital and profits, without any foreign exchange impediments;
- c) The right of protection of industrial and intellectual property rights, in particular patents, copyrights, business names, industrial designs, technical processes and trademarks:
- d) The right to transact and carry on business with an enterprise operating outside the Konza Technopolis;
- e) The right to contract with any other enterprise, to buy, sell, lease, sublet or otherwise exercise, manage, or transfer land or buildings within Konza Technopolis, subject to the said enterprise's own property rights; and
- The right to determine the prices of any of its goods or services sold inside or outside Konza Technopolis for which it is licensed.

The Bill has been delayed because of a perceived conflict with the Ministry in charge of industrialization. It appears now that this conflict has been addressed by a revision of the Bill. The Bill will now start making its journey towards enactment.

3.2.2.2 **Special Economic Zones Act**

The government rolled out Special Economic Zones (SEZs) which will enjoy lower taxes to boost Kenya's investment profile. Designated trading zones are established by the Ministry of Industrialization to aid in reduction of key cost drivers such as transportation. With the



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facilitation of the SEZ Act, goods are produced at lower costs due to relative proximity to raw material sources and preferential licensing terms provided to investors to operate in designated zones. The Act provides for numerous tax incentives for investors, including exemption from all existing taxes and duties payable under the Customs and Excise Act, Income Tax Act, East African Community Customs Management Act and Value Added Tax Act on all special economic zone transactions.

Konza will have the capability to house SEZs as defined in the SEZ Act and regulated by SEZ Authority (SEZA). In this way, the Authority becomes a partner of SEZA.

3.2.2.3 Science, Technology and Innovation Act

The Science, Technology and Innovation (ST&I) Act of 2013 provides for establishment of a research fund that represents 2% of Kenya's GDP.

3.2.3 Privately-owned Local Cities

A number of privately owned cities have emerged in Kenya. These cities (not necessarily smart cities) can be categorized as major real estate developments, and subject to the legal framework established for the real estate sector. In general, private cities have no independent legal and regulatory frameworks and often face challenges in engaging with the public sector. They have struggled to become operational.

Table 3-3 shows a summary of the private cities or facilities in Kenya.

Table 3-3 Summary of Private Cities in Kenya

City/Facility	Size	Start Date	Population	Primary Purpose	Secondary Purpose	Summary
Tatu City	2,500 acres	2010	70,000 residents	Residential/Community Living	Light Industry/Com mercial	Tatu City, located in the outskirts of Nairobi is part of the Kenya Vision 2030. On completion, it will be a large-scale urban development consisting of residential, commercial, industrial, tourism, social and recreation amenities. Underlying Tatu City's design is a visionary concept aiming to shift urban development in Kenya from the familiar single node model to a decentralized urban environment. Tatu will significantly de-congest Nairobi by offering a unique live, work and play environment for an estimated 70,000 residents and 30,000 day visitors. Firms such as Uniliver, Kim Fay, Maxon and Heineken Brewers have shown interest in setting up at Tatu.
Garden City	32 acres (13 Hectares)	2012	800 residential units 50,000 square metres (Retail) 10,000 square metres (Office)	Fully integrated mixed use development targetted equally towards office, retail and residential development	-	Garden City is a mixed-use development on Nairobi's Thika Highway with a primary catchment area of 1.5 million people. The aim of Garden City is to be an integrated residential, retail and office development centred around Garden City Mall, one of the largest retail malls in East Africa and Garden City Village; a luxury residential complex consisting of 800 units on completion and an office park with over 20000 sq. m.



City/Facility	Size	Start	Population	Primary	Secondary	Summary
City/i acility	3126		Fopulation			Summary
		Date		Purpose	Purpose	
Two Rivers	100 acres	2012	851,000 sq.	Fully integrated mixed	-	Two Rivers is situated on 100 acres within
	(41.21		m. total built	use development		Nairobi's diplomatic blue zone, Two Rivers is
	Hectares)		up area on	targetted equaly		wedged between the Northern Bypass and Limuru
	,		completion	towards office, retail		Road. Over 30% of the land is set aside as parks
			·	and residential		and natural open spaces.
				development		
						The development is described as an integrated
						Retail Entertainment and Lifestyle centre and will
						provide 42,000 sq. m. of retail space and 10,000
						sq. m. of office space. The residential complexes
						will consist of both high and medium density
						residential areas
						Todiaciniai areas
						Two Rivers is marketted as a premium
						development aimed at benefiting from a catchment
						area that is in close proximity to various affluent
						suburbs of Nairobi. There is easy access to other
						·
						parts of Nairobi from Two Rivers. The Central
						Business District is just 14 Km away, 29 Km from
						Jomo Kenyatta International Airport and 5 Km from
						the UN Complex.

3.3 INTERNAL CONTEXT ANALYSIS

This section outlines the key aspects of the internal Authority context that may have a bearing on strategic planning.

3.3.1 Master Developer Partner 2

Master Developer Partner 1 (MDP1) prepared a detailed business plan and master plan for Phase 1. During this period, marketing for the city happened and a database of almost 300 investors was documented by MDP1. Master Developer Partner 2 (MDP2) was employed in August 2014 as a full consortium of all professionals required to impliment the city, including project managers, financial consultants, marketing/communication/PR consultants, architects, planners, property lawyers, etc.

MDP2's focus is on program management of the design and construction of the initial publicly-funded Phase 1 infrastructure required to service the site together, attracting and signing-up private developers and tenants expected to fund the full vertical development of Phase 1. MDP2 effort follows the master plan and business plan prepared by MDP1 and its commercial and critical mass requirements. Also, MDP2 provides the necessary knowledge transfer to the Authority and marketing and branding support. MDP2's charge is to turn the Authority into a self-sustaining entity that can take the project forward with limited external support in the subsequent phases once MDP2 concludes its assignment at the end of five years.

MDP2 has wide-ranging responsibilities including supporting land-lease negotiations, public relations, creating development guidelines, procuring and managing detail design and engineering consultants, reviewing PPP opportunities and procuring and managing contractors.

MDP2 to date has developed guidelines for development and design guidelines for the Authority for use to engage bidders to support the building of the infrastructure in Phase 1A: Streetscapes and Utilities, Parks, Worker Housing, Social Services, University, Commercial and Residential Parcels. Auxiliary reports have been developed to support the Authority interworking as an entity when engaging sub consultants: Management of Design Consultant, Construction Consultant plans and Procurement. MDP2 is also charged with developing the One-Stop Shop, business processes and land leasing plans, policies and processes.

MDP2 was supposed to run the project for five years as the Authority's human capacity was being build up slowly. The onboarding of MDP2 was delayed by almost a year due to budget problems and therefore its scope had to be reviewed. At the same time, a lot more capacity than had been planeed seems to have been acquired in the first two years. This upfront onboarding of staff into the Authority should effectively change the way the project is implemented.

The organizational set up of the Authority will evolve with the phased development of the Technopolis. The organizational structure of Konza will evolve and will initially rely heavily on consultants, especially MDP2. External resources and expertise will continue to play an



important role as the Technopolis develops. As it becomes a more established city, the Authority will increase its city management and service regulation role, and reduce on the infrastructural development role.

The realization of the Technopolis has however been delayed for a long time. By 2015, things had began to turn around. This turnaround has achieved largely because of an inter-ministerial committee that solved all emerging issues and support from a dynamic Board of Directors appointed in 2014 that took matters in their hands, creating its own roadmap and closely monitoring its implementation. Change also happened because the Board gave the acting CEO authority to make decisions and report on strict deadlines and the Board hired people into key positions, at competitive salaries, to move matters forward.

There was a feeling that the strategic plan would help to get things back on track and provide a direction for the next five years, beyond MDP2. The work of MDP2 will interface with this strategic plan for only about two years. This strategic plan is designed to ensure that the Authority will have the requisite institutional capacity to complete the rest of the phase 1 infrastructure construction.

3.3.2 Governance

The Authority is overseen by a Board of Directors from the Government and private sector drawn from real estate development, international business community, investment and financial management. The current Board is the second one and was inaugurated in 2016. It has a three year term and will oversee the implementation of this strategic plan for the next two to three years.

3.3.3 Organizational Structure and Human Resources

The staff establishment is shown in Table 3-4. This table also shows the staff in post and the variance.

Position Establishment Staff In-Post **Variance** CEO 1 1 0 **Directors** 5 4 1 Managers 8 4 5 **Assistant Managers** 4 4 0 Officers 5 2 3 Assistants 12 5 8 Secretaries/Receptionist 2 3 1 Drivers/Caretaker 4 4 0 Office Assistants 1 1 1 **TOTAL** 44 27 18

Table 3-4 Staff Establishment, July 2016/17

It is evident that the Authority is gradually achieving optimal staffing levels as per the current establishment.

3.3.4 Funding

Private Public Partnership (PPP) program has been initiated. It however had to be rescheduled because the ability to finance the project (income) given that Konza was a green field will not be viable in the short term.

At the same time, awareness creation of the potential impact of Konza Technopolis on the Kenyan economy in the long term among key stakeholders is critical. When the Authority took some members of the National Assembly to the Research Triangle in North Carolina in the USA, they began to appreciate the potential contribution of the Authority national socioeconomic development – by for instance creating and sustaining jobs for employees at all levels of their career, and thus, sustain families.

Engineering, procurement, construction and finance (EPCF) is a variant of PPP. It is a loan guaranteed by GoK. This was developed because the Government had no money to fund the construction of the smart city. The concept has worked in the water sector. It is however not guaranteed that this type of funding will work. If it does not, then the Authority will need to pursue other options of securing funding. Some of the options that are open include:

- a) Donor conference to obtain development aid. This will however require the involvement of the National Government and it will take quite a while. If this was to be pursued, it would have to be in 2018 after the 2017 national elections.
- b) Government financing. Exchequer funding will continue to be a key source of funding for Konza. It will be important that Konza lobbies for increased funding from the Exchequer
- c) Unclaimed assets. The Unclaimed Financial Assets Authority (UFAA) was established pursuant to the Unclaimed Financial Assets Act No. 40 of 2011, Laws of Kenya. It is estimated that the unclaimed assets received by UFAA is stands at over Kshs 16 billion. With the engagement of the Cabinet Secretary in charge of the Treasury, it is possible for Konza to use the unclaimed assets to fund development projects.
- d) Long-term leases and a developer to control
- e) Land parcel disposition
- f) Infrastructure bond. This is a lengthy process, with stakeholders expecting high returns
- g) Scale down the program In addition to KAIST, get a technology or innovation anchor tenant and implement the scaled down program with whatever resources are available
- h) Naming rights

3.3.5 Infrastructure and Technology

The Technopolis infrastructure is to be developed in the first five years. Given that it is at the very early stages of infrastructure development, there is very little in terms of physical infrastructure and use of technology. In the Authority based in Nairobi, there is ICT infrastructure in all the

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offices, with access to the internet. However, there is very use of technology in terms of automation of the key business processes.

3.3.6 Processes

Konza Technopolis was hyped quite a lot before it was launched in 2012 by the former President, His Excellency Mwai Kibaki. Despite the initial budgetary and staffing challenges before the MDP2 consultants came on board in August 2014, the Authority managed to get the NEMA approvals, SRC approvals, its first board, a small complement of staff, new premises, an interministerial committee, a stakeholders' forum, a draft KoTDA Bill, among other achievements. The technical departments were formed and critical pople recruited even later. In addition, the strategic planning process was initiated before critical persons were in place. Therefore there was a mismatch in marketing Konza and onboarding critical other processes.

The marketing consultants, Development Counsellors International (DCI) from USA, came on board by June 2016. They will produce business engagement strategy in terms of a marketing blueprint. The finalization of the strategic plan in 2016 will give guidance to the marketing work by DCI and the work of other consultants wo may be engaged.

A consensus was emerging that that Konza should be emotionally felt even before the physical city is constructed, e.g. by engaging stakeholders and holding events at Konza. The marketing and branding of Konza and the establishment of the City into the vocabluary and hearts of Kenyans should occur prior to turning the first shovel of dirt for physical construction. It is the intent to engage the population around the concept of Konza.

3.4 STAKEHOLDER ANALYSIS

It is important to analyse the stakeholders of Konza Technopolis Authority. One of the popular tools used for this analysis is the Interest-Influence Grid. It maps the stakeholders according to their interest and power or influence in relation to the intervention. The two dimensions of the grid are outlined below.

- a) **Influence:** The extent to which the stakeholder is able to persuade or coerce others into making decisions, and following certain course of action. Those with High Influence are likely to be your most useful supporters or most dangerous opponents.
- b) **Interest:** This represents the interest the stakeholder has on Konza. This is likely to be most obvious when stakeholder interests converge closely with those of Konza.

Figure 3-1 shows the interest-influence grid. This analysis helps to prioritize your focus on stakeholders.

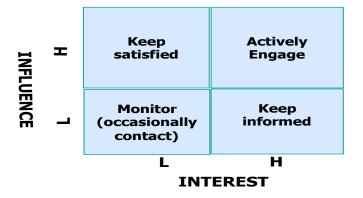


Figure 3-1: Interest-Influence Grid

The interpretation is as follows:

- a) Low Interest, Low Influence These are relatively unimportant stakeholders. You only need to keep in touch with them, just in case their status changes.
- b) High Interest, Low Influence These stakeholders only need to be informed because they may gain influence by low level blocking, e.g. resistance to the strategy.
- c) Low Interest, High Influence These stakeholders will not be worried about what you do but can derail the strategy if persuaded to act by those opposed to the strategy. Therefore you must keep them satisfied.
- d) High Interest, High Influence These are key players who will be significantly affected by the strategy and have the influence to do something about it, either supporting or opposing the strategy. It is important to actively engage these stakeholders in the strategy, ensuring that they understand the strategy and have a buy-in.

The list of stakeholders is shown in Table 3-5. This table also shows how the stakeholders can be mapped onto the grid in Figure 3-1.

Table 3-5: List of Konza's Stakeholders and their Interests and Influence

	Stakeholder		Interest		Influence
		Level	Reason	Level	Reason
1.	R&D partners	Н	Have a high interest in the innovation ecosystem and are critical to it	Н	Have linkages to other innovation partners for financing, human resource and guidance on research requirements
2.	Education partners	Н	Have a high interest in the innovation ecosystem and are critical to it	Н	Have linkages to other innovation partners for guidance on industry needs, research assistance and mentoring of students
3.	Commercial partners	Н	Provide financing to R&D and Education programs	Н	Have linkages to other innovation partners for new products and human resource development
4.	Infrastructure developers	Η	Konza offers investment opportunities	Н	Provide horizontal infrastructure without which you cannot



Stakeholder	Laying ai	Interest		Influence
	Level	Reason	Level	Reason
				develop the vertical infrastructure
5. Ministry of ICT	Н	Konza is critical in developing the ICT/ITES sector and support of the innovation ecosystem	Н	Provides policy support, allocates budgets to the Authority, appoints Directors and monitors performance
6. The National Treasury	Н	Interested in the revenues that the Authority can generate	Н	Provides financial support to the Authority
7. The Board of Directors	Н	Are responsible for ensuring the success of the City	Н	Have power to set the strategic direction and direct the operations of the City
8. Management	Н	Are responsible for managing the City and showing results	Н	Can determine the success or failure of the City
Surrounding County Governments and area Members of Parliament	Н	Are highly interested in the benefits they can derive from Konza, e.g. jobs, investment and taxes	Н	If they politicize the City, it can affect Konza negatively, and conversely
10. Real estate developers	L	There are other opportunities for these stakeholders to invest in real estate (e.g. local private 'cities')	H	Konza cannot have tenants without the vertical infrastructure by real estate developers
11. Business Membership Organizations (BMOs) e.g. KEPSA	L	Konza is one of the many members	Н	Potential investors will be members of some of the BMOs and can support in policy advocacy
12. Ministry of Education, Science & Technology	L	Konza is not in the Ministry	Н	Ministry has critical agencies that relate to ST&I sector (NACOSTI, KENIA and NRF) and must support the establishment of universities
13. Enterpreneurs	L	There are competing spaces where entrepreneurs can go. Konza is not yet attractive for entrepreneurs	Ħ	Are critical on commercialization of innovative products and in generating GRP
14. Residents	L	There are other places where residents can stay. Konza is not yet attractive for residents	Н	Without residents, there is no City
15. Business Support Organizations (BSOs) e.g. Venture Capitalists	L	Very little ST&I activity taking place for BSOs to be interested	Н	Are critical to funding commercialization of innovations
16. Innovation Support Organizations (ISOs) e.g. KIPI	L	Very little ST&I activity taking place for BSOs to be interested	Н	Are critical to supporting innovations
17. Global organizations, e.g. IASP	L	Konza would be one of the many members	Н	Set the standards



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				-	
Stakeholder		Interest		Influence	
	Level	Reason	Level	Reason	
18. Other smart cities	L	Konza is another smart city in another part of the world	Н	Are the basis for benchmarking and potential partners	
19. Konza employees	Н	Are interested in the success of Konza for career and livelihood	L	Have little power to significantly affect the City	
20. The Community	Н	Is interested in the jobs and infrastructure that will come with the City	L	Has very little sway over matters in the City	

3.5 SUMMARY OF SITUATIONAL ANALYSIS

The situational analysis, in form of the internal and external environmental analysis, is critical in understanding the conditions within which organizations operate. These conditions can either be facilitating (opportunities and strengths) or hindering the organizations towards excellence performance (threats and weaknesses). Strategic environmental analysis provides an appreciation of the capabilities of an organization in terms of its strenths and weaknesses. It also provides the external factors that affect it, in terms of opportunities and threats. The strengths, weaknesses, opportunities and threats (SWOT) identified through this analysis that provide a good indication of what the future strategies will be.

The SWOT issues were generated from the persons interviewed and from a workshop composed of Konza and Tetra Tech staff as shown in Annex 1. They are outlined in Tables 3-6 to 3-9.

3.5.1 Strengths

Table 3-6 SWOT Analysis - Strengths

Issues	Explanations	
Governance		
Leadership	Board of Directors that is multi-skilled and committed	
Policies	Most investor-oriented policy documents have been drafted	
Culture		
Versatile organization	 Fact that the Authority has started on a clean slate Young and small organization that is able to be versatile and easily adapt to change 	
Human resources		
Internal human capacity	There is a diversity in the professions of staffThe Authority has started recruiting staff	
MDP2 partnership	 Availability of diverse and experienced human resources Partnership with MDP2 to get Konza Technopolis off the ground 	
Performance contracting	Performance contracting has been cascaded to all staff	
Infrastructure		
Master plan	There is an approved master plan	
Infrastructure design guidelines	Streetscape, waste water and other guidelines are complete, opening opportunity for development of the horizontal infrastructure of the city	
	Start of construction of the first building. This will house the early investors and provide services to investors on-site	

3.5.2 Weaknesses

Table 3-7 SWOT Analysis - Weaknesses

Issues	Explanations	
Governance		
Strategic direction	Lack of finalization of a strategic plan to define the vision and strategic direction	
Leadership capacity building	 Need for additional leadership capacity building at Board and Management levels 	
Organizational structure	Boundaries of managers in technical departments need additional clarity to avoid duplication of effort	
Policies	Most internal policies have not been developed	
Systems		
ICT systems	All functions have not been automated	
Performance management system	Performance management system not clearly defined	
Culture		
Institutional culture	Institutional culture has not yet been created - in the early stages of team formation	
Openness	Need to create a culture where people are open to share their ideas	
Financial		
Investment financing	There has not been a viable source of funding for infrastructure development, making it difficult to build the smart city	
Funding	Dependence on grants	
Human resources		
Attracting high-end talent	Challenges in attracting high-end talent in developing smart cities	
MDD2 consultancy	No incentives because of lack of policies MDP2 peods to appure knowledge transfer.	
MDP2 consultancy	MDP2 needs to ensure knowledge transfer	

3.5.3 Opportunities

Table 3-8 SWOT Analysis - Opportunities

Issues	Explanations
Political	
Political goodwill	Support from the Executive arm of Govt (President, Cabinet Secretary and Princial Secretary, with PS attending Board meetings in person)
Vision 2030	The fact that Konza Technopolis is a Vision 2030 project
Democracy	Kenya is a relatively mature democracy
Development partners	Development partners are interested in funding Kenyan projects
County governments	Support from the neighbouring county governments



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Issues	Explanations	
	Existence of Governors' Consultative Forum for consultation, discussion, dissemination and buy-in	
High-level champion	Opportunity to create a high-level champion for Konza Technopolis	
Economic		
Local innovation funds	 Availability of innovation funds from different sources in Kenya (NACOSTI, NRF, R&D funds in Energy, Universal Services Fund in CA, Safaricom Foundation, etc.) Significant presence of venture capitalists (VCs) 	
Funding	 Plans for funding of science and technology parks around the country by MoEST Engineering, procurement, construction and financeg (EPCF) provides an opportunity to secure funding for Konza Technopolis infrastructure 	
Talent pool	Access to large pool of educated, technologically savvy and innovative youth	
Destination for FDIs	 Kenya is an attractive hub for innovation, finance, diplomacy, connectivity, logistics, etc. Kenya is also attractive from a quality of life perspective Kenya and Nairobi are popular destinations for FDI 	
Land	Availability of 5,000 acres of land for development of a mixed use city	
Investors	 There is significant interest from investors – received a number of expressions of interest Plans are underway to develop an advanced research university with assistance from KAIST – one of the top 10 innovation universities globally 	
Infrastructure	Horizontal infrastructure projects have began (Thwake dam, power sub-station, etc.)	
Strategic location	 Easy access to infrastructure, e.g. JKIA, Northern Corridor road and rail (SGR) infrastructure, broadband connectivity, water, electricity, etc. to serve the smart city infrastructure Strategic location of Konza Technopolis with respect to nature (flora and fauna), animal migratory corridor, etc. 	
Social	The state of the s	
Urbanization	Increasing urbanization in Kenya and many other parts of the world Strategic partnership with UNHABITAT	
Technological	Charles parameters from Comments	
Developments in technology	Opportunities to use cutting-edge technologies (e.g. big data analytics, IoT, sensors, integrated urban transport systems, etc.) to develop the smart city	
ST&I sector	ST&I as the fastest growing sector globally	
Technological innovations in Kenya Environmental	Increasing technological innovations e.g. MPESA, USHAHIDI, MKOPA, INTERFERON (former KEMRON), etc.	
Other smart cities	Possibilities to learn lessons from best practice of other smart cities	
Legal and regulatory framework		
Legal infrastructure	Existence of an enabling legal infrastructure, e.g. Constitution, Special Economic Zones Act, Data Protection Act, etc.	



Issues	Explanations	
Cross-cutting		
Smart city organizations	 Membership of international smart city and science park associations (e.g. IASP - International Association of Science Parks and Areas of Innovation) may can give Konza a profile Linkage with Smart Africa based in Kigali might bring in new opportunities 	
Uncontested ST&I space	The Authority has the opportunity to occupy the uncontested ST&I space in Kenya	
Standards	Sustainability guidelines already in place	

3.5.4 Threats

Table 3-9 SWOT Analysis - Threats

Issues	Explanations
Political	
County governments	Goodwill from neighboring counties needs to be enhanced
Security	Insecurity posed by Alshabab and other terrorist groups
Political goodwill	 Need to cultivate sufficient buy-in from some of the arms of Government Government priorities can change and the financial subsidy for Konza Technopolis withdrawn or reduced to a minimum
Corruption	 Despite various efforts made by the Government, perception of a corrupt public sector and society still lingers. This acts to deter investors
Coordination of ST&I	ST&I is found in a number of ministries (especially in Ministries in charge of Industrialization, Science and Technology and ICT), with very little coordination
Economic	
Scaling of start-up businesses	Limited access to funds for scaling up small start-up businesses
Horizontal infrastructure	Horizontal infrastructure is at low level of development (roads, rail, water, etc.)
Exchequer funding	Limited budgetary allocation by the Exchequer. With the current level of funding, it would take very many years to build the infrastructure necessary to attract investors
Competition	 Competition from other countries that have been developing smart cities or technology parks, e.g. Botswana, Kigali Technology City in Rwanda, Innovation Hub in Pretoria, Botswana ICT Hub. Investors will go to these other destinations Competition for FDI from other African countries (Egypt, South Africa and Morocco) Competition for local real estate investors by local real estate projects marketed as 'cities'
Greenfield risk	Investment risk given that Konza Technopolis is a green field
Intellectual property infrastructure	Inadequate intellectual property legislation
Social	
Public perception	Poor public perception and high reputation risk given the time it has taken to have any tangible deliverable, leading to loss of public support



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Issues	Explanations			
	 Unrealistic public expectations/limited information especially in regard to the citizenry The product that the Authority is selling is not understood by potential customers and the public 			
Construction in Konza Technopolis environs	 Inadequate control of infrastructure developments in the periphery of Konza Technopolis 			
Technological	perspectation and the second persons			
ICT sector	ICT is not set up as a stand-alone sector and therefore its contribution to GDP is difficult to stand out			
Environmental				
Water	The ground water initially available is insufficient to sustain a big city			
Environmental concerns	Environmental concerns e.g. carbon emissions			
Wildlife concerns	Concerns of interference with wildlife corridor			
Climate change	Challenges of climate change including drought and floods that might affect Konza given its location			
Legal and regulatory fram	nework			
KoTDA Bill	Delayed enactment of the KoTDA Bill			
Land disposition	Inadequate legal and regulatory framework for land disposition			
Land title	Challenges associated with not having the land title			
Cross-cutting				
Commercialization	Low levels of commercialization activities and therefore very limited experience to learn from			
Local universities	Few start-ups coming out of our local universities, making it difficult for the Authority to link up with them			

4.0 STRATEGIC DIRECTION

4.1 STRATEGIC THEMES

Strategic themes are the key focal points around which planning takes place. These themes are based on the strategic analysis in Chapter 3. From the strategic analysis, five strategic themes were identified. Three are two pillars, representing the core business of Konza Technopolis Authority and three enablers as shown in Figure 4-1.

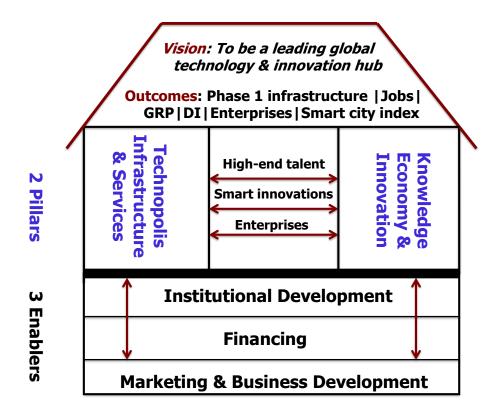


Figure 4-1: Schematic Representation of the Strategic Themes

The two pillars are the Technopolis Infrastructure and Operations and the Knowledge Economy and Innovation. The former is concerned with developing the Technopolis infrastructure and providing City services. On the other hand, the latter's role is the development and exploitation of knowledge and technology. This is where high-end talent is developed for the Technopolis; and where innovative smart solutions that solve problems in the Technopolis, other parts of Kenya and globally are created. The Technopolis provides a platform for testing these solutons and then commercializing them. Therefore the two pillars have a symbiotic relationship as shown in Figure 4-1. The pillars are supported by the three enablers as shown in the figure.

Table 4-1 provides a more detailed explanation of the strategic themes.

Table 4-1 Strategic Themes

	trategic Themes	Components	Comments
Pil	lars		
1.	Technopolis Infrastructure & Services	 a) This essentially constitutes the physical face of Konza Technopolis. It includes A109 Interchange with city welcome center where visitors will be electronically screened (smart security); available parking slots will be availed electronically (smart parking); undergroung power cabling in ducts with smart (digital) metering; and roads fitted with digital speed sensors (smart traffic control) b) Key projects that will be implemented during phase 1 development are provided in Annex 3 c) Once development is complete, this will entail operation and management of City infrastructure from the Technopolis' control centre, including continuously data gathering and analysis to find opportunities to become a more efficient City – water consumption, waste minimization, land use application processing, library book loans, etc. 	The basic smart city infrastructure will be developed during the first phase of the Authority's strategic plan It also represents the major component of the MDP2 program of activities It has symbiotic relationship with the Knowledge Economy and Innovation Pillar below and supported by the Enablers below
2.	Knowledge Economy and Innovation	This is the innovation ecosystem of Konza with the following key components: • Universities • R&D Centres and Pre-incubation facilities • Research Centers of Exellence (CoEs) • Incubation centres/labs • Acceleration centres/labs • Collaboration bridge between education, research and enterprise/ businesses	a) The success of Konza is dependent on the enabling environment created for the recruitment, promotion, development and exploitation of scientific, engineering, and technology knowledge b) The purpose of this Pillar is: to develop high end talent for the Technopolis; to create a pipeline of innovative, relevant and smart solutions and commercialize them in the Technopolis; and to create innovative smart solutions for problems in the Technopolis, other parts of Kenya and globally. c) It will have symbiotic relationship with the Konza Technopolis Infrastructure and Services Pillar above and supported by the Enablers below



Strategic Themes	Components	Comments
, and the second		d) Pillar can start existing virtually before the physical Konza Technopolis
Enablers		
3. Financing	Financing has the following components: Resource mobilization for construction of the Technopolis pillar Resource mobilization to fund the other enablers Revenue generation from parcel disposition and services offered by Konza Technopolis	 This is an enabler because without funds, the Authority cannot build Konza Technopolis or carry out any investment projects Lack of aquate and timely financing is also one of the key reasons why the Authority has delayed in building Konza Technopolis After successful implementation of phase 1, financing might no longer be a key enabler
4. Marketing and Business Development	The key components of this foundation are: • Marketing and branding • Image and brand retention • Relations management • Business development • Development, managemenet and deployment of communications plans • Facilitation of investors • Creation and operating the onestop shop	The objectives of this enabler are to: Create and sustain an enabling investment environment through marketing and improved investor facilitation Attracting businesses from the marketing effort that result in the 'long-term value' for the key stakeholders Managing the complicated and inter-woven and varying relationships
5. Institutional Development	This is essentially the Authority, with the following components:	Given that areas of innovation and smart cities are new concepts in Kenya and that the Authority is supposed to contribute significantly to national development, it is critical that MDP2 develops the institutional capacity to ensure that the Authority sustainably adds value based on international best practice

4.2 STRATEGIC OBJECTIVES, STRATEGIES AND STRATEGIC INITIATIVES

Strategic Objectives are the broad statements or goals about where the Authority wants to be in five years. They address the strategic themes identified in Section 4.1 and are supportive of the mission and vision in the context of the core values given in Chapter 3. Strategies on the other hand are statements that set HOW the Authority will achieve its strategic objectives. They represent the alternatives selected from the many options of achieving those objectives. Finally, strategic initiatives are critical high-level activities or projects that if initiated will jump-start the realization of the strategic objectives. They complement the strategies.

Table 4-2 shows, for each strategic theme, the strategic objective, strategies and key initiatives. This is based on the strategic analysis detailed in Chapter 3. The projects to be implemented in phase 1, which are referred to in the Technopolis pillar, are provided in Annex 3.

Table 4-2 Strategic Objective, Strategies and Key Initiatives

Strategic Themes	Strategic Objectives	Strategies	Strategic Initiatives
Pillars			
Technopolis Infrastructure & Services	To develop and manage a world class smart city	a) Develop critical infrastructure master plans	 Benchmark with other smart cities
	with a vibrant, safe and secure, healthy and	b) Develop design guidelines and detailed designs for all phase 1 projects	Construct the first building at KonzaDevelop and implement
	sustainable ecosystem	c) Construct all phase 1 projects and auxiliary facilities in Konza	the land disposition process and licensing scheme
		d) Coordinate offsite infrastructure development	Develop concept notes for all phase 1 projectsConstruct the first
		e) Collaborate with Counties in regulating developments in the 10km buffer zone	residential units and basic city support facilities for residents Prepare a buffer zone
		f) Prepare a framework for operation and management of completed infrastructure projects	plan in collaboration with partners
		g) Enhance public safety and security	
		h) Encourage a vibrant arts, culture and entertainment scene	
		i) Improve environmental conservation	
		j) Provide reliable, available and affordable utilities	



Strategic Themes	Strategic	Strategies	Strategic Initiatives
otrategic Themes	Objectives	Strategies	Strategic illitiatives
2. Knowledge Economy and Innovation	In partnership with other actors in the National Innovation System, to recruit, attract, and develop high-end talent and create relevant, and smart innovative solutions and commercialize them	 a) Provide a one-stop shop for ST&I actors b) Develop a Konza Technopolis online portal as a platform to provide electronic services c) Implement an information and digital literacy program for all residents d) Institutionalize an innovation pipeline, including a technology transfer office, and a business accelerator identifying and developing for start-ups to scale e) Provide a platform for entrepreneurs to exploit the smart city infrastructure to innovate new products/services using f) Provide data centre services g) Leverage on local innovation funds to scale start-up and small businesses based in Konza h) Build a platform for collaboration in knowledge economy and innovation 	 Develop the Konza innovation pipeline development program Create a virtual Konza innovation ecosystem Setup a Konza techology transfer and commercialization office Set up KAIST and quality local universities as key educational anchor tenants in Konza Develop a linkage program with selected global innovation centres (e.g. Skolkovo (Russia), Cyberjaya (Malaysia), Yachay (Ecuador) & Research Triangle (USA) Provide a platform for launch of businesses and products Establish a centre for knowledge economy and innovation for collaboration between industry players, education institutions and R&D centres Establish a foundation for supporting innovations Attract the hosting of esolutions (e.g. e-Government services) in Konza
Enablers			
3. Financing	To mobilize adequate and sustainable funding to meet the Authority's mandates and changing needs of the business community and residents	 a) Develop and implement a resource mobilization strategy b) Lobby for enhanced Exchequer funding c) Implement a strategy to unlock alternative financing options, including infrastructure bonds, diaspora funding, naming rights by philanthropists, and development partners 	Develop the Konza financial sustainability and project financing strategy Engage financial services sector for funding, e.g. unclaimed assets and pension funds Benchmark with other ICT parks with diverse funding strategies and programs



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Strategic Themes	Strategic	Strategies	Strategic Initiatives		
	Objectives	d) Generate revenue from parcel disposition and services offered by Konza Technopolis Authority e) Establish, manage and administer an innovation fund to support the Konza innovation ecosystem	Develop financing models, including PPP, Real Estate Investment Trust (REIT)		
4. Marketing and Business Development	To create a strong brand and image of the City that will attract, facilitate and retain investors	a) Develop a marketing plan to firmly establish Konza as an investment destination b) Develop and implement a PR, communication and digital strategies c) Develop and implement a brand development plan d) Implement the marketing plan and attract quality Research, Education and Commercial partners in Information Technology Enabled Services (ITES), Life Sciences and Engineering e) Develop new partnerships and brand assets and sponsorships with revenue generation potential f) Lease land to investors in accordance with the Konza Technopolis parcel disposition policy and all applicable laws for construction of vertical municipal building structures g) Develop, monitor and evaluate stakeholder relationships h) Develop and implement	 Develop and implement a comprehensive stakeholder management program Develop a business model Organize innovation events in Konza (e.g. expos, awards programs, conferences, youth camps, etc.) Develop an investor outreach program, including youth and start-up focused projects and promotion tours nationally and internationally Establish and operate a Small Enterprise Support Centre to develop and provide business advisory services to start-ups and small businesses Develop an effective incentives scheme for all investors, balancing between domestic and foreign investments Establish a regulatory and business one-stopshop for investors 		
		an anchor investor program			



Strategic Themes	Strategic Objectives	Strategies	Strategic Initiatives
5. Institutional Development	To ensure that the Authority has adequate institutional capacity to fulfill its mandate	 a) Institutionalize core values b) Review organizational structure and right-size staffing c) Develop leadership and human resource capacities d) Recruit and retain top talent e) Review staff terms and conditions of service f) Develop all key policies g) Automate core business processes h) Implement a performance management system i) Lobby for enactment of the Konza Technopolis Bill 	 Organize forums for team building and communication of core values Cascade performance contracting to staff Develop and implement an induction program for all staff and Directors Develop a continuous staff training and personal development program Develop and implement service charter at all levels Develop and implement an internship program

OUTCOMES, OUTPUTS AND KEY PERFORMANCE INDICATORS 4.3

Table 4-3 shows, for each strategic theme, the outcomes, outputs and key performance indicators. This is based on the strategic analysis detailed in Section 3: Strategic Analysis.

Table 4-3 Outcomes, Outputs and Key Performance Indicators

Strategic Theme	0	utcomes and Outputs	Key Performance Indicators	Sources of Data for Monitoring Performance
Pillars				
Technopolis Infrastructure	Outco	mes		
& Services	1.1	Completed phase 1 infrastructure development	% of phase 1 infrastructure development completed	Phase 1 Master planMDP 1 Deliverables
			 % of phase 1 infrastructure development completed and in use 	
	1.2	Improved smart city governance	 Rank in global smart city governance 	ISO and Smart Cities Council
	Outpu	its		
	1.1.1	Approved master plans for critical infrastructure	 % of approved master plans for critical infrastructure 	Phase 1 Master planMDP 1 Deliverables
	1.1.2	Approved design guidelines for all phase 1 infrastructural	% of approved design guidelines for phase 1 infrastructural projects	Phase 1 Master planMDP 1 DeliverablesMDP2 Contract
		projects	% compliance with approved guidelines	
	1.1.3	Framework for operation and maintenance of completed infrastructure projects in place and in use	% completion of the framework for operation and maintenance of completed infrastructure projects	
	1.1.4	Increased parcel disposition	 Proportion of disposed parcels where 	



Laying the Foundation for Konza: An Area of Innovation Contained in a Smart C				
Strategic Theme	Outcomes and	Key Performance	Sources of Data for	
	Outputs	Indicators	Monitoring	
			Performance	
		construction has started • % parcels under		
		master developer contract		
		 % Land acreage under master developer contract 		
	1.1.5 Framework for operation and maintenance of completed infrastructure projects in place and in use	% completion of the framework for operation and maintenance of completed infrastructure projects	ISO and Smart Cities Council	
		 Completion of Operations and Maintenance Program for installed infrastructure 		
	1.1.6 Offsite infrastructure connectivity to	% of offsite infrastructure completed	Plans by KURA, KENHA and KERA	
	Konza complete and functional	 % of offsite infrastructure completed and in use 		
	1.2.1 Improved public safety and security	Number of non- violent incidents recorded (non- lethal)	Phase 1 Master planMDP 1 Deliverables	
		Number of violent incidents recorded	MDP2 Contract	
	1.2.2 Increased spaces for and activities in arts,	Level of availability of spaces to play and	Phase 1 Master planMDP 1 Deliverables	
	culture and entertainment	celebrateTotal number of public art projects	MDP2 Contract	
		No. of sponsored arts and culture		
	1.2.3 Improved environmental conservation	% reduction in energy use in city facilties	Phase 1 Master planMDP 1 Deliverables	
		 No. of new trees and bushes planted 	MDP2 Contract	



Laying the Foundation for Konza: An Area of Innovation Contained in a Smart (
Strategic Theme	Outcomes and Outputs	Key Performance Indicators	Sources of Data for Monitoring Performance
	1.2.4 Reliability, availability and affordability of City utilities	 Level of reliability of solid waste disposal Level of recycling % compliance with health regulations for clean and safe drinking water % reliability of power Renewable power generated as % of total power requirements Turnaround time in reponse to outage calls (water, power & communications) Affordability of internet connectivity 	 Phase 1 Master plan MDP 1 Deliverables MDP2 Contract
2. Knowledge economy and	Outcomes	l	
innovation	2.1 Increased entrepreneurship and innovation	Improvement in the entrepreneurship and innovation sub-index	 ERAT⁴ calculation of innovation index based on the inputs (research & development, finance, human capital) and outputs (intellectual property, gross regional product, enterprenuership and employments dynamics) ERAT calculation of enterpreneureshop index based on business formation

⁴ Konza will set up an Economic Research and Analysis Team (ERAT) in order to quantify and monitor several in-house metrics



Strategic Theme	Outcomes and	Key Performance	Sources of Data for
Stratogro momo	Outputs	Indicators	Monitoring
	•		Performance
			rate and percent growth in employer establishments. • Technology transfer analytics (IP, talent recuitments, loyalties, commercialization metrics, strategic partnerships, valuations, new commercialization applicants, and job creation)
	2.2 Enhanced contribution to economic development	 Amount of ST&I direct investment (DI) (US\$ m) Amount of gross regional product (GRP) from ST&I (US\$ m) No. of direct and indirect jobs created in ST&I 	Kenya National Beareau of Statistics surverys and reports analysed/distilled by ERAT
	Outputs		
	2.1.1 Increased ST&I partnerships	No. of universities set up in Konza	Records maintained by KoTDA
		 No. of R&D centres set up in Konza 	 Surveys conducted by KoTDA through the ERAT
		 No. of innovation hubs with a direct link to Konza Technopolis 	 Participation rates in innovation pipeline events and publications
		No. of top talent graduands from Konza Technopolis	 Records of national, regional and international awards in knowledge creation, innovation, and commercialization
	2.1.2 Increased innovations and enterprises	 No. of businesses in the innovation system No. of successfully commercialized innovations 	 Records maintained by KoTDA Surveys conducted by KoTDA through the ERAT Kenya Industrial Property Institute reports



			ation Contained in a Smart City
Strategic Theme	Outcomes and	Key Performance	Sources of Data for
	Outputs	Indicators	Monitoring
			Performance
		 No. of patents/IPs filed that are linked to Konza No. of high-tech companies with presence in Konza Technopolis No. of enterprises whose home is Konza 	Intellectual Property Owners Association of Kenya reports
		Technopolis	
Enablers		·	
3. Financing	Outcomes		
	3.1 Enhanced financial sustainability	Level of adequacy of funds to finance investments and operations	PPRMTEFOthers
		Interest coverage ratio	
		Net financial liabilities ratio	
		 Debt rating 	
	Outputs	1	
	3.1.1 Increased funds for infrastructure projects	Funds mobilised for infrastructure projects as a % of planned infrastructure budget	PPRMTEFMonthly and annual financial reports
		Asset sustainability ratio	
	3.1.2 Increased funding of operations	Funds mobilised for operations as a % of operations budget	
		Liquidity ratio	
		Operating surplus ratio	
	3.1.3 Increased endowments for	Amount of money disbursed from the	
	innovations from the innovation fund	innovation fund to support innovations	



Strategic Theme	Outcomes and	Key Performance	Sources of Data for
-otrategie Tileffie	Outputs	Indicators	Monitoring
			Performance
4. Marketing			
and business development	4.1 Increased attractiveness of	Perception index	Media coverage report
	Konza Technopolis		Marketing report
			Investors report
	4.2 Enhanced contribution to economic	Cumulative direct investment (DI) (US\$ m)	Investors annual reports
	development	Total gross regional product (GRP) (US\$ m)	
		Total direct and indirect jobs created	
	4.3 Increased acquisition of investors	Cumulative direct investment (DI) (US\$ m)	Investing firms annual reports
	Outputs		
	4.1.1 Ease of doing business in	Time taken to settle an investor	Quality control report
	Konza	No. of steps to get the necessary approvals	One-stop shop annual report
	4.1.2 Sustained higher occupancy in Konza Technopolis	% of occupation	Estate management report
	4.1.3 Increased visitors to Konza Technopolis	No. of visitors annually	Visitors report
	4.1.4 Increased partnerships and collaborations	No. of active MoUs with partners	Agreement register
		No. of active MoUs with collaborators	
	4.1.5 Increased investor attraction	No. of investors	Investment report
	4.1.6 Land parcel disposition	No. of land parcels allocated	Real estate report



			ation Contained in a Smart City
Strategic Theme	Outcomes and	Key Performance	Sources of Data for
	Outputs	Indicators	Monitoring Performance
			Performance
	4.1.7 License issuance	 No. of licenses issues No. of business entities within Konza 	License register
5. Institutional	Outcomes	1101120	
development	Outcomes		
	5.1 Enhanced institutional capacity to develop and manage Konza Technopolis	 % of planned targets achieved Level of ISO Certification Awards earned 	 Performance Contracting Evaluation Report Report on progress made towards ISO certification
	Outputs		
	5.1.1 Enhanced human capacity	% of staff trained in their areas of specialization	Staff training inventoryTraining Needs
		% of managers (HoD and above) trained on management and leadership	assessment survey
		% staff completed required training relevant to The Authority values	
	5.1.2 Institutionalised corporate culture	% of staff who have gone through the orientation program	 Training and personal development needs assessment survey
		No. of times core values are communicated and explained to all staff per year	 Quarterly performance targets progress reports
		No. of "State of The Authority" communiqué from the CEO's Office	
		No. of team building events pa	
	5.1.3 Improved efficiency and effectiveness	Level of compliance with service delivery charter at all levels	Quarterly performance targets progress reports



Strategic Theme	Outcomes and Outputs	Key Performance Indicators	Sources of Data for Monitoring Performance
		No. of innovations to improve service delivery	
	5.1.4 Increased institutional performance	Extent of cascading performance contracts to individual level	 Quarterly performance targets progress reports Performance
		Aggregate staff appraisal rating	Appraisal rating report
		% of Units that meet their performance targets	
	5.1.5 Enhanced attraction and retention of top	Work environment index Employee	Quarterly performance targets progress reports
	talent	satisfaction index • % of applicants	Employee satisfactory survey
		from top tier organizations • % retention of staff	Applications data baseStaff turnover reports

5.0 STRATEGY IMPLEMENTATION

5.1 IMPLEMENTATION PLAN

An excellent strategy will deliver expected results if its implementation is good. Various activities ought to be done to ensure successful implementation of this strategy. The key activities are reviewed below.

5.1.1 Internal Consistency

Successful strategic plan implementation requires congruence between the various internal dimensions of an organization. Key among these are strategy, structure, systems, style (leadership), staff (skills, number, attitudes) and shared values. These need to be aligned to support the Konza Technopolis Authority strategic plan being implemented. This is the responsibility of the Board and Top Management.

5.1.2 Annual Work Plans

Annual Work Plan (AWPs) are prepared every year on the basis of intended results, strategies and budgets, reflecting achievements and lessons learned of the preceding year. The AWPs provide detailed activity planned and set out what will be accomplished during the year for result or set of results identified by the Authority or its departments and contains:

- the expected outputs, related to the relevant outcomes;
- the planned annual targets and KPIs;
- activities to carried out towards achievement of the expected outputs;
- timeframe for undertaking the planned activities;
- those responsible for carrying out the activity;
- the resources required to execute each activity; and
- the budget.

A corporate five-year implementation plan has been developed based on the strategic direction in Chapter 4 and is shown in Annex 4. It shows the outcomes, performance indicators for each outcome, targets to be achieved over the plan period, the departments responsible for achieving these targets, target dates and key initiatives to be undertaken. Annual work plans for each fiscal year should be developed based on the implementation plan shown in Annex 4.

5.1.3 Budgets Alignment

It will be important to align both the corporate annual budget and the unit annual work plans with the corporate five-year strategic plan. In 2016/17, the corporate budget must be reviewed and aligned to the budgets in the departmental annual plans that are a result of cascading the strategic plan to the departments. In subsequent years, the unit annual work plans should be developed or reviewed in time to inform the corporate annual budget.

5.1.4 Communication of the Strategic Plan

All Konza Technopolis Authority staff will be involved in implementing this strategic plan. There is need to sensitize them on key highlights of the strategic plan being implemented and what is expected of them. This calls for communicating the strategic plan to all staff. This is the responsibility of Management.

5.2 MONITORING AND EVALUATION

Monitoring and evaluation (M&E) helps those involved in executing the strategic plan to assess if progress is being made in line with expectations in the plan. M&E of performance shall be the responsibility of those who are closely involved in the implementation of the strategic plan at all levels. M&E ensures accountability and illustrates the importance of tasks to the overall functin of the Konza Technopolis engine.

5.2.1 Setting Performance Targets

At the beginning of the year, all the departments will set their performance targets, aligned to the targets in the implementation plan (Annex 4).

5.2.2 Monitoring Performance and Performance Contracts

Monitoring involves establishing indicators; setting up systems to collect information relating to these indicators as shown in the framework above; collecting and recording the information; analyzing the information; using the information to inform day-to-day management; and utilizing the information to make infored decisions regarding changes for continuous improvement. The key reasons for monitoring can be summarized as follows:

- to establish if performance targets have been met and the explanations as necessary;
- to act as an early warning system and detect potential difficulties and help to address them during implementation; and
- to provide feedback to the next phase of implementation, reduce the cost and/or increase the efficiency of post evaluation studies.

The strategic plan should be able to guide the Konza Technopolis Authority in the next five years. It is important that all top and middle managers should derive their annual performance contracts (PCs) from the implementation plan shown in Annex 4 and their annual work plans.

The strategic plan will therefore be implemented through PCs by the officers in the relevant departments. Each department will monitor the implementation of its annual work plan and PC on a quarterly basis and provide proofs of compliance. The departments will be expected to have the capacity to conduct self-assessment of performance and will be given the responsibility to undertake performance measurements and reporting. Monitoring the implementation of the PCs will ensure that the action plans are implemented, and in turn the corporate strategic plan is implemented, in order to realize the growth and development of the Konza Technopolis Authority as envisioned in this document.

5.2.3 Performance Evaluation

Performance evaluation shall be carried out quarterly and annually at all levels. The agreed performance indicators and targets at all levels will be used for benchmarking of this

evaluation. The outcome of the annual evaluation will form a basis for the following year's plan.

5.3 FUNDING

Konza Technopolis Authority needs to find other sources of funding as detailed in the enabler Funding theme.

5.4 ORGANIZATIONAL STRUCTURE

Konza Technopolis Authority should review its organizational structure to ensure that this strategic plan can be successfully implemented. There needs to be a specific office in charge of monitoring and evaluate performance against the implementation plan in Annex 4 and the annual work plans of Departments.

5.5 RISKS AND MITIGATION STRATEGIES

The following are the key risks, their levels and the strategies to mitigate against them.

Types of Risk	Risk	Level	Mitigation Strategies
1. Financial	Access to finances to lay the horizontal infrastructure	High	 Implement EPCF Lobby for support from Treasury and National Assembly Explore other sources of funding as detailed in the
	Dependence on government subsidies	Medium	 Funding enabler Explore other sources of funding as detailed in the Funding enabler
	Delays in getting budgeted funds from Government	High	 Enhance financial planning Realign expenditures to the Exchequer disbursement cycles Establish monthly meetings with National Treasury
2. Knowlege, economy, and Innovation	Lack of a innovation and talent pipeline	High	 Create ways to identify and recruit talent, inventions, that will be housed at Konza Implement the strategy as detailed under the knowledge economy and
			 Recruit the Director in charge of the knowledge economy and innovation pillar
	Lack of critical anchor tenants	High	Identify critical anchor tenants, approach them



Ту	pes of Risk	Risk	Mitigation Strategies	
3.	Marketing and business development			and understand their demands and try to meet them
				Implement the strategy detailed under the Marketing and Business Development pillar
		Marketing not matched with reality on the ground	Medium	Develop and implement the marketing strategy
4.	Procurement	Delays in procurement	High	 Enhance skills of procurement team Seek Board intervention as necessary
5.	Infrastructure development	Delays in infrastructure construction	High	MDP2's close supervision
		Further delays in enacting the Konza Technopolis Authority Bill	High	 Make the Bill part of an existing law, e.g. ST&I Act Lobby for support from the Executive and key Government offices
6.	Managed services	Inadequate readiness to start providing City services	High	 Recruit the Director in charge of Managed Services Plan for provision of City services
7.	Political	County Governments and politicians attempting to interfere with the project in pursuit of their interests	High	Constantly engage the surrounding County Governments and politicians

ANNEXES

ANNEX 1: STRATEGIC PLANNING PARTICIPATION

Table A1-1 shows the list of persons who were interviewed in the process of data collection.

Table A1-1 List of Interviewees

Name of Person	Designation and Organization
Dr. Reuben Mutiso	Chairman, Board of Directors, Konza Technopolis
2. Eng. John Tanui	Chief Executive Officer, Konza Technopolis
3. David Mugambi	Business Development Manager, Konza Technopolis
4. Patrick S. Adolwa	Director, Infrastructure Development, Konza Technopolis
5. Mwikamba Mghenyi	Director, Finance and Administration, Konza Technopolis
6. Miriam Gitau	Director, Human Resources and Administration, Konza Technopolis
7. Lewis B. Ogundo	ICT Engineer, Konza Technopolis
8. Paul Kibe Mungai	Internal Auditor, Konza Technopolis
9. Michael Wanyika	Manager, Legal Affairs, Konza Technopolis
10. Jim Lenzotti	Program Director, Tetra Tech
11. Laetitia Mulamula	Program Manager, Tetra Tech
12. Nanette Nelson	Deputy Project Manager, Tetra Tech
13. Dr. Catherine Adeya-Weya	Former Ag. CEO, Konza Technopolis
14. Dr. David Otwoma	Chief Science Secretary, NACOSTI
15. Brian Omwenga	PhD Student (Innovation Ecosystem), University of Nairobi
16. Steve Duncan	Director, Lead Generation, DCI
17. Kendra Walker	Account Executive, DCI

Table A1-2 shows the participants of a meeting in which the consultant presented the draft strategic plan to the Board of Directors on July 19, 2016 in Enashipai Lodge, Naivasha.



Table A1-2 List of Participants in the First Board Meeting Presentation

Name of Person	Designation and Organization
1. Reuben Mutiso, PhD	Board Chairman, Konza Technopolis
2. Carolyne W. Kariuki	Board Member, Konza Technopolis
3. Harun Nyakundi	Board Member, Konza Technopolis
4. Kaburu Mwirichia	Board Member, Konza Technopolis
5. Mbithe Muema	Board Member, Konza Technopolis
6. Victoria J. Chepseba	Board Member, Konza Technopolis
7. Musa Kathanje	Board Member, Konza Technopolis
8. John Tanui	Chief Executive Officer, Konza Technopolis
9. David Mugambi	Director, Business Development, Konza Technopolis
10. Patrick Adolwa	Director, Infrastructure Development, Konza Technopolis
11. Adam Brown	Director of Project Controls, Tetra Tech
12. Laetitia Mulamula	Program Manager, Tetra Tech
13. Anna Musyimi	Project Manager, Konza Technopolis
14. Miriam Gitau	Director, Human Resources and Administration, Konza Technopolis
15. Lewis Ogundo	ICT Engineer, Konza Technopolis
16. Paul Mungai	Internal Auditor, Konza Technopolis
17. Jim Lenzotti	Program Director, Tetra Tech
18. Jasmin Hussein	Procurement, Konza Technopolis
19. Michael Wanyika	Manager, Legal Affairs, Konza Technopolis
20. Maureen Mujera	Partner, OGOLA & MUJERA ADVOCATES



Table A1-3 shows the participants of the strategic planning workshop.

Table A1-3 Strategic Planning Workshop Participants

Name of Person	Designation/Department
1. John Tanui	Chief Executive Officer
2. David Mugambi	Director, Business Development
Patrick Adolwa	Director, Infrastructure Development
4. Miriam Gitau	Director, Human Resources and Administration
5. Anna Musyimi	Project Manager
6. Lewis Ogundo	ICT Engineer
7. Michael Wanyika	Manager, Legal Affairs
8. Paul Mungai	Internal Auditor
9. June Chepkemei	Business Development/Marketing
10. Hillary Nyadwa	Project Assistant, Infrastructure Development
11. Lucas Omolo	ICT
12. Nanette Nelson	Deputy Project Manager, Tetra Tech
13. Timothy M. Waema	Total Information Management/Tetra Tech Consultant and Facilitator

ANNEX 2: DOCUMENTS REVIEWED

The following are the documents that were reviewed.

- 1. Republic of Kenya (2016), A Summary of Key Investment Opportunities in Kenya.
- 2. Republic of Kenya (2016), The Economic Survey 2016.
- 3. Republic of Kenya (2015), Kenya's Industrial Transformation Programme, Ministry of Industrialization and Enterprise Development
- 4. Republic of Kenya (2013), The Science, Technology and Innovation Act.
- 5. Republic of Kenya (2013), Second Medium Term Plan, 2013-2017.
- 6. Republic of Kenya (2012), A Policy Framework for Science, Technology and Innovation, Draft.
- 7. Republic of Kenya (2010), Kenya Industrialisation Policy Framework Draft.
- 8. Republic of Kenya (2008), First Medium Term Plan, 2008-2012
- 9. Republic of Kenya (2007), Kenya Vision 2030: A Globally Competetive and Prosperous Kenya.
- 10. Konza Draft Strategic Plan, 2014-2018.
- 11. Mapping smart cities in the EU (2014),

http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/507480/IPOL-ITRE_ET(2014)507480_EN.pdf

ANNEX 3: PHASE 1 INFRASTRUCTURE PROJECTS (2016-2020)

- 1. Construct Waste water reclamatin facility
- 2. Construct Konza hub
- 3. Construct Phase 1 Streetscape and sub-surface utilities
- 4. Bulk Water Treatment, Booster Station and Storage
- 5. Construct initial residential housing
- 6. Implement Phase 1 ICT connectivity network
- 7. National Data center
- 8. Construct model Konza police station
- 9. Construct Regional Innovation Hub
- 10. Construct solid waste facility
- 11. Construct an International Hospital
- 12. Power/Electrical Distribution and Substations
- 13. Construct 12km railway spur line to SGR
- 14. Construct Phase 1 Surveillance system/Public safety solution

Others

- 15. Phase 1 guidelines/MDP2 Consultancy
- 16. Wildlife management
- 17. Construction of modern sport facility
- 18. Conduct NEMA EIA/SEA Certification



ANNEX 4: IMPLEMENTATION PLAN

PILLAR 1: TECHNOPOLIS INFRASTRUCTURE & SERVICES

Strategic Objective 1: To develop and manage a world class smart city with a vibrant, safe and secure, healthy and sustainable ecosystem

Assumptions

- 1. Continued budget support from GoK especially the initial 3 years of the strategic plan
- 2. EPCF will be successfully implemented
- 3. Political support will continue
- 4. Steady growth in the national economy will be experienced
- 5. Business community will be establishing large presence with industry, Universities, and small enterprises
- 6. First residents established

Ou	tcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame		Initiatives	Budget (Kshs)	Responsibility
Outco	Outcomes								
	Completion of Phase 1 infrastructure development	% of phase 1 horizontal infrastructure development completed	2%	30% 50% 80% 100%	2016/17 2017/18 2018/19 2019/20 2020/21	1. 2. 3. 4. 5.	Construct waste water reclamation facility Construct Konza hub Construct Phase 1 Streetscape and subsurface utilities Bulk Water Treatment, Booster Station and Storage Construct initial residential housing (at least 60 units) Implement Phase 1 ICT connectivity network and National Data center	1. 3.5b 2. 3.9b 3. 20.1b 4. 3.9b 5. 1.5b 6. 2.5b 7. 692m 8. 1.4b 9. 410m 10. 9b 11. 5b 12. 20m 13. 500m 14. 2.5b 15. 100m 16. 30m	Infrastructure Development



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility	
					 Construct command center Construct Regional Innovation Hub Construct solid waste facility Power/Electrical Distributionand Substations Construct railway spur line to SGR Conduct NEMA EIA/SEA Certification Construct Security Entrance and Transportation Center Phase 1 guidelines/MDP2 Consultancy Wildlife management Develop M&E plan for above projects 			
	% of phase 1 horizontal infrastructure development completed and in use		30% 50% 80% 100%	2016/17 2017/18 2018/19 2019/20 2020/21	 Develop leasing strategy for Phase 1 Infrastructure Develop a regulatory framework for managing leased infrastructure 	20m	Infrastructure Development, Management Services, & Business Development	



	utcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame		Initiatives	Budget (Kshs)	Responsibility
1.2	Improved smart city governance index	Rank in global smart city governance	N/A	N/A N/A N/A Baseline 20% improvement	2016/17 2017/18 2018/19 2019/20 2020/21	• - -	Develop a smart city governance matrix for Konza Technopolis	10m	Infrastructure Development
Outp 1.1.1	uts Approved designs/plans for Phase 1 infrastructure	% of approved plans for critical infrastructure	20%	40% 60% 80% 100%	2016/17 2017/18 2018/19 2019/20 2020/21	•	Develop, Approve and award construction tenders for completed infrastructure designs and plans	2m	Infrastructure Development
1.1.2	Approved design guidelines for all Phase 1 infrastructural projects	% of approved guidelines for phase 1 horizontal infrastructural projects	50%	60% 100% 100% 100% 100%	2016/17 2017/18 2018/19 2019/20 2020/21	•	Develop and Approve all Phase 1 guidelines Review and update guidelines	2m	Infrastructure Development
		% compliance with approved guidelines		60% 100% 100% 100% 100%	2016/17 2017/18 2018/19 2019/20 2020?21	•	Develop guideline compliance matrix Rate the performance of the guidelines	5m	
1.1.3	Framework for operation and maintenance of completed infrastructure projects in place and in use	% completion of the framework for operation and maintenance of completed infrastructure projects	0%	30% 50% 80% 100%	2016/17 2017/18 2018/19 2019/20 2020/21	•	Develop Konza's smart infrastructure management plan Continously update Konza's smart infrastructure management plan	20m	Infrastructure Development



0	utcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame		Initiatives	Budget (Kshs)	Responsibility
1.1.4	Offsite infrastructure connectivity to Konza complete and functional	% of offsite infrastructure completed & in use	20%	30% 50% 70% 80% 100%	2016/17 2017/18 2018/19 2019/20 2020/21	•	Document all relevant offsite infrastructure Collaborate and facilitate other government agencies to develop offsite infrastructure	5m	Infrastructure Development, CEO
1.2.1	Improved public safety and security	Number of non- violent incidents recorded (non-	N/A	N/A N/A N/A	2016/17 2017/18 2018/19				
		lethal)		Establish a baseline	2019/20	•	Put in place a data driven policing unit Develop safety and security guideliness for residential and commercial properties Establish a city safety notification system		Managed Services
				Reduce number by 5%	2020/21	•	Analyse reported cases to establish problem locations or situations Take action depending on the results of the analysis		
		Number of violent incidents recorded	N/A	N/A N/A N/A	2016/17 2017/18 2018/19				Managed Services, Business
				Establish a baseline	2019/20	•	Create a 'Konza Alert' System Put in place a data driven policing unit Develop safety and security guideliness for residential and commercial properties		Development/ Communications, Infrastructure Development



0	utcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame		Initiatives	Budget (Kshs)	Responsibility
	Outputs		(2013/10)	Reduce number by 5%	2020/21		Encourage public sign-ups through a publicity campaign Analyse reported cases to establish problem locations or situations Take action depending on the results of the analysis	(113113)	Managed Services
1.2.2	Increased	Level of	N/A	N/A	2016/17		•		
	spaces for and activities	availability of spaces to play		N/A	2017/18				
	in arts, culture and entertainment	and celebrate, places to experience cultural events and entertainment		20%	2018/19	• 1	Plan for and construct public spaces and venues Provide both free and affordable spaces for social interaction		Managed Services, Infrastructure Development
		venues		40%	2019/20	•	Record statistic of the use of free public spaces and venues Record statstics for permits issued for paid venues Track the usage of provided venues and spaces		Managed Services



	Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
,				50%	2020/21	 Advertise and market the available spaces and venues Record statistic of the use of free public spaces and venues Record statstics for permits issued for paid venues 		Managed Services, Business Development/ Marketing
		Total number of	N/A	N/A	2016/17			Managed
		public art projects		N/A	2017/18			Services,
				N/A	2018/19			Business Development/
				3	2019/20	Agree on a theme for the artworksEngage at least 3	3m	Marketing
				6	2020/21	artisits to create permanent, semi- permanent or portable works of art	3m	
		No. of sponsored arts and culture	N/A	N/A	2016/17			
		events		N/A	2017/18			
				N/A	2018/19			
!				4	2019/20	 Establish partnerships programs with arts and culture organisations Sponsor performances, exhibitions, presentations particularly those that makse use of city facilities 	6m	Managed Services



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame		Initiatives	Budget (Kshs)	Responsibility
·			5	2020/21	•	Establish partnerships programs with arts and culture organisations Sponsor performances, exhibitions, presentations particularly those that make use of city facilities	7.5m	
1.2.3 Improved	% reduction in	N/A	N/A	2016/17				
environmenta	energy use in city	Ì	N/A	2017/18	1			
conservation	facilties	Ì	N/A	2018/19				
			5%	2019/20	•	energy use throughout the city owned facilities	10m	Managed Services
			7%	2020/21	•	Identify patterns of home energy use and introduce efficiencies Put in place energy saving measures	20m	
	No. of new trees and bushes	N/A	N/A	2016/17		-		
	planted	Ì	N/A	2017/18	1			
	plantod		500	2018/19	•	Identify areas to be used for planting Plant and nurture trees	15m	Managed Services, Infrastructure Development
			200	2019/20	•	Identify areas to be used for planting	20m	



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame		Initiatives	Budget (Kshs)	Responsibility
					•	Plant and nurture trees		
			200	2020/21	•	Identify areas to be used for planting Plant and nurture trees	20m	
1.2.4 Reliability, availability	Level of reliability of solid waste	N/A	N/A	2016/17				Managed Services,
and	disposal		N/A	2017/18				Infrastructure
affordability of City			N/A	2018/19				Development
utilities			50%	2019/20]			
			60%	2020/21				
	Level of recycling	N/A	N/A	2016/17				
			N/A	2017/18				
			N/A	2018/19				
			20%	2019/20	٠.	Benchmark with other		Managed
			30%	2020/21		smart cities		Services, Infrastructure Development
	• % compliance	N/A	N/A	2016/17				•
	with health		N/A	2017/18				
	regulations for clean and		N/A	2018/19	1			
	safe drinking water		100%	2019/20	•	Conduct microbial, chemical and physical		Managed Services,
	water		100%	2020/21	•	monitoring daily Conduct quarterly survey of water aestheics (taste, odor & appearance) Publish annual water quality report		Infrastructure Development
		N/A	N/A	2016/17		1		



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
	% reliability of		N/A	2017/18			
	power	[N/A	2018/19			
			Establish SAIDI baseline	2019/20	Measure and establish the System Average Interruption Duration Index (SAIDI)		Managed Services, Infrastructure Development
			Improve the average SAIDI by 5%	2020/21			
	Renewable	N/A	N/A	2016/17			
	power generated	[N/A	2017/18			
	as % of total		N/A	2018/19			
	power requirements		?	2019/20	Initiate projects to generate renewable power		Managed Services,
			?	2020/21			Infrastructure Development
	Turnaround time in reponse to	N/A	N/A	2016/17			
	outage calls		N/A	2017/18			
	(water, power &		N/A	2018/19			
	communications)		N/A	2019/20	Establish a baseline		Managed
			?	2020/21			Services
	Affordability of	N/A	N/A	2016/17			
	internet	l	N/A	2017/18			
	connectivity		N/A	2018/19			
			N/A	2019/20	 Establish a baseline Establish a discount program for eligible households and firms 		Managed Services, Infrastructure Development
			?	2020/21	Increase enrollment in the internet discount program		



PILLAR 2: KNOWLEDGE ECONOMY AND INNOVATION

Strategic Objective 2: In partnership with other actors in the National Innovation System, to recruit, attract and develop high-end talent and create smart innovative solutions and commercialize them

0	outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
Outo	comes							
2.1	Increased entrepreneur ship and innovation	Improvement in the entrepreneurship and innovation	No index existing	Adopt, adapt or develop indexes	2016/17	 Find global standards on technology transfer and commercialization Establish linkages with entities managing the indexes 	5m	Business Development
		sub-index		Establish baseline measurem ent of index metrics	2017/18	 Measurement of indicators Identify areas of improvement Carry out improvement actions 	5m	
				Increase of 5 % on the baseline	2018/19	 Measurement of indicators Identify areas of improvement Carry out improvement actions Engagement with strakeholders 	8m	
				Percentag e increase of 5% on previous year's values	2019/20	 Measurement of indicators Identify areas of improvement Carry out improvement actions Engagement with strakeholders 	8m	
				Percentag e increase of 5% on previous year's values	2020/21	 Measurement of indicators Identify areas of improvement Carry out improvement actions Engagement with strakeholders 	8m	



0	utcomes and	KPIs	Baseline	Targets	Time-	Initiatives	Budget	Responsibility				
	Outputs		(2015/16)		frame		(Kshs)					
2.2	Enhanced contribution	Amount of ST&I direct investment	0 Ksh	0 Ksh	2016/17	Marketing to potential investorsSupporting establishment of firms	10m	Business Development,				
	to economic	(DI) (Ksh)		3 B	2017/18	 Marketing to potential investors 	10m	Finance,				
	development			Ksh		 Supporting establishment of firms 		Procurement				
				30 B	2018/19	 Marketing to potential investors 	10m					
				Ksh		 Supporting establishment of firms 						
								130 B	2019/20	 Marketing to potential investors 	15m	
				Ksh		 Supporting establishment of firms 						
				200 B	2020/21	 Marketing to potential investors 	15m					
				Ksh		 Supporting establishment of firms 						
		Amount of gross	0 Ksh	0 Ksh	2016/17			Business				
		regional product		οВ	2017/18			Development				
		(GRP) from ST&I		Ksh								
		(Ksh) – annual		5 B	2018/19	 Supporting established firms and 	18m					
		not cummulative		Ksh		start-ups						
				30 B	2019/20	Supporting established firms and	18m					
				Ksh	0000/04	start-ups						
				78 B	2020/21	Supporting established firms and	18m					
				Ksh	0040/47	start-ups	4.0					
		No. of direct and	0	0	2016/17	Marketing to potential investors	18m					
		indirect jobs				Supporting establishment of firms						
		created in ST&I				Supporting established firms and etart upp						
				0	0047/40	start-ups	4.0					
				0	2017/18	Marketing to potential investorsSupporting establishment of firms	18m					
						 Supporting established firms and 						
						start-ups						
				2,000	2018/19	Marketing to potential investors	15m					
				2,000	2010/19	 Supporting establishment of firms 	13111					
						Supporting established firms and						
						start-ups						
				4,500	2019/20	Marketing to potential investors	15m					
				4,500		Supporting establishment of firms	10/11					
						Supporting established firms and						
						start-ups						



Ou	tcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
				9,000	2020/21	 Marketing to potential investors Supporting establishment of firms Supporting established firms and start-ups 	15m	
Outpu	ıts							
2.1.1	Increased ST&I	No. of universities set up in Konza	0	1	2016/17	Sign 1 MOUAllocation space to 1 university	0m	Business Development
	partnerships			3	2017/18	 Sign MOUs for 2 educational insitutions Allocation of space for 1 insituition Support commencement of operations Create the centre for knowledge economy and innovations 	0m	
				5	2018/19	 Support commencement of operations Sign MOUs for 2 educational institutions Allocation of space for 1 university 	0m	
				7	2019/20	 Increase capacity of tertiary educational institutions and partnership with industry Increase collaboration of basic educational institutions with higher educational institutions 	0m	
				7	2020/21	 Increase capacity of tertiary educational institutions and partnership with industry Increase collaboration of basic educational institutions with higher educational institutions 	0m	
		No. of R&D centres	0	0	2016/17	Create interest among research institutions & multinationals	3.5m	
		committed to		0	2017/18	Create intrest among research institutions & multinationals	3.5m	



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
	setting up in Konza		0	2018/19	Create intrest among research institutions & multinationals	3.5m	
			1	2019/20	 Create intrest among research institutions & multinationals Enter into an MOU with one Commence Establishment of 1 	3.5m	
			2	2020/21	Support Establishment of 1Enter into an MoU with one	3.5m	
	No. of innovation hubs with a direct link to Konza Technopolis	0	0	2016/17	 Create awareness of value proposition of Konza Visit at least 5 innovation hubs Complete virtual innovation platfrom concept Establish collaboration with an association of innovation hubs Become a member of at least two interantional associations whose focus is on issues of innovation/smart cities 	15m	
			0	2017/18	 Increase awareness of value proposition of Konza Visit at least 3 innovation hubs Operationalise virtual innovation platform 	15m	
			1	2018/19	 Support hubs through virtual innovation platform Enter into MoU with at least 1 	18m	
			1	2019/20	Construction of Konza Regional Innovation HubSupport hub operations	18m	
			2	2020/21	Enter into MoU with at least 1Support existing hub operations	18m	



Outcomes and	KPIs	Baseline	Targets	Time-	Initiatives	Budget	Responsibility
Outputs		(2015/16)		frame		(Kshs)	
	No. of top talent graduands from Konza Technopolis	0	0	2016/17	 Give necessary support to universitites in their establishment and programme accreditation Market Konza universities and campuses 	18m	
			0	2017/18	 Give necessary support to universitites in their establishment and programme accreditation Market Konza universities and campuses 	18m	
			0	2018/19	 Give necessary support to universitites in their establishment and programme accreditation Market Konza universities and campuses 	18m	
			0	2019/20	 Give necessary support to universitites in their establishment and programme accreditation Market Konza universities and campuses 	18m	
			KAIST target +10%	2020/21		18m	



Oute	comes and	KPIs	Baseline	Targets	Time-	Laying the Foundation for Konza: An Area of Inno Initiatives	Budget	Responsibility
	Outputs		(2015/16)		frame		(Kshs)	
i a	Increased innovations and enterprises	No. of businesses in the innovation system	0	0	2016/17	 Finalise concept of annual expo with focus on start-ups Create awareness of the Konza start-up/innovation ecosystem 	15m	Business Development
				0	2017/18	 Hold the first expo with focus on start-ups Create awareness of the Konza start-up/innovation ecosystem Establish an accelerator/incubator within Konza Complex Establish partnerships with global accelerators and venture capitalists Identify and host at least 20 start-ups 	18m	
				5	2018/19	 Support registration and growth of start-ups Hold the annual expo with focus on start-ups Attract high-potential startups in the innovation hubs linked to Konza Identify and host at least 20 start-ups 	20m	
				10	2019/20	 Support registration and growth of start-ups Hold the annual expo with focus on start-ups Attract high-potential startups in the innovation hubs linked to Konza Identify and host at least 20 start-ups 	18m	



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
			20	2020/21	 Support registration and growth of start-ups Hold the annual expo with focus on start-ups Attract high-potential startups in the innovation hubs linked to Konza Identify and host at least 20 start-ups 	18m	
	No. of successfully commercialized innovations	0	0	2016/17	 Support establishment and operations of start-ups Connect start-ups with venture capitalists 	25m	Business Development
			0	2017/18	 Support establishment and operations of start-ups Connect start-ups with venture capitalists 	18m	
			0	2018/19	 Support establishment and operations of start-ups Connect start-ups with venture capitalists 	18m	
			2	2019/20	 Support establishment and operations of start-ups Connect start-ups with venture capitalists Support marketing of innovations 	18m	
			3	2020/21	 Support establishment and operations of start-ups Connect start-ups with venture capitalists Support marketing of innovations 	18m	



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives Budget Responsibility (Kshs)
	No. of patents/IPs filed that are linked to Konza	0	0	2016/17	 Create awareness of the process and means of protecting innovations and intellectual porperty through our innovation platform 18m Business Development
			0	2017/18	Create awareness of the process and means of protecting innovations and intellectual porperty through our innovation platform
			0	2018/19	Support innovators to make applications (at least 20 applications made) 18m
			5	2019/20	Support innovators to make applications
			10	2020/21	Support innovators to make applications
	No of high-tech companies who	0	0	2016/17	 Marketing and creating awarness of Konza's value proposition 18m Business Development
	are present in Konza Technopolis		0	2017/18	 Marketing and creating awarness of Konza's value proposition Get commitment from at least 5 firms
			3	2018/19	 Support at least three firms to establish presence in Konza Get commitment from at least 2 firms
			5	2019/20	 Support at least two firms to establish presence in Konza Get commitment from at least 5 firms
			10	2020/21	 Support at least five firms to establish presence in Konza Get commitment from at least 4 firms



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
	No. of enterprises whose home is Konza Technopolis	0	0	2016/17	 Marketing and creating awarness of Konza's value proposition Attracting enterprises to relocate their headquaters to Konza 	18m	Business Development
			0	2017/18	 Marketing and creating awarness of Konza's value proposition Attracting enterprises to relocate their headquaters to Konza 	18m	
			2	2018/19	 Marketing and creating awarness of Konza's value proposition Attracting enterprises to relocate their headquaters to Konza Allocating land or office space to enterprises 	18m	
			5	2019/20	 Marketing and creating awarness of Konza's value proposition Attracting enterprises to relocate their headquaters to Konza Allocating land or office space to enterprises Carrying out client satisfaction surveys Establishing a client relationship management team 	18m	
			10	2020/21	 Marketing and creating awarness of Konza's value proposition Attracting enterprises to relocate their headquaters to Konza Allocating land or office space to enterprises Carrying out client satisfaction surveys 	18m	



Laying the Foundation for Konza: An Area of Innovation Contained in a Smart City

ENABLER 1: FINANCING

Strategic Objective 3: To mobilize adequate and sustainable funding to meet the Authority's mandates and changing needs of the business community and residents

	tcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
Outc	omes							
3.1	Enhanced sustainabilit y of the Authority funding	Level of adequacy of funds to finance investment and operations	50%	65% 75% 80% 85% 100%	2016/17 2017/18 2018/19 2019/20 2020/21	Develop and implement project financing strategy		Finance, Business Development
Outp	uts							
3.1.1	Increased funds	Mobilised funds for planned infrastructure budget	800m		2016/17	 Lobby for enhanced Exchequer funding Lobby National Treasury to approve EPC Financing Benchmark an ICT park 	21b	Finance, CEO
		Funds mobilised for operations budget	90m			with diverse funding strategies Hiring a resource mobilization Staff	200m	Finance, CEO
		Funds mobilised for business development budget	10m				250m	Business Development, Human Resources
		Mobilised funds for planned infrastructure budget			2017/18	Lobby for enhanced Exchequer funding Benchmark with other ICT parks with diverse funding strategies	35b	Finance, CEO
		Funds mobilised for operations budget			2017/18		200m	Business Development



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame	Initiatives	Budget (Kshs)	Responsibility
	Funds mobilised for business development budget			2017/18		300m	
	Mobilised funds for planned infrastructure			2018/19	2018/19 Lobby for enhanced Exchequer funding		Finance
	budget			2018/19	Implement project financing strategy	250m	
	Funds mobilised for operations budget			2018/19		400m	
	Funds mobilised for business development budget						
	Mobilised funds for planned infrastructure budget			2019/20	Deploy the strategy/programmes to raise funding from the alternative options Parcel leasing	47b	Finance, Business Development
	Funds mobilised for operations budget			2019/20	T dissiling	300m	Business Development
	Funds mobilised for business development budget			2019/20		400m	
	Mobilised funds for planned infrastructure budget			2020/21	Deploy the strategy/programmes to raise funding from the alternative options	34b	Finance, Business Development
	Funds mobilised for operations budget			2020/21	Explore alternative options of mobilizing money from private sector	350m	



Outcomes and Outputs	KPIs	Baseline (2015/16)	Targets	Time- frame			Responsibility
	Funds mobilised for business development budget			2020/21	Parcel leasing	282m	
3.1.2 Competetive staff remuneration	Position of the Authority in the parastatal grading				Develop a structure for additional allowances		Human Resources
3.1.3 Increased support for innovations from the innovation	% of money disbursed from the innovation fund to support innovations	0	0		Develop a programme to generate fund Develop criteria for selecting	100%	Finance, Business Development
fund					innovations to support		



ENABLER 2: MARKETING AND BUSINESS DEVELOPMENT

Strategic Objective 4: To create a strong brand and image of the City that will attract, facilitate and retain investors

	Outcomes and Outputs	KPI	Baseline (2015/16)	Targets	Timeframe	Budget (Kshs)	Key Initiatives	Responsibility
Out	comes							
4.1	Increased attractiveness of Konza Technopolis	Perception Index	TBD	Complete index	2016/17	35m	 index Develop branding strategy Develop and Implement PR,Communications and digital plan Launch Konza Technopolis TV Show 	Business Development, CEO's office
				Grow the base line by 10%	2017/18	60m	 Implement the Marketing, branding strategy Implement the PR, Communications, and digital plans Implement brand assets and 	
							sponsorships strageties	
				Grow the base line by 15%	2018/19	70m	Enhance the Marketing,branding strategies to capture the growth of the city	
							Enhance the PR,Communications, and digital plans in line	



Outcomes and Outputs	КРІ	Baseline (2015/16)	Targets	Timeframe	Budget (Kshs)	Key Initiatives	Responsibility
				2040/20	20	with the changing audience • Enhance the brand assets and sponsorships strategies • Grow communications channles and platforms beyond the TV show	
			Grow the base line by 20%	2019/20	80m	Establish and operate a Small Enterprise Support Centre to develop and provide business advisory services to start-ups and small businesses	
			Grow the base line by 25%	2020/21	90m	Enhance the operations of the Enterprise Support Centre to develop and provide business advisory services to start-ups and small businesses	
4.2 Contribution to economic development	 Cumulative direct investment(DI) (US\$M) Total GRP Total jobs created 	0 0 27	0 0 227	2016/17 0 0	35m 0 0	Develop an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	Business Development



Outcomes and	KPI	Baseline	Torquia	Timeframe		onza: An Area of Innovation Conta	<u>, </u>
Outcomes and Outputs	KPI	(2015/16)	Targets	rimerrame	Budget (Kshs)	Key Initiatives	Responsibility
	 Cumulative direct investment (DI) (US\$M) Total GRP Total jobs created 	0 0 500	500 0 2,500	2017/18	90m	Implement an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	
	Total GRP(US\$) Total jobs created		1,500 0.16B 5,000	2018/19	90m	Implement an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	
	Cumulative direct investment (DI) (US\$M) Total GRP Total jobs created		2,500 0.65B 10,000	2019/20 2020/21	100m	Implement an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	



Outcomes and Outputs	KPI	Baseline (2015/16)	Targets	Timeframe	Budget (Kshs)	Key Initiatives	Responsibility
	 Cumulative direct investment (DI) (US\$M) Total GRP Total jobs created 		5,000 1.3B 15,000		100m	Implement an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	
4.3 Increased acquisition o investors	Cumulative direct investment (DI) (US\$M)	0	0	2016/17	35m	Develop an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	Business Development
	Cumulative direct investment (DI) (US\$M)	0	500	2017/18	90m	Implement an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	
	Cumulative direct investment (DI) (US\$M)		2,500	2019/20	100m	Implement an investor outreach program, including youth and start-up focused projects and promotional tours	



Outcomes and Outputs	KPI	Baseline (2015/16)	Targets	Timeframe	Budget (Kshs)	Key Initiatives	Responsibility
						nationally and internationally	
	Cumulative direct investment (DI) (US\$M)		5,000		100m	Implement an investor outreach program, including youth and start-up focused projects and promotional tours nationally and internationally	
Outputs	•						
4.1.1 Ease of doing business in Konza	Time taken to settle an investor	415 days to settle an investors	300 days	2016/17	2m	Develop a digital one stop shop for investors	Business Development
	No. of steps to get the necessary approvals	300 days	150 days	2017/18	10m	 Build a coordination mechanism for OSS Communicating OSS services to investors Facilitating land acquisition Build a coordination mechanism with agencies 	Business Development, Infrastructure Development, Legal



	Outcomes and Outputs	KPI	Baseline (2015/16)	Targets	Timeframe	Budget (Kshs)	Key Initiatives	Responsibility
			150 days to settle an investors	100 days	2017/18	2m	Operate a one stop shop	
			100 days to settle an investors	70 days	2018/19	65m	Introduce Business facilitation: visas, build partnerships, investment missions, financing and deal structuring	
			70 days to settle an investors	70 days	2019/20	10m	Enhance the operations of OSS	
			70 days to settle an investors	30 days	2020/21	5m	Enhance the operations of OSS	
4.1.2	Sustained	• % of	15	500	2017/18	12m		Business
	Higher occupancy in	occupation	500	10,000	2018/19	25m		Development Business
	Konza Technopolis		10,000	15,000	2019/20	30m		Development , Infrastructure Development



0	utcomes and Outputs	KPI	Baseline (2015/16)	Targets	Timeframe	Budget (Kshs)	Key Initiatives	Responsibility
	Increased visitors to Konza Technopolis	No. of Visitors annually	1000	2,000 10,000 15,000 20,000	2016/17 2018/19	12m 20m 30m 30m	Develop and implement a Tourism program (To attract visitors, festivals and recreation facilities)	Business Development
	·		2,000	5,000	2017/18	15m	Develop and implement a Tourism program (To attract visitors, festivals and recreation facilities)	
				10,000	2018/19	20m	Implement brand assets strategy to attract tourist	
				15,000	2019/20	30m	Implement brand assets strategy to attract tourist	
				20,000	2020/21	30m		
	Increased partnerships and collaborations	No. of active partners, collaborations and agreements	1 MoU	4 Key partnerships	2016/17	10m	Develop and impement a partnership and collaboration program for investment promotions	Business Development, Legal
				10% increase in partnerships	2017/18	12m	Build relationships with universities linkage department and industry	Business Development
				20% increase in partnerships	2018/19	15m	Implement the partnership program through outreach	
				25%increase in partnerships	2019/20	20m	Enhance outreach program	
				30%increase in partnerships	2020/21	30m		
		No. of investors	0	2	2016/17	12m	Develop anchor investor program	Business Development



Outcomes and Outputs	KPI	Baseline (2015/16)	Targets	Timeframe	Budget (Kshs)	Key Initiatives Responsibility
4.1.5 Increased Investor		2	10	2017/18	10m	Market Phase 1A to investors
attraction		10	24	2018/19	10m	Settle Phase 1A Investors
		24	48	2019/20	10m	Market Phase 1B
		48	100	2020/21	10m	Settle phase 1B investors
4.1.6 Land parcel disposition	No. of land parcels allocated	2	3	2016/17	12m	Develop Phase 1A Business Development
		3	10	2017/18	6m	Implement Phase 1A parcels disposition plan
		10	24	2018/19	6m	Phase 1A parcels disposition
		24	48	2019/20	5m	Phase 1A & 1b parcels disposition
		48	100	2020/21	4m	Entire Phase 1 parcels disposed
4.1.7 Licence issuance	No. of Licences issued	0	2	2016/17		Develop Licensing Business Development
		2	4	2017/18		Develop One Stop Shop (OSS)
		4	8	2018/19		Implement OSS
		8	16	2019/20		Enhance OSS operations to reduce the steps
		16	32	2020/21		Build a digital OSS



ENABLER 3: INSTITUTIONAL DEVELOPMENT

Strategic Objective 5: To ensure that the Authority has adequate institutional capacity to fulfill its mandate

C	Outcomes and Outputs	KPIs	Baseline (2015/16)	Target	Time- frame	Key Initiatives	Budget (Kshs)	Responsibility
Outo	comes							
5.1	Enhanced institutional capacity to develop and manage the smart city	% achievement of planned targets	47%	50% 55% 60% 65% 70%	2016/17 2017/18 2018/19 2019/20 2020/21	 Develop and implement an Annual Training Plan and seek approval by the Human Resources Board Committee Departments to develop Policies to standardise operations Develop and Implement a Human Resources Communication Plan Aproval of the HR Annual Calender by the Human Resources Board Committee Departments to develop new innovations to improve service delivery 	737.28m	Finance
Outp		T	I		1			
	Enhanced human capacity	% of staff trained in their areas of specialization	15 %	50 %	2016/17	 Carry out an Annual Training and Personal Development Needs Assessment Develop and implement an Annual Training Plan and seek approval by the Human 	2.5m Human Resources 0.7m 10.0m 15.0m	
				75%	2017/18	Resources Board Committee	0.7m	
				85%	2018/19			
				90%	2019/20		2.5m Human Resources 0.7m 10.0m	
				100%	2020/21			Finance
	% of managers (HoD and above) trained on management and leadership	30 % 50 % 75 % 85%	2016/17 2017/18 2018/19 2019/20 2020/21	 Carry out an Annual Training and Personal Development Needs Assessment Develop and implement an Annual Training Plan and approval by the Human Resources Board Committee 	1.0m 2.0m 3.0m 4.0m			



					Laying the Foundation for Konza: An Area of Innovation Contained in a Smart City			
Outcomes and	KPIs	Baseline	Target	Time-	Key Initiatives	Budget	Responsibility	
Outputs		(2015/16)		frame		(Kshs)		
Outcomes								
5.1.2 Institutionalise	% of staff who	0%	100%	2016/17	Developing and Implementing an Orientation	0.05m	Human	
d corporate	have gone		100%	2017/18	Programme	0.10m	Resources	
culture	through the		100%	2018/19		0.25m		
	orientation		100%	2019/20		0.50m		
	program		100%	2020/21		1.00m		
	No. of times	0	2	2016/17	Develop and Implement a Human Resources	0.05m		
	core values		2	2017/18	Communication Plan	0.07m		
	are		2	2018/19		0.09m		
	communicated		2	2019/20		0.12m		
	and explained		2	2020/21		0.15m		
	to all staff per							
	year							
	No. of "State	0	2	2016/17	Develop and Implement a Comminications	0.10m	CEO	
	of the		2	2017/18	Policy	0.12m		
	Authority"		2	2018/19	Develop format and content of "State of the	0.15m		
	communiqué		2	2019/20	Authority" communiqué	0.18m		
	from the		2	2020/21		0.20m		
	CEO's Office No. of team	1	2	2016/17	Organise Team Building events	6.0m	Human	
	building events		2	2016/17	Organise ream building events	8.0m	Resources	
	pa		2	2017/10		10.0m	Resources	
	٦		2	2019/20		12.0m		
			2	2020/21		15.0m		
5.1.3 Improved	Level of	N/A	0	2016/17	Develop and Implement a monitoring and	0.20m	Human	
efficiency and	compliance			2017/18	evaluation mechanism.	0.02m	Resources	
effectiveness	with service			2018/19	Continuous capacity building	0.03m		
	delivery			2019/20		0.04m		
	charter at all			2020/21		0.05m		
	levels							



Outcomes and	KPIs	Baseline	Target	Time-	Key Initiatives	Budget	Responsibility
Outputs	KF15	(2015/16)	raryet	frame	ney illitatives	(Kshs)	Responsibility
		(2013/10)		ITAIIIE		(NSIIS)	
Outcomes	1						Laur
	Number of	1	4	2016/17	Departments to develop new innovations to	2.0m	All depts
	innovations to		4	2017/18	improve service delivery.	4.0m	
	improve		4	2018/19		6.0m	
	service		4	2019/20		8.0m	
	delivery		4	2020/21		10.0m	
	Number of	0	3	2016/17	Departments to develop policies to	1.5m	
	Policies		3	2017/18	standardise operations	1.5m	
	developed		3	2018/19		1.5m	
			1	2019/20		0.5m	
			0	2020/21		0.0m	
5.1.4 Increased	Extent of	100%	100%	2016/17	Early planning of PC target-setting	0.02m	Human
institutional	cascading		100%	2017/18	 Developing and implementing a PC target 	0.03m	Resources
performance	performance		100%	2018/19	cascading timetable	0.05m	
periormanee	contracts to		100%	2019/20		0.07m	
	individual level		100%	2020/21		0.10m	
	Aggregate	Not	75%	2016/17	Develop and Implement a monitoring and	0.02m	
	staff appraisal	available	100%	2017/18	evaluation mechanism	0.03m	
	rating		105%	2018/19	Capacity building to meet training needs	0.05m	
			110%	2019/20	identified in apparaisal	0.07m	
			120%	2020/21	Develop and implement a reward and	0.10m	
					sanction system		
	% of Units that	Not	100%	2016/17	Develop and Implement a monitoring and	0.02m	
	meet their	available	100%	2017/18	evaluation mechanism	0.03m	
	performance		100%	2018/19	Continuous capacity building	0.05m	
	targets		100%	2019/20		0.07m	
			100%	2020/21		0.10m	
5.1.5 Better	% retention of	90%	80%	2016/17	Reviewing Human Resources Policy	50.0m	Human
retention of	staff		80%	2017/18	Improvement of work environment	75.0m	Resources
core staff			80%	2018/19	Imroved staff welfare	100.0m	
Core stair			80%	2019/20		150.0m	
			80%	2020/21		200.0m	



Outcomes and Outputs	KPIs	Baseline (2015/16)	Target	Time- frame			Responsibility		
Outcomes									
5.1.6 Attracting top talent	% of applicants from top companies (KPMG Annual Survey of Top 20 Companies to Work For)	N/A	10% 15% 20% 20% 20%	2016/17 2017/18 2018/19 2019/20 2020/21	Reviewing Human Resources Policy Improvement of work environment Imroved staff welfare Targetted recruitment	50.0m 75.0m 100.0m 150.0m 200.0m			