

KWAZULU-NATAL

REVISED INDUSTRIAL DEVELOPMENT STRATEGY

IDS 2012



Department of Economic Development and Tourism

Umnyango Wezokuthuthukiswa
Komnotho Nezokuvakasha

KWAZULU-NATAL PROVINCIAL GOVERNMENT

February 2012

Preface

To the citizens of KwaZulu-Natal and with special thanks to those who participated in the development of this revised Industrial Development Strategy- it is time for us to act.

The 2012 Industrial Development Strategy has been developed to ensure our Province takes the essential steps, in the light of changed economic conditions, to grow the economy as quickly as possible in order to meet our goals. Our vision is for a province which can provide economic opportunities for all its citizens, regardless of where they may choose to live. To achieve this, we attach greater value to sustainable industrial development which leads to a more equitable and stable society and a better life for all. This implies increasing the pace of our growth trajectory.

Conditions in the global economy have changed, making it harder for our businesses to compete against hungry global firms with access to major markets as well as huge resources. In KwaZulu-Natal we must strive to understand and leverage the conditions and focus areas that enable industries to compete with the rest of the world with the assurance that by doing so, they will thrive and compete globally. This enables us to package the necessary interventions to support our industry so as to increase competitiveness. We need to create a business friendly and competitive destination in our Province to ensure that we retain existing business, but also to ensure that manufacturing businesses increase their presence here - because they know that by doing so they will do better business.

Infrastructure development, both basic and advanced, is a priority of KwaZulu-Natal provincial government. While major strides in this regard have already been made, through this strategy we intend to move swiftly to provide our industries with effective and cost efficient logistics and transport as well as access to markets. At the same time, leading industries can expect us to be sympathetic towards investing in sector specific infrastructure such as the Automotive Supply Park- in our drive to provide the best industrial business environment in South Africa.

Government is cognisant of the lack of technical skills of value to industry. Against this backdrop, working with our strategic partners we will be taking very pragmatic steps to

begin a permanent process whereby people are appropriately skilled for industry, work opportunities and entrepreneurial development. We intend to implement a number of interventions in partnership with Industry and Labour to ensure that within a few years, there will be no shortage of standard artisans and technical skills for KwaZulu-Natal. In implementing this strategy, we are conscious of the critical roles that other stakeholders will play.

We cannot, with limited resources, undertake to do all things to all people and so this Industrial Development Strategy has highlighted specific sectors, sub sectors and niches where KwaZulu-Natal has either an existing or potential comparative or competitive advantage, or both. As a Province, we naturally support all business and industrial activity, but it is clear that we will gain advantages from focussing some resources on areas where our chances of success are greater – and these opportunities are outlined in the Productive Growth section of this Industrial Development Strategy.

Finally let me assure you that government will organise itself effectively to support productive growth and job creation in our province- in any way we can- to ensure quality of life for us all into the future.

Michael Mabuyakhulu

MEC- Economic Development and Tourism- KwaZulu-Natal

Glossary of Terms

Acronym	Expanded Term
ADST	Advanced Distributed Simulation Technology
AIDC	Automotive Industry Development Centre
ARV	Anti-Retroviral Drugs
ASGISA	Accelerated and Shared Growth Initiative for South Africa
BPO&O	Business Process Outsourcing and Offshoring
BR&E	Business Retention & Expansion
CIP	Critical Infrastructure Programme
COSATU	Congress of South African Trade Unions
CTFL	Clothing Textiles Footwear & Leather
CTSP	Concentrated Thermal Solar Power
DAERD	Department of Agriculture, Environmental Affairs and Rural Development
DAFF	Department of Agriculture Forestry and Fisheries
DBSA	Development Bank of Southern Africa
DEA	Department of Environmental Affairs
DEDT	Department of Economic Development & Tourism
DIA	Durban International Airport
DM	District Municipality
DMR	Department of Mineral Resources
DOE	Department of Education
DOL	Department of Labour
DOT	Department of Transport
DPW	Department of Public Works
DST	Department of Science & Technology
dti	Department of Trade & Industry
EPWP	Extended Public Works Programme
EPZ	Export Processing Zone
FET	Further Education & Training
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
HSRC	Human Science Research Council
ICT	Information and Communication Technology
IDC	Industrial Development Corporation of SA Ltd
IDS	Industrial Development Strategy
IDZ	Industrial Development Zone
IPAP 2	Industrial Policy Action Plan, Revised (2011)
JIPSA	Joint Initiative on Priority Skills Acquisition
M&HCV	Medium and Heavy Commercial Vehicles
MIG	Municipal Infrastructure Grant
NAAMSA	National Association of Automobile Manufacturers of South Africa
NGP	New Growth Path
NHA	Natural Health Academy
NIPF	National Industrial Policy Framework

Acronym	Expanded Term
NTI	National Tooling Initiative
OEM	Original Equipment Manufacturer
PSDF	Provincial Spatial Development Framework
PSEDS	Provincial Spatial Economic Development Strategy
PPPS	Public Private Partnership
R&D	Research & Development
RBIDZ	Richards Bay Industrial Development Zone
SAOSO	South African Organics Sector Organisation
SASA	South African Sugar Association
SATIEC	SA Textile Industry Export Council
SEDA	Small Enterprise Development Agency
SETA	Sector Education and Training Authority
SMME	Small Micro and Medium Enterprises
SOE	State Owned Enterprise
TIKZN	Trade & Investment KwaZulu-Natal
WHO	World Health Organisation

Table of Contents

PREFACE	2
EXECUTIVE SUMMARY	8
1.1 THE IDS (2005)	11
1.1 THE IDS (2012)	12
1.3 THE PLANNING PROCESS	15
2. SITUATIONAL ANALYSIS- WHERE ARE WE NOW?	15
2.1 THE WORLD AND SOUTH AFRICA	16
2.1 KWAZULU NATAL	17
2.3 SOCIAL PARTNER PERCEPTIONS SURVEY	21
2.4 CONCLUSIONS AND IMPLICATIONS FOR INDUSTRIAL DEVELOPMENT STRATEGY	22
2.4.2 CONSTRAINTS	22
2.4.3 OPPORTUNITIES	23
2.4.4 IMPLEMENTATION	24
3. INDUSTRIAL DEVELOPMENT STRATEGY, 2012	25
3.1 APPROACH TO INDUSTRIAL DEVELOPMENT STRATEGY	26
3.2 VISION AND MISSION FOR THE INDUSTRIAL DEVELOPMENT STRATEGY	27
3.3 INDUSTRIAL POLICY & STRATEGY	27
3.3.1 ESSENTIAL SUPPORT STRATEGIES – PILLARS	32
3.3.2 INDUSTRIAL COMPETITIVENESS	33
3.4 THE FOCUS OF THE INDUSTRIAL DEVELOPMENT STRATEGY	35
3.4 ORGANISATION OF INDUSTRIAL DEVELOPMENT STRATEGY	37
3.4.1 OBJECTIVES OF INFRASTRUCTURE DEVELOPMENT	37
3.4.2 FOCUS SECTORS – INFRASTRUCTURE DEVELOPMENT	38
3.4.3 STRATEGIC INTERVENTIONS - INFRASTRUCTURE DEVELOPMENT	39
3.4.4 IMPACT OF IMPLEMENTATION –INFRASTRUCTURE DEVELOPMENT	40
3.5 ENABLING PLATFORM- SKILLS DEVELOPMENT	41
3.5.1 OBJECTIVES OF SKILLS DEVELOPMENT	41
3.5.2 FOCUS SECTORS – SKILLS DEVELOPMENT	43
3.5.3 STRATEGIC INTERVENTIONS IN SKILLS DEVELOPMENT	44
3.5.4 IMPACT OF INTERVENTIONS IN SKILLS DEVELOPMENT	46
3.6 INDUSTRIAL DEVELOPMENT STRATEGY- SUSTAINABLE JOB CREATION & ENTREPRENEURIAL DEVELOPMENT	48
3.6.1 OBJECTIVES OF SUSTAINABLE JOB CREATION & ENTREPRENEURIAL DEVELOPMENT	48
3.6.2 FOCUS SECTORS IN SUSTAINABLE JOB CREATION & ENTREPRENEURIAL DEVELOPMENT	49
3.6.3 STRATEGIC INTERVENTIONS IN SUSTAINABLE JOB CREATION & ENTREPRENEURIAL DEVELOPMENT	49
3.6.4 IMPACT OF INTERVENTIONS IN SUSTAINABLE JOB CREATION & ENTREPRENEURIAL DEVELOPMENT	51
3.7 INDUSTRIAL DEVELOPMENT STRATEGY- PRODUCTIVE INDUSTRIAL GROWTH	52
3.7.1 OBJECTIVES OF THE INDUSTRIAL DEVELOPMENT STRATEGY- INDUSTRIAL GROWTH	52
3.7.2 FOCUS SECTORS IN PRODUCTIVE GROWTH	54
3.7.4 IMPACT OF INTERVENTIONS IN PRODUCTIVE GROWTH	61
4. PRIORITISATION- FLAGSHIP PROGRAMMES AND PROJECT	62

5. SUMMARY	70
6. ANNEXURE ONE- DETAILED PROJECT OPTIONS & ACTION OPTIONS BY MAJOR PROGRAMME	71
7. ANNEXURE TWO- INDUSTRIAL POLICY AND STRATEGY- DEFINITIONS	83
8. ANNEXURE THREE- THE CONSULTATIVE PROCESS	84
9. ANNEXURE FOUR- REFERENCES	85

Executive Summary

The New Growth Path for South Africa as articulated by National Government tells us that if we are to grow South Africa into the nation we dream of we need to undertake certain tasks together and achieve certain goals. The recently ratified Provincial Growth and Development Strategy (2011) for KwaZulu Natal agrees that we should grow the provincial economy by at least 6 per cent per annum in order simply to keep pace with employment requirements. In order to achieve this¹ we need to create jobs and improve productive growth in the provincial economy.

KwaZulu Natal is home to over 10 million South Africans with an average age in 2009 of 26². Six million people in KwaZulu-Natal, are of working age, but only 2.5 million of these are formally or self-employed. Unemployment stands at over 23 per cent and³ the number of people living in poverty increased between 1995 and 2009 by approximately 7 per cent. The population is densely gathered in three major centres and highly fragmented in the rural areas and urbanisation is predicted to increase significantly with a further 3.6 million of the population likely to move to the urban areas by 2030⁴.

Economic activity in KwaZulu-Natal is concentrated in eThekweni which generates almost two-thirds (61.2 per cent) of GDP in the province. The other areas of concentrated economic activity include the port city of Richards Bay, the city of and the cities of Ladysmith and Newcastle.

Education and skills levels are very low and unemployment is very high. In 2009, only 2 per cent of the adult population of KwaZulu Natal had an accredited tertiary qualification (degree or diploma) and while a little over 132,000 people passed Matric only 26,000 earned a University exemption.

¹Industrial Programme Action Plan, Revised, (2011)

² KwaZulu Natal Treasury , 2012

³ Labour Force Survey, StatsSA, 2011

⁴ Provincial Growth and Development Strategy, 2011

In spite of clear comparative advantages in agriculture due to soil, climate and geology conditions, KwaZulu Natal has become a net importer of agricultural goods.⁵ In spite of comparative advantages in terms of location and ports and a traditionally strong industrial base these have not translated into competitive advantages resulting in wasted productive economic potential.⁶ However in the absence of easy markets in the developed world currently, international firms are paying close attention to an untapped market for consumer goods of over 1 billion people in Africa, and there is renewed interest in accessing these markets. KwaZulu Natal's PGDS vision of becoming the gateway to Africa speaks to this opportunity.

Constraints to industrial growth and development include availability and lack of clarity regarding ownership of agricultural land, lack of available industrial land, an inflexible labour environment, low skills levels and the increasing cost of capital. Added to this are significant inefficiencies in the ports and rail networks serving the province and an overburdened road network⁷. Planning coherence, institutional coordination and funding for economic development (over 73 per cent of the provincial budget is allocated to education and health spending) represent real implementation challenges for KwaZulu Natal and are inhibitors of growth.

There has been a decline in manufacturing and agriculture investment in KwaZulu Natal over the last 8 years which has reduced employment in these sectors as well as reducing the productive growth potential of the province. Manufacturing and agriculture lost over 43,000 jobs between 1996 and 2011. This is particularly disturbing in the context of the fact that the South African Manufacturing sector, if Iron and Steel and Oil refining are excluded, grew at 3.4 per cent by mid-2011⁸. This was offset by the tertiary sector in KwaZulu Natal, in particular Finance and Business Services and Trade, which added approximately 151,000 jobs. This is equivalent to the creation of 21,500 jobs per annum but the province is producing approximately 132, 000 matriculants every year not taking into consideration those already unemployed. The government has become the employer of last resort.

⁵ Provincial Growth and Development Strategy, 2011

⁶ Industrial Development Strategy, 2012, Volume One- Situational Analysis

⁷ Transnet Freight Rail, 2011

⁸ Bruggemans, C, FNB Economist, January 2012

Reliance on government to provide jobs is increasing and 126,000 jobs over the period 1995 to 2010 were created by government.

The IDS prioritises sectors for action based on their ability to absorb labour, improve contribution to GDP and GVA, stimulate trade and exports, and ability to attract foreign exchange earnings. Their current importance to the provincial economy as well as their growth potential and speed of growth, are further criteria. As a result, the key priority sectors in KwaZulu Natal in terms of industrial development are the agri-process, automotive, capital equipment, wood and wood products, metals, maritime, chemicals, transport and logistics, tourism and the green economy sectors and various sub sectors of these.

Transport and logistics is a crucial catalytic sector. The CSIR study (2009) estimates that if KwaZulu Natal GDP growth is in the order of 3 per cent, 47 per cent freight growth could have been expected between 2007 and 2020; if GDP growth were in the region of 5 per cent then 89 per cent freight growth could have been expected within the province. Provision of efficient infrastructure (include telecommunications) therefore leads to reduced costs and greater efficiencies.

The IDS recommends that as an implementation mechanism, KwaZulu Natal sets up an Industrial Development Strategy Flagship Programme which will focus on sectors which are able to move the provincial economy towards its job creation and productive growth goals. In terms of implementation it will be critical to improve intra government department planning and implementation alignment and to work closely with social partners.

Although there are many programmes and projects with good potential outlined in the detailed plan in the annexure to this report, it is necessary in the light of limited resources, to prioritise and the prioritised programmes are outlined in the proposed flagship programme tables.

Preconditions for success of the Industrial Development Plan are that the three major constraints to industrial growth which are, unskilled human capital, significant logistics and

supply chain inefficiencies and inadequate unlocking of the potential of agriculture, must be addressed simultaneously with the implementation of the Industrial Development Strategy.

KwaZulu Natal has to compete effectively with other regions for investment and jobs- to do this, it is not enough to intervene along value chains and within clusters, the basic foundations for industrial growth must be present and prioritised for action according to the prioritisation of growth sectors in the industrial economy.

1. The Industrial Development Strategies, 2005 and 2012

1.1 The IDS (2005)

There are no available quantitative data on performance against stated goals for the KwaZulu Natal Industrial Development Strategy of 2005. This is clearly a shortcoming which the current revision will address. Effective goal setting and the rigorous monitoring and evaluation of achievements relative to goals⁹ is an essential component of the new IDS.

The previous IDS was consistent with the national and provincial policy of the day. New policy since 2005 includes IPAP, IPAP-2 and the National Growth Path while a revised KwaZulu Natal PGDS and various new sector based strategies have been produced and ratified at the provincial level. Of these, the most salient are the national policies of IPAP-2 and the New Growth Path, both of which emphasise job creation, productive growth and focused application of resources to achieve national goals. At the provincial level, the Provincial Growth and Development Strategy (PGDS) of 2011 outlines clearly and precisely the economic growth and development goals for the province and the 2012 IDS is constructed within this framework.

The focus of the 2005 IDS was largely to support national industrial policy and strategy, to improve the human capital skills base in the province and to protect and enhance manufacturing. Although quantitative review is not possible, on a qualitative assessment level there has been very limited progress on the development of the human capital skills

⁹In 2009, a report was prepared by Dr Jeff McCarthy and Kwame Owusu-Ampomah which reviewed the KwaZulu Natal Industrial Development Strategy in relation to its implications for skills, however it does not review the performance of the previous Industrial Development Strategy against the goals and targets set.

base. This, according to the PGDS (2012) has been partly a result of unsatisfactory national policies¹⁰ and partly due to ineffective implementation by national and provincial agencies.

Some progress has been made in the protection and enhancement of local manufacturing, which has increased in terms of GVA and contribution to provincial GDP from 1995 to 2010, but some industries, such as the clothing and textiles industry, have been almost entirely lost. Agriculture, an area of potentially large comparative and competitive advantage for the province, has declined significantly, resulting in massive job losses over the last ten years, but also in the loss of agricultural inputs to the Food and Beverage and Chemical and Pharmaceuticals industry sectors in the province.

There has also been progress in terms of new industry development- studies have been conducted into all the major industry sectors in KwaZulu Natal and opportunities along the various value chains identified. In some cases, such as the automotive sector, catalytic industry support has taken place via the provision of specialised industry infrastructure using national support mechanisms. Additionally, major strides have been made in the upgrade, renewal and greenfields implementation of strategic infrastructure such as in the Richards Bay Industrial Zone, Dube Trade Port, King Shaka and more recently, the upgrade of Pietermaritzburg and potentially other provincial airports. However, serious inefficiencies in other areas, such as in Durban Port, and in industrial rail transport and logistics, remain to be addressed and constrain industrial growth.

1.1 The IDS (2012)

The current IDS takes cognisance of the following:

- *Changes in national industrial policy and strategy* arising out of IPAP 2 and the New Growth Path and in particular the need to identify essential trade-offs
- *The need to focus on relevant sectors* for KwaZulu-Natal that can deliver over 1 million jobs in five years and place the provincial economy on the path of productive growth , taking cognisance of skills, infrastructure and locational issues.

¹⁰ For example, the removal of the artisanal apprenticeship system

- The need to *align scarce government resources* (money, specific skills and expertise and agencies) around shared goals and avoid duplication and dilution of effort
- The need to *clearly monitor and measure outcomes* on an annual basis and re-align activities based on changing conditions and inadequate performance.
- The need to ensure that *the basic infrastructure that is needed* is provided - fast.

The objectives of the 2012 KwaZulu Industrial Development Strategy are to promote and support the increase of investment in industry resulting in increased labour absorption, an increased contribution by industry to the speed of growth of the KwaZulu Natal economy and an increased contribution to provincial Gross Domestic Product (GDP) and Gross Value Added (GVA). An increase in exports and an increase in foreign exchange earnings are additional goals.

The current status of the industrial sectors in the provincial economy coupled with the criteria of labour absorption, speed of potential growth, ease of entry for SMEs, the ability to grow exports and earn foreign exchange are the criteria for selection of priority sectors and projects. For example, while the contribution of Construction to provincial GDP is relatively small, the labour absorption capacity of the sector is very high, and in periods of economic development the sector can contribute significantly to economic growth.

In parallel, the Department for Economic Development (DEDT) seeks to provide a framework for implementation of the IDS which will ensure prioritisation, action, accountability and measurement and regular feedback to all stakeholders.

In terms of implementation, proper goal setting and measurement of outcomes form a key element of the Industrial Development Strategy.¹¹ Improved quantitative goal setting and Monitoring and Evaluation (M & E) are essential so that progress can be properly measured and reported. This Industrial Development Strategy will, in alignment with the Provincial Growth and Development Strategy (PGDS) ensure improved organisation and quantitative

¹¹ The previous KZN Industrial Development Strategy (2006) did not implement any clear Monitoring and Evaluation systems and no mid-term review or end term review was conducted, therefore no assessment of the efficacy of the strategy has been possible.

goal setting, and efficient M & E of interventions. The monitoring and evaluation mechanisms suggested in the implementation plan of this strategy¹² will ensure continuous review of interventions, performance assessment against goals, that adjustments are undertaken where necessary and accountability is improved. At the same time, improved organisation and alignment between government plans and government departments will be essential for effective implementation and optimum use of resources.

The IDS will locate resources where they can have the highest sustainable impact in the shortest period of time in meeting the goals of job creation and productive growth. Focus is therefore on areas where KwaZulu-Natal has a clear comparative advantage and/or an existing successful presence or the potential for advantage.

Globally and nationally speaking, a region which can offer the most relevant and quality skills for target sectors attracts the most productive investment. The intense rate of change of technology in industries important to the province as well as the productive growth of these industries means there is a need to build robust and relevant skills programmes to ensure a steady supply of superior skills to industry and better access to decent work for the human capital in the province.

In sum the objectives of the IDS are to stimulate and fast track productive growth and job creation in KwaZulu-Natal by providing an assessment of the status quo in KwaZulu-Natal in terms of Industrial Development and by providing an Industrial Development Strategy for KwaZulu-Natal which focuses resources for the best return.

The role of the DEDT is to provide the IDS and the strategic level implementation plan for action by the relevant agencies and role players, and to undertake an M & E role by measuring the outcomes of strategy implementation. The DEDT is responsible for and will report annually on, the facilitation of the implementation of the IDS through various

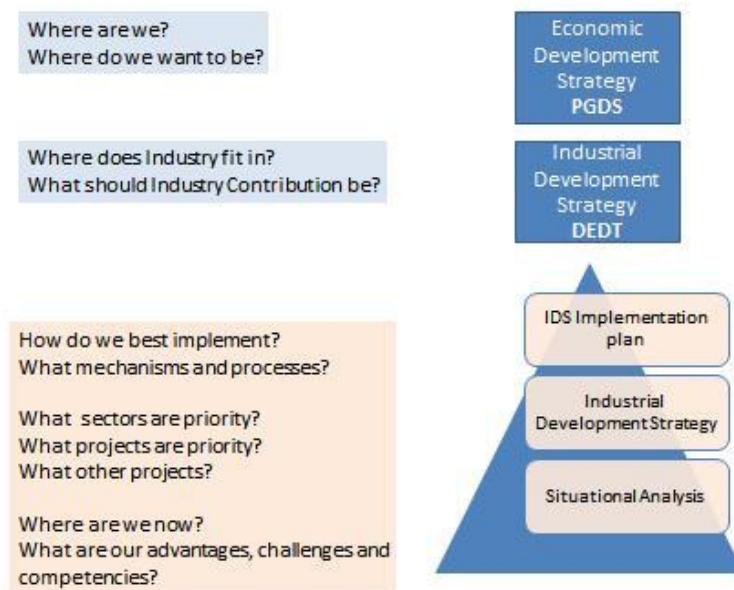
¹² Industrial Development Strategy, 2012, Volume Three- Implementation Plan

agencies and economic actors; the championing of specific sector related projects and the monitoring and evaluation of projects.

1.3 The Planning Process

The Industrial Development Strategy preparation process has taken place within the framework of the 2012 Provincial Growth and Development Strategy (PGDS) which tables the overall economic growth goals and plans for KwaZulu Natal. The development of the IDS requires that a review of the status quo is undertaken, followed by the development of strategies based on the ability of sectors to meet the economic development goals of the province. Once these are finalised, key projects are determined and prioritised, and a high level implementation plan is completed. This has occurred within a consultative process involving social partners and stakeholders.

Figure 1.1 Industrial Development Strategy- Planning Hierarchy



Source: Blueprint (2012)

The Situational Analysis and the detailed implementation plans are provided in detailed separate reports,¹³ and a summary only is contained herein.

¹³ Refer DEDT KZN

2. Situational Analysis- Where are we now?

2.1 The World and South Africa

The global economy is underperforming and volatile and the South African economy, including the economy of KwaZulu-Natal, has been deeply affected by global circumstances.

China is attempting to curb an overheated economy by raising interest rates and undertaking other measures to ensure stability within its borders. This is having an effect on demand and prices for commodities, many of which are supplied by South Africa, which has increased exports to China very significantly over the last 8 years. Japan is attempting to restructure its economy as a result of a major natural disaster and the subsequent nuclear reactor failure, and a number of manufacturing industries have been affected - of particular relevance to South Africa and to KwaZulu-Natal is the impact the disaster has had on the automotive industry and demand for commodities. In northern Africa, a series of popular uprisings against leadership has resulted in volatility and concern about the price of oil, which has affected and will continue to affect all oil based economies in the world.

Europe continues to struggle with debt issues, with Greece moving closer to default with the potential to impact very significantly on the value of the Euro and the future of the common currency in the EU. The EU is still South Africa's largest trading partner and the devaluation of the Euro against the US dollar and the Rand has had consequences for South African importers and exporters. Finally although the USA is moving out of deep recession, improvement is slower than anticipated, and this is constraining global economic growth. The volume of South African trade with the EU, the US and China therefore has fallen and until conditions for growth improve in these three markets, will stay at lower levels. South Africa's accession to the BRICS may go some way to improving exports to these markets but the propensity of South African exporters to take up the opportunities other than in China, has been sluggish.¹⁴

National Industrial growth is also constrained. Increasingly severe credit conditions and limited lending by local banks has resulted in a slow-down in residential building activity and

¹⁴ The dti, 2011

a much more limited market of house buyers. Uncertainty around mining rights has seen new exploration in South Africa reduce to the lowest levels relative to other destinations, in over 100 years. Uncertainty around land policy issues has stalled farming investment and retarded growth in the Food, Beverage, Pharmaceuticals and Chemicals sectors. However, new local procurement and BB-BEE regulations may provide stimulation within the national economy to manufacturers of all designated products and provide easier entry for black owned SMEs to industry value chains.

2.1 KwaZulu Natal

KwaZulu Natal is home to over 10 million South Africans representing just over 21 per cent of the national population. Population growth has slowed to under 0.28 per cent, due to the combined effects of lower fertility, increased child mortality and lower life expectancy of 48 years for adults, nevertheless, population growth over the last ten years was approximately 12 per cent over the period. The population is young, with an average age in 2009 of 26¹⁵.

The impact of HIV/AIDS in KwaZulu Natal continues to be very high. While infection rates for HIV/AIDS has decreased by over 30% in South Africa over the last five years, KwaZulu-Natal is the province with the highest prevalence of HIV/AIDS in South Africa and many people are infected and/or affected by the condition.¹⁶

Six million people in KwaZulu-Natal, are of working age, but only 2.5 million of these are formally or self-employed. Unemployment - largely amongst young people - stands at over 23 per cent.¹⁷ The number of people living in poverty increased between 1995 and 2009 by approximately 7 per cent.

The population is densely gathered in three major centres and highly fragmented in the rural areas making the provision and maintenance of infrastructure an extremely expensive undertaking. Currently, 54 per cent of the population lives in the rural areas comprising largely women and those attending school, however, urbanisation is predicted to increase significantly with a further 3.6 million of the population likely to move to the urban areas by

¹⁵ KwaZulu Natal Treasury , 2012

¹⁶ World Health Organisation, 2011

¹⁷ Labour Force Survey, StatsSA, 2011

2030 thus placing more pressure on urban infrastructure and systems.¹⁸ 3.5 million people live in eThekweni alone with the remainder relatively equally distributed amongst the districts.

Education and skills levels are very low and unemployment is very high. In 2009, only 2 per cent of the adult population of KwaZulu Natal had an accredited tertiary qualification (degree or diploma) and while a little over 132,000 people passed Matric only 26,000 earned a University exemption. The labour force currently is largely unskilled. From 1996 to 2011 inclusive¹⁹ KwaZulu Natal grew total employment by just under 10 per cent. This is not adequate for KwaZulu Natal to grow provincial GDP to the levels needed to decrease unemployment and increase productive growth, to provide work for those leaving school each year or to address the backlog of the unemployed seeking work.

Economic activity in KwaZulu-Natal is concentrated in eThekweni which generates almost two-thirds (61.2 per cent) of GDP in the province. The other areas of concentrated economic activity include the port city of Richards Bay and its immediate surrounds, the city of Pietermaritzburg - a manufacturing hub along the major N3 corridor- and the cities of Ladysmith and Newcastle near the border of the province with the Free State and Mpumalanga. Together, eThekweni, Richards Bay and Pietermaritzburg account for over 80 per cent of all economic activity in KwaZulu-Natal. eThekweni is responsible for 53 per cent of provincial Gross Value Added (GVA) and when uMgungundlovu and uThungulu are added to eThekweni, the three areas together account for 72 per cent of provincial GVA.

There has been a decline in manufacturing and agriculture investment in KwaZulu Natal over the last 8 years which has reduced employment in these sectors as well as reducing the productive growth potential of the province. In spite of clear comparative advantages in agriculture due to soil, climate and geology conditions, KwaZulu Natal has become a net importer of agricultural goods.²⁰ In spite of comparative advantages in terms of location and ports and a traditionally strong industrial base these have not translated into

¹⁸ Provincial Growth and Development Strategy, 2011

¹⁹ KwaZulu Natal Treasury Statistics, 2011

²⁰ Provincial Growth and Development Strategy, 2011

competitive advantages resulting in wasted productive economic potential.²¹ However in the absence of easy markets in the developed world currently, international firms are paying close attention to an untapped market for consumer goods of over 1 billion people in Africa, and there is renewed interest in accessing these markets. KwaZulu Natal's PGDS vision of becoming the gateway to Africa speaks to this opportunity.

Constraints to industrial growth and development include availability and lack of clarity regarding ownership of agricultural land, lack of available industrial land, an inflexible labour environment, low skills levels and the increasing cost of capital. Added to this are significant inefficiencies in the ports and rail networks serving the province and an overburdened road network²². Planning coherence, institutional coordination and funding for economic development (over 73 per cent of the provincial budget is allocated to education and health spending) represent real implementation challenges for KwaZulu Natal and are inhibitors of growth.

In the private sector, manufacturing and agriculture, the major productive sectors driving the KwaZulu Natal economy, Manufacturing and Agriculture, lost over 43,000 jobs between 1996 and 2011. This is particularly disturbing in the context of the fact that the South African Manufacturing sector, if Iron and Steel and Oil refining are excluded, grew at 3.4 per cent by mid-2011²³. This was offset by the tertiary sector in KwaZulu Natal, in particular Finance and Business Services and Trade, which added approximately 151,000 jobs. Construction recorded a small increase in jobs of 21,000. This is equivalent to the creation of 21,500 jobs per annum but the province is producing approximately 132, 000 matriculants every year not taking into consideration those already unemployed.

The government has become the employer of last resort. Reliance on government to provide jobs is increasing and 126,000 jobs over the period 1995 to 2010 were created by government. Not only does provincial government provide employment, but over 75 per cent of the provincial budget is allocated to social spending on education and health and

²¹ Industrial Development Strategy, 2012, Volume One- Situational Analysis

²² Transnet, 2011

²³ Bruggemans, C, FNB Economist, January 2012

national programmes such as the Expanded Public Works Programme (EPWP) are needed to provide additional work opportunities for the unemployed. Unless investment in productive growth is increased therefore, progressive unemployment and the social burden on the state will increase.²⁴ High unemployment results in high dependency ratios, and ultimately in large numbers of people in even working households living near or below the poverty line. This increases the potential for social instability.

The IDS prioritises sectors for action based on their ability to absorb labour, improve contribution to GDP and GVA, stimulate trade and exports, and ability to attract foreign exchange earnings. Their current importance to the provincial economy as well as their growth potential and speed of growth, are additional criteria. Sector focus is further prioritised based on existing comparative and competitive advantage and potential comparative and competitive advantage. As a result, the key priority sectors in KwaZulu Natal in terms of industrial development are the agri-process, automotive, capital equipment, wood and wood products, metals, maritime, chemicals, transport and logistics, tourism and the green economy sectors.

Transport and logistics is a crucial catalytic sector. The CSIR study (2009) estimates that if KwaZulu Natal GDP growth would be in the order of 3 per cent, 47 per cent freight growth could be expected between 2007 and 2020; if GDP growth were to be in the region of 5 per cent then 89 per cent freight growth could be expected over the same time frame. Provision of efficient infrastructure (include telecommunications) leads to reduced costs and greater efficiencies resulting in improved competitive capability for industry.

KwaZulu-Natal under-performs economically taking into account its potential. The most populous province (20.6% of the population), it contributes only 16.3% to GDP and only ranks fifth in terms of GDP per capita. The problem of rural underdevelopment with high levels of poverty, unemployment, especially in rural areas is significant and a weak, small business (SMME) sector, lacking in skills, access to finance and with a poor entrepreneurial record contributes to lower than desirable levels of economic growth. The province must

²⁴ StatsSA, LFS Q1, 2011

simultaneously deal with skewed and unequal spatial development and the fact that the largely rural nature of the province and dispersed settlements, and a topography which adds to the cost of development and infrastructure provision, renders infrastructure provision more difficult and costly than in other regions.

2.3 Social Partner Perceptions Survey

As part of the consultative process, a survey was conducted within the social partner constituencies in KwaZulu Natal²⁵. The majority of respondents (regardless of sector, affiliation or employer) believe that poor coordination, synergy and integration between departments, spheres of government and between municipalities and traditional authorities have resulted in poor implementation of Industrial Strategy within KwaZulu- Natal.²⁶ A second major constraint to investment in industry is a critical shortage of professional skills, such as engineering and project management.

The lack of access to financing for small scale entrepreneurs and SMMEs owing to the inflexibility of the formal financial institutions means that enterprise development as an alternative to low employment uptake in the formal sector is very difficult to achieve and a variety of social factors such as the high infection and prevalence rates of HIV/AIDS, unemployment, low human capital and development indices, a high rate of crime, poor quality of education and high numbers of out-of-school children make it very difficult to progress on growth issues that are focussed on industrial growth alone. In other words, unless the social and educational issues are dealt with, the constraints on industrial growth will remain.

Most respondents were of the opinion that government initiatives aimed at creating job opportunities in manufacturing and industry had failed or had very little effect because of the inability of the government departments to implement policies originating at cabinet or at Provincial level.

KwaZulu Natal social partners believe that provincial industrialisation initiatives have ground to a halt and have had a minimal effect on unemployment because of poor implementation.

²⁵ Blueprint, 2011

²⁶ Industrial Development Strategy Survey, 2011

Many questioned the usefulness of having another round of discussions about increased industrialisation in the province of KwaZulu-Natal because of a perception that no action had been taken after previous discussions. This limited interest in participating in workshops although they were willing to discuss issues on a one on one basis.

2.4 Conclusions and Implications for Industrial Development Strategy

The 2011 PGDS has as its vision the maximisation of KwaZulu Natal as a *gateway to South and Southern Africa*, to be achieved by 2030. The PGDS aims to build this gateway by growing the economy for the development and the improvement of the quality of life of all people living in the Province.

The success of the PGDS will depend on strong relationships and agreements between government, labour, civil society and business. Thus a critical success factor in achieving the 2011 PGDS is for all stakeholders to be synchronized in the development of KZN's growth path towards shared growth and integrated, sustainable development. The PGDS identifies the major challenge for KwaZulu Natal as that of ensuring that the province creates sufficient jobs for its people over time, and empowers its people to take advantage of economic opportunity through skills development. Strategic Infrastructure is also noted as a critical strategic imperative for the province. It also specifies particular catalytic interventions and notes that without these being implemented, the PGDS is unlikely to succeed.

An important priority for the province is to invest further in positioning KwaZulu Natal as the trade gateway into the African continent. This requires investment in building a modern infrastructure, particularly in terms of transportation, communication and logistics, that reduces business costs, enhances competitiveness for firms and creates employment.

2.4.2 Constraints

There are three major constraints to the successful implementation of the KwaZulu Natal Industrial Development Strategy which need to be addressed without which industrial growth cannot be achieved or sustained.

Firstly, *human capital development* is essential to up-skill and re-skill local people, and the quality of and access to primary, secondary and tertiary education (which is relevant and useful to industry) is a critical platform. Without access to an appropriately skilled labour force, investment in new industry and expansions in existing industries, and even the retention of traditional industries is unlikely to occur. In this regard, the success of the Human Capital Development strategy of the PGDS is fundamental to the growth of Industry in the province.

Secondly, *key logistics shortfalls and blockages* must be removed. Port and rail efficiencies need to improve exponentially to ensure the basic efficiencies of provincial industries forming part of global value chains such as the automotive and chemicals industries, but also for industries seeking to realise the PGDS vision of KwaZulu Natal as a gateway to Africa and to the World. If such efficiencies are not dramatically and radically improved within a reasonable time frame, such as three to five years, new investment in industries with a high dependency on efficient logistics will not materialise, and trade into Africa will migrate to other access points such as Maputo.

Thirdly, *agriculture*, while not within the mandate of industry per se, provides the essential inputs for all agro-industry such as food, beverages, certain pharmaceuticals and chemicals, as well as demand for agro-industry goods and services. The unnecessary decline of agriculture in the provincial economy is of serious concern not only to farming and food security, but also to industrial growth activities.

2.4.3 Opportunities

The KwaZulu Natal Industrial Development Strategy will focus on identifying and implementing interventions which will retain and expand existing business and attract investment in new businesses in the province, in the core and priority sectors of the provincial economy. The key manufacturing sectors and focus of the strategy are agri-process, automotive, chemicals and pharmaceuticals, metals (especially Aluminium and

Steel), Wood and Wood products, Maritime, Tourism, and Transport and Logistics²⁷ based on the criteria outlined earlier in this analysis.

The green economy and in particular renewable energy, offer new opportunities for provincial manufacturing and changes in the trade environment (such as South Africa's accession to BRICS) offer new opportunities for increased exports into Africa via KwaZulu Natal, as well as from South Africa to the BRIC countries.

Competitive advantage in terms of location, infrastructure and agricultural land should be better leveraged. Key competencies in the province in the areas of supply chain management, bulk logistics, and business services can be aligned to projects and programmes to result in improved implementation.

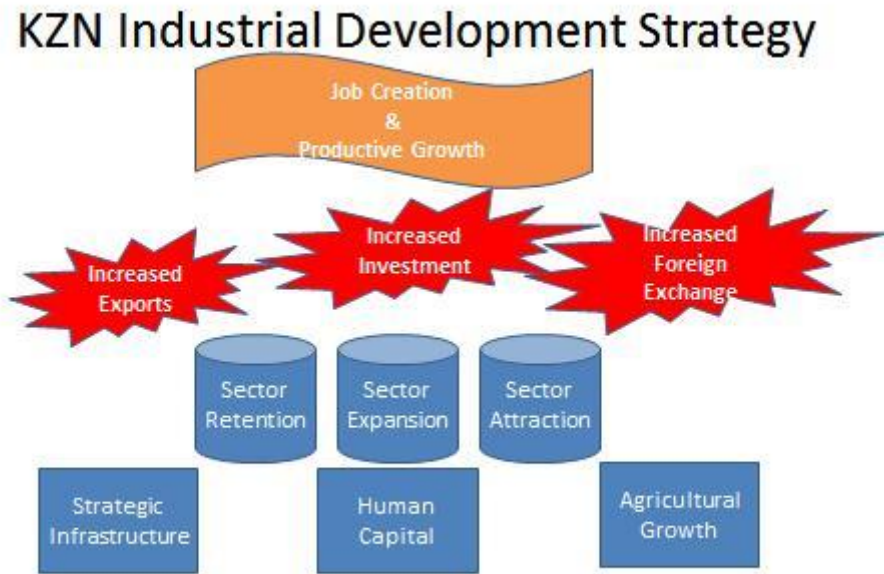
Increases in trade and manufacturing will further stimulate the financial and business services sector and the transport and logistics sectors and thus will have a knock on effect on job creation outside their own sector boundaries. Key mechanisms for focussed implementation of Industrial Development Strategy will be value chains and clusters where targeted and catalytic intervention can be maximised.

2.4.4 Implementation

The opportunities and projects identified need to be effectively implemented. The three major constraints to growth identified by the PGDS and this study should be addressed in parallel to all industrial strategy implementation projects in order to progressively remove constraints to industrial growth. Alignment between the departments and agencies charged with implementation of projects to remove these constraints and the DEDT and its implementing mechanisms will be critical to success. Quantitative goal setting and reliable M&E processes for assessing progress against stated goals will be a key success factor in the effective and optimum use of resources.

²⁷ Industrial Development Strategy, 2012, Volume One- Situational Analysis

Figure 2.1 Platform for Industrial Development in KZN



Source: Blueprint (2012)

In terms of strategy, it will be important to ensure that the major constraints and difficulties identified are acknowledged as significantly affecting the ability of the Industrial Sector in KwaZulu-Natal to become competitive or increase competitive capability. Specific strategic interventions with the objective of unlocking industrial potential should be undertaken at the same time as industrial and sector focused interventions. Orderly and well organised and measured implementation with accountability factored in to goal setting and achievements, is an essential platform without which it is unlikely that real progress can be made.

3. Industrial Development Strategy, 2012

In the face of the persistent challenges facing the KwaZulu-Natal economy, (such as jobless growth, very high unemployment, economic growth rates which are inadequate to absorb young labour entering the market, low levels of value adding to minerals and other commodities and distance from major markets with significant disposable income), that the KwaZulu-Natal Industrial Development Strategy responds meaningfully and very

pragmatically to the challenges identified and tabled earlier in this paper. If the quality of life for the citizens of KwaZulu-Natal is to improve sufficiently to enable a decent quality of life for all, then jobs must be created, inequity in society reduced, driven by a robust and high value added manufacturing sector.

3.1 Approach to Industrial Development Strategy

Three linked frameworks are important to ensure the success of any Industrial Strategy in KwaZulu-Natal. In the first instance, a solid and constructive Industrial Policy Framework is required, with national government paying attention to macro and micro economic variables and factors which are relevant and useful for economic growth. The recent tabling of IPAP 2 and the New Growth Path have provided a useful and constructive framework for the development of industrial strategy as well as providing focus on sectors where South Africa can be expected to have chances of success, and specific measures with which South Africa can measure success at the macro level.

In the second instance, Industrial Strategy offers the mechanism for a nation or region to identify, develop and implement strategies to achieve the goals laid down by policy. Industrial Strategy at the national level is outlined in IPAP 2 and the New Growth Path, but is also reflected in various programmes of strategic activity (such as the Customised Sector Programmes of the dti) undertaken by National agencies and departments²⁸.

Thirdly, if Industrial Policy and Strategy are to be successful in meeting the goal of increasing productive growth, the effective and speedy implementation of interventions and the sustainable competitiveness of companies in the core sectors are key success factors. This means that provincial government and agencies need to understand what drives competitive capability in industrial sectors and develop support in conjunction with business to ensure that steady growth in competitive capability will occur. This will assist not only in growing existing businesses in the focus sectors, but also in attracting new local and international investment as the ability of KwaZulu-Natal industries to compete becomes more and more of a commercial proposition for productive investment.

²⁸Refer Situational Analysis, Volume One for complete table of National Industrial Strategy goals and Activities

The efficient use of scarce government resources is an essential factor for success. There is no room for a proliferation of agencies working in different directions to achieve different goals, or for the duplication and/or dilution of activities. Timing and swift action is also critical given the fast rate of change of technology and opportunity. Effective inter agency cooperation and implementation, and thorough monitoring and evaluation of achievements against shared goals is therefore not negotiable in the successful implementation of KwaZulu-Natal's industrial strategy.

3.2 Vision and Mission for the Industrial Development Strategy

The vision for the Industrial Development Strategy is to provide

“A productive and competitive KwaZulu-Natal Industrial economy that creates employment for all”

The IDS has therefore as its mission

“To ensure a competitive industrial base that continues to grow and develop to sustain competitive capability in the sectors where it participates in order to grow the contribution of industry to the KwaZulu Natal economy”

A clear focus on implementation and prioritisation of critical projects and programmes will have the effect of fast tracking economic growth and providing economic opportunities for the people of KwaZulu-Natal within a shorter time span.

Prioritisation is critical – the IDS will focus on where to concentrating efforts according to the relevant criteria and will phase implementation accordingly. There are a number of opportunities which will support the Province in meeting the tough work creation targets of the New Growth Path, if the current fragmentation of implementation effort and duplication of resources, is effectively and quickly addressed

3.3 Industrial Policy & Strategy

Industrial strategy is important, because industry does not exist in a vacuum. Industry is a source of economic growth. It is a source of employment. It helps prevent unemployment,

thus offering positive social outcomes. As a provider of jobs, it reduces poverty. In certain regions and sub-regions it contributes to economic and social cohesion. People at work enjoy better physical and mental health. They are less likely to be involved in crime. They also pay the taxes that fund schools, hospitals and care for the elderly. Policymakers therefore have a huge interest in industrial success.

Business retention, expansion and attraction are critical components of any industrial strategy- the closure of a company or an entire industry for example, can have massive political consequences. Notwithstanding their current situation, the economies that have enjoyed the most long-term post-war success – Germany, Japan and the United States – have strong manufacturing sectors. The manufacturing prowess of China - and its ability to play by different rules at the moment - render it almost impossible to play a low cost game in the world of global manufacturing. Other sources of advantage must therefore be found and sustained. Industrial Strategy takes place in the context of specific drivers in order to achieve South African and KwaZulu-Natal goals for job creation and productive growth. These are:

- **Improving competition** - Competition puts downward pressure on costs and prices, driving innovation and business efficiency, and delivering a better deal for consumers;
- **Promoting enterprise** - by removing barriers to entrepreneurship and promoting an enterprise culture, as well as using regulation to deliver genuine reductions in the burdens on business;
- **Supporting science and innovation** - to promote the development of new technologies and more efficient ways of working. Increasing rewards for innovation mean that KwaZulu-Natal will be able to depend on its ability to create new knowledge and translate it into innovative goods and services;
- **Raising skills levels** - to create a more flexible and productive workforce, which can adopt innovative technologies and enable individuals to move into new areas of work; and
- **Encourage investment** - to increase the stock of physical capital, including through stronger, more efficient, capital markets as well as strengthening productive growth

- **Innovation**
- **Technological Advancement**

The framework provided by IPAP2 and the NGP, which outline focus sectors, allows for support to occur at the level of the provincial economy (province wide) as well as at the sector and area specific levels. When a sector is an area of traditional strength that has major spin-offs for wider industry and the KwaZulu-Natal economy it makes sense to develop specific strategies for business retention in that sector. At the same time, when a strategic company needs to restructure or diversify and needs bridging support this too can be an optional element of industrial strategy support. A good example of this kind of strategic support has been the electricity supply and pricing contract between Billiton BHP and Eskom.

New Business development, or the attraction of new industries, is a critical element of Industrial strategy. Manufacturing, like the rest of the world, cannot stand still. Relatively low skill, low value manufacturing typically migrates to countries or even regions with lower labour costs than KwaZulu-Natal (as has already occurred with the Clothing and Textiles industry) and consequently KwaZulu-Natal must fight for its share of the future and in high technology, high skilled areas of production. Identifying comparative advantages within the province (such as access to the coast), and building competitive advantage from this basis (such as modern port infrastructure) begins to permit specific industries to set up base in the province and compete successfully over time.

One such opportunity outlined in IPAP2 and the revised IPAP2 (Feb2011) as well as in the NGP is that of Green Industries. The green challenge will offer enormous possibilities as well as new constraints on older industries. The environmental technology industry is a dynamic and growing sector, with a turnover of £25 billion per year in the UK alone in 2008 with 400,000 jobs attributable to the sector. As an example, the manufacture and installation of wind-related technologies and tidal power systems as well as the waste management industry, and recycling (-also known as remanufacturing – the practice of taking end-of-life goods and re-engineering them back to as-new condition, with warranty to match) – offers further possibilities. Wave and Tidal Power technology in particular, given the KwaZulu-

Natal coastline, could represent a major thrust for the province in attracting international investment (the UK is the global market leader in this technology) and knowledge to the province.

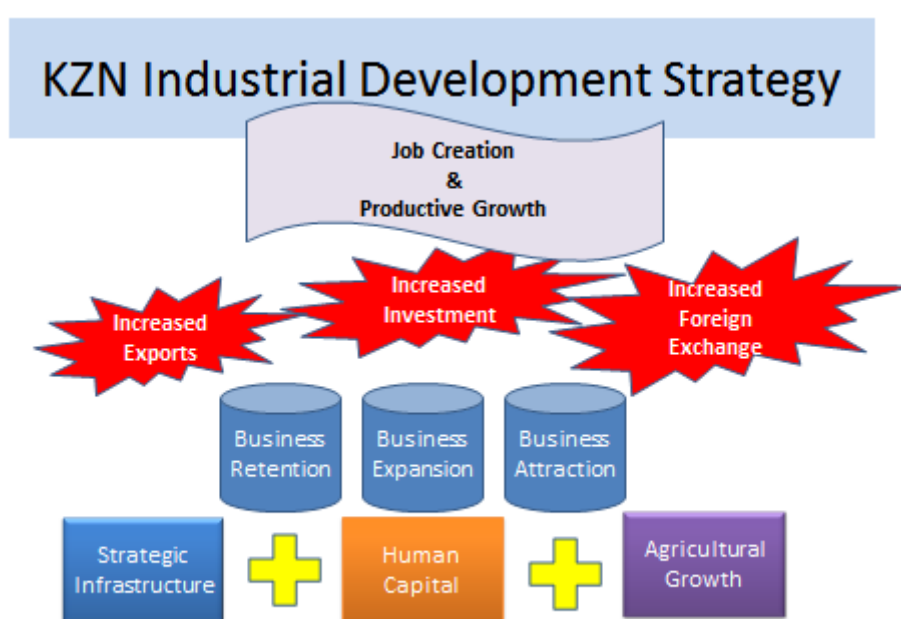
Greater productivity requires more innovation, which, in turn, depends partly on research and development. Innovation should however, not simply focus on new technology and R&D although selected interventions in R&D support are critical for KwaZulu-Natal. But also innovative working practices, including high performance models, have been proven to be effective. Evidence shows that the intensity of innovation in a region depends critically on the relationships between leading businesses and local universities and how these are used.

In order to deliver Industrial Strategy, joined-up and well aligned provincial government is vital. Too often, the aims of different government departments and agencies are at odds with each other. Any industrial strategy must be supported not only by the DEDT but also by all other relevant agencies. Inter-agency cooperation and focus is a critical success factor for Kwa-Zulu Natal economic growth and job creation targets to be met. Any industrial strategy must have a means by which its success or failure is measured. Industry, government and labour should agree a set of key performance indicators which should be revisited at regular intervals to ensure the industrial strategy is on course.

National Industrial Policy and Strategy reflects the dual nature of the South African and provincial economies. Not only does South African industrial policy and strategy need to address productive growth but also the desperate straits of a large percentage of the South African and provincial population – many under 26 and rural - who have no work, and inadequate education. This requires therefore that an additional component of industrial strategy is implemented - what commercially viable and sustainable opportunities are there which will permit for the employment of large numbers of people with very limited skills, who live in rural and urban areas? Certain sectors of the economy are capable of providing these opportunities, largely on a local level. Excellent opportunities exist in waste management and in wood and wood products, as well as in agro industry, for such jobs and work to be created, with additional potential over time for some level of successful enterprise creation to occur.

Overall therefore, a portfolio approach to sector stimulation and support is needed in KwaZulu-Natal with certain sectors able to deliver export growth and an improved balance of trade for the province, others able to deliver sustainable rural jobs, more able to deliver new investment attraction and some able to deliver productive competitive growth over time. Very few sectors can deliver all of these outcomes at the same time, but to the extent that these exist (like the automotive industry) they should be heavily supported.

Figure 3.1: Industrial Development Strategy – Vision and Pillars



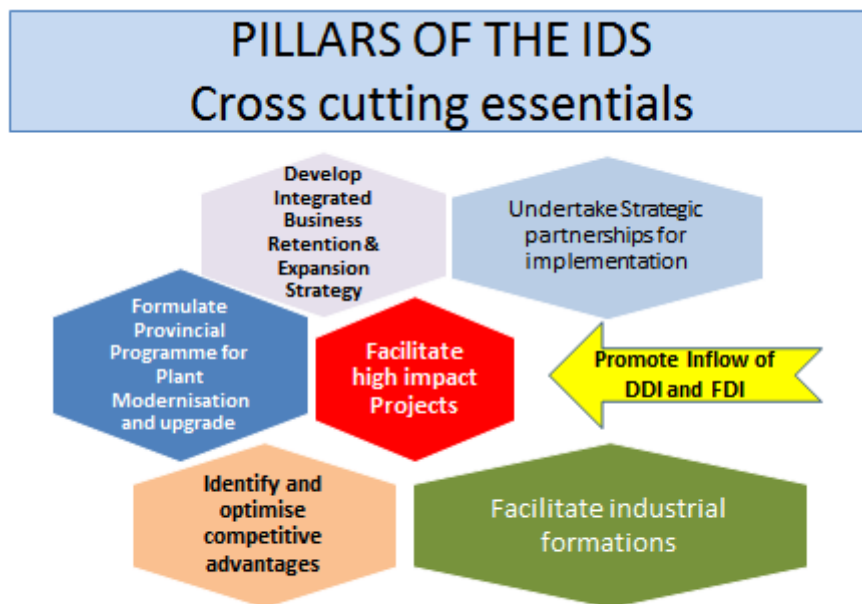
Source: Blueprint (2012)

It is this mix or portfolio of sectors and sector support strategies in the revised KwaZulu-Natal Industrial Development Strategy, combined with significantly improved efficiencies in agency alignment, resource utilisation and measurability of interventions, that will permit KwaZulu-Natal to meet the job creation and productive growth objectives of National and Provincial policy within the required time frame.

3.3.1 Essential Support Strategies – Pillars

Certain strategic platforms are essential for engendering sustained competitive improvement in industry and form part of the revised Industrial Development Strategy platform. This requires high levels of inter-agency coordination and cooperation.

Figure 3.2: Crosscutting essentials for the Industrial Development Strategy



Source: Blueprint (2012)

The following strategies should be implemented as cross cutting and underpinning activities for all envisaged industrial and related projects and programmes:

- Leveraging of resources through strategic partnerships for implementing economic projects;
- Developing and facilitating an integrated Business Retention and Expansion (BR&E) strategy;
- Formulation of a Provincial Programme of Upgrading and Modernization of Industries;
- Developing and facilitating the implementation of strategic high impact projects that strengthen the competitiveness of the province as a trade and logistics gateway to Southern Africa;

- Promotion and improvement of global competitiveness of enterprises based in KwaZulu-Natal;
- Promotion of the inflow of local and Foreign Direct Investments (FDI's); and
- Facilitating the structuring of institutional formations to promote industrial development.

3.3.2 Industrial Competitiveness

A focus on increasing the competitive capability of firms in the region, in ways which will be sustainable over time is needed. While competitiveness has always mattered for industrial growth, its nature has evolved²⁹. Rapid technical change, shrinking economic distance, new forms of industrial organization, tighter links between national value chains and widespread policy liberalization, are altering the competitive reality.

Competition now arises with great intensity from practically anywhere in the world, based on new technologies, advanced skills and sophisticated supply-chain and distribution techniques. To survive it, all producers must use new technologies at or near 'best practice'. It is organised in complex systems spanning many countries, tapping differences in costs, skills, resources and tastes to optimize the efficiency of the entire system (Radosevic, 1999). It is supported by international brands and networks with the capacity to deliver vast amounts of information at negligible cost. *Manufacturing is becoming more information-intensive: larger parts of value added consist of 'weightless' activities like research, design, marketing and networking.*

Technical change is also shifting industrial and trade structures towards more complex, technology-based activities. Organizational structures and the location of production are changing in response to technical change. Industrial firms are becoming less vertically integrated and more specialized by technology. Under competitive pressure, they are scouring the world for more economical locations. Technical progress allows some firms to locate processes and functions anywhere on the planet. Countries require new skills to manage technical change, and so the institutional ability to upgrade skills is critical. Regions

²⁹ Lall, S (2003) Industrial Policy: Working Paper Number 111 - Reinventing industrial strategy: The role of government policy in building Industrial Competitiveness

need good technical support agencies in standards, metrology, quality, testing, R&D, productivity and SME extension. They need advanced infrastructure in information and communication technologies (ICTs) - for KwaZulu-Natal this could begin with the delivery of province wide broad band access rolled out as quickly as possible.

However, attractive investment is itself competitive. Only if KZN is a competitive destination relative to other options, will it attract new investment. Given the industrial structure of KZN as outlined above the bases for competition are:

- To compete on value chain costs- to offer a sustainable supply chain cost advantage to firms in a sector through methods such as grants, tax efficiencies, serviced land, more cost efficient logistics etc.
- To compete by offering demand- is there a big market for the industry products?
- To compete by offering access to factors of production at improved costs

If the cost of producing and getting to market is greater in KZN than in another competing destination, over time, then the decision will be made not to invest here. Start-up cost support is only one small part of the equation.

Continuing with business as usual will not bring the growth and development needed to deal with the issues of unemployment and poverty. A substantial decline in investment into the primary and secondary sectors (predominately agriculture and manufacturing) over the past decade has reduced employment, and the real growth rate of GVA. Whilst KZN is endowed with the Durban and Richards Bay Ports, the Dube Trade Port, excellent agricultural land, and a strong industrial base, these comparative advantages have yet to be translated into competitive advantages.

The KwaZulu-Natal Industrial Strategy, taking place in a regional economy of a developing country, needs to be well grounded in the development of the critical factors of production without which no sector or industry can sustain competitiveness. Specifically, these factors include, *inter-alia*, skills, finance, technological transfer, infrastructure (ICT and logistics) and support institutions.

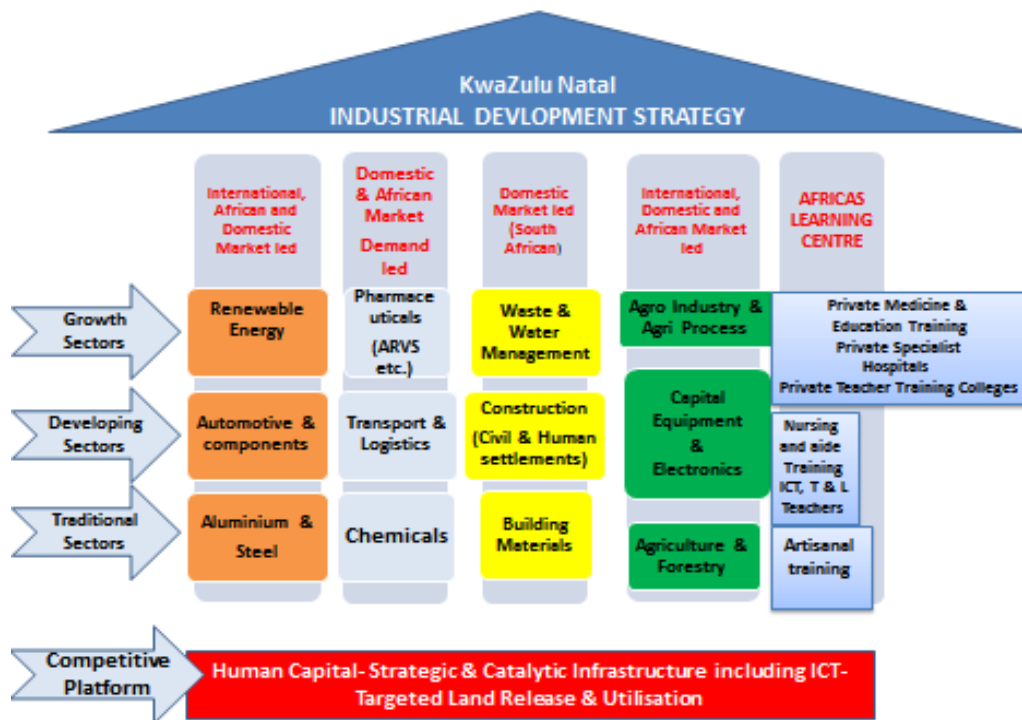
3.4 The Focus of the Industrial Development Strategy

The Industrial Development Strategy is located within the larger economic development strategy outlined by the PGDS. Many of the projects outlined for the Industrial Development Strategy are dependent on the specific implementation of other projects, that fall outside the mandate of the Industrial Development Strategy but which are essential to its success. The IDS focus is on business retention, business expansion and the attraction of new sectors and businesses to the province.

In terms of priority sectors which offer the most opportunities for the province, the traditional sectors of metals, chemicals and building materials, as well as agriculture have high labour absorption capacity, reasonable beneficiation opportunities and can contribute to GDP growth and GVA. They have reasonable export propensity for Africa and other provinces in South Africa. The strategies here will be to ensure efficient supply chains for industry products to local and African markets, to implement effective skills training for participation in the sectors and to open up some aspects of the business value chain so that SMEs can enter with more ease. Clusters are an excellent mechanism for organising SMEs in engagement with larger firms, while export education, trade delegations and information campaigns through consular officials in other countries are useful mechanisms for increasing export penetration.

Developing sectors for targeting include the automotive sector, where the focus should be on continuous improvement of specialised infrastructure and efforts to expand South African participation in the value chain through components as well as attracting new investment into South Africa of perhaps Chinese and Indian manufacturers which wish to access the African market. This sector requires more specific skills development, and has higher levels of value added. Export propensity is high due to the Automotive Industries Development Programme (AIDP) and contribution to GDP and GVA is potentially high. There is already major sunk investment which suggests that profitability could increase further.

Figure 3.3 Industrial Development Strategy and the Economic Development Platform



Source: Blueprint (2012)

For Transport and Logistics the need for catalytic infrastructure expansion and significantly improved supply chain systems for industry is clear. Much remains to be done in this sector but it can potentially grow very fast and absorb reasonable labour within the province. While direct contribution to GVA and GDP may be smaller, the distributive and catalytic effects on other industries are extremely high. Focus here must be on ensuring funding, political will and Transnet cooperation in implementation in the short to medium term. The IDZs and EPZs are essential components of catalytic infrastructure which cannot be ignored. Construction is highly labour absorptive and Capital Equipment and specific electronics are designated products for local procurement for the future giving an advantage to local manufacturers.

Growth sectors have been identified in the sector analyses undertaken by the DEDT between 2009 and 2011. Specific activities in the chemicals and pharmaceuticals value chains as well as renewable energy options, waste and water management options and agri process options are tabled later in this section. They are fast growing, labour absorbing, with

excellent export propensity and the potential to add significantly to GVA and GDP. However none of this will be possible or sustainable without catalytic skills and infrastructure development occurring in parallel with industrial development strategy implementation.

3.4 Organisation of Industrial Development Strategy

Due to the widespread incidence of projects, programmes, agencies and activities which have proliferated in KwaZulu-Natal over the last years, there is a need to logically organise activities into major themes or clusters of work, which themselves will represent major strategic trajectories into the future. Such organisation also facilitates the measurement of outcomes and the management of activities and budgets. It also ensures better synergy between cross over projects and agencies as well as initiatives.

The successful implementation of the Industrial Development Strategy will be severely inhibited without concomitant action taking place to improve the position of the critical enablers of infrastructure development and skills development. The recommended enabling projects are outlined below, followed by the Industrial Development Strategy in detail.

3.5 Enabling Platform- Infrastructure Development

Strategic infrastructure development is a key catalyst of economic growth. As the situational analysis indicates, without the implementation of strategic infrastructure, industrial growth will be severely curtailed. The construction sector and the linked building materials sector form part of productive manufacturing and the determination of what projects are needed to unlock industrial growth is linked firmly to the Industrial Development Strategy

3.4.1 Objectives of Infrastructure Development

Appropriate provision of basic and advanced infrastructure is a pre requisite for both poverty alleviation and productive growth within Industry. Where there is a large rural population, even the most determined of efforts to create economic opportunities in rural areas is doomed to failure if there is no physical access to routes to market. At the same time, efficient logistics reduces costs in the supply chain of all industries without exception, thus rendering the industries more competitive and attracting increased investment

The key objective is to fast track catalytic and strategic infrastructure development and this therefore is the first recommended major programme of the Industrial Development Strategy. It is acknowledged that the implementation of this will be multi agency as this is a fundamental cross cutting issue for the province and supports virtually every mandate.

This suggests that in order to support Industrial growth in particular, a re-organisation of activities is likely to be required. This will focus on pulling together all efforts in the areas of a) road logistics b) rail logistics c) strategic access to main routes and ports for specific industries such as agri process and other key manufacturing industries and d) the roll out of reliable broadband to rural and urban areas.

At the same time, a sub programme to determine the advanced/specialised infrastructure needs of focus sectors should be established. Such a programme will determine where advanced infrastructure investment can be either leveraged quickly (such as the perishables storage for organic and perishables at Dube Trade Port, or the specific requirements of the proposed Chemicals Hub) or implemented in order to attract productive investment. This work should be undertaken by commercially savvy and highly experienced people with the requisite commercial experience in order to ensure a practical outcome. Efforts in this area will have the effect of stimulating the building and construction industry inter alia, all along the value chain.

The short term job creation opportunities inherent in this area are largely linked to the EPWP, the Municipal Infrastructure Grant (MIG), the Critical Infrastructure Programme (CIP) and other national infrastructure budgets that are planned to roll out, as well as KwaZulu-Natal budgets such as the R35 billion earmarked for the port of Durban. Effort is needed to organise roll out in an integrated way and to access and deploy these funds immediately, to ensure KwaZulu-Natal benefits in the short term as well as in the longer term.

3.4.2 Focus Sectors – Infrastructure Development

The key sectors and sub sector focus in Infrastructure Development will be linked to the provision of basic and advanced infrastructure to serve various industries. This is essentially

the Building and Construction Industry, the ICT industry and those firms which supply inputs to those industries. There will be a knock on effect on all industry in KwaZulu-Natal which relies on critical, reliable and efficient infrastructure and supply chains. At the same time, strategic interventions in rural areas to ensure links to main routes will provide access to markets for sectors such as agriculture (in particular, emerging farmers) and agro process, and wood and wood products.

3.4.3 Strategic Interventions - Infrastructure Development

The following interventions are critical to enhanced competitiveness for KwaZulu-Natal overall as well as for specific industries:

- Road infrastructure development – major routes and strategic rural connecting roads to permit rural areas access to major routes thus providing access to markets for agricultural produce as well as the products of agro industry and wood products
- Port infrastructure development - in particular expansion to encompass more facilities (perishables and organic goods inter alia), the rejuvenation and re-orientation of the previous Durban Airport in terms of container potential, the implementation of infrastructure to improve turnaround performance at Durban Port and the consolidation and expansion of the Richards Bay IDZ and port to provide better facilities for export firms and inbound trade.
- Broadband roll out - the roll out of reliable and high speed broadband wireless throughout the province and additionally to rural areas where the digital divide is most severe.
- Spatial planning and identification and rezoning of industrial land - this will require linking with the Critical Infrastructure Programme for the development of basic infrastructure in the region of the newly zoned land (electricity, water, link roads, etc.) as well as with other national programmes.
- Human Settlements - increased speed of implementation and roll out of housing for fully government funded housing, government guaranteed housing, and commercially funded housing at the lower end of the market.
- Development of specific Industrial Parks and Hubs - particular sector strategies for KwaZulu-Natal requires that specialised infrastructure, possibly through Public Private

Partnerships (PPPs) and other mechanisms, be developed. In particular, the proposed Chemicals Industrial Hub and the Perishables Hub require specific facilities in order to be able to function not only efficiently but also competitively.

- Development of agribusiness incubators and shared equipment hubs for wood and wood products.
- Adequate resources for essential organisation clusters and clustering activities.

3.4.4 Impact of Implementation –Infrastructure Development

Implementation will assist in alleviating unemployment in the short to medium term and will assist in up-skilling workers in various skills to do with building and construction. The Extended Public Works Programme (EPWP) will be a key funder and partner in the delivery of basic infrastructure such as community based and mass housing infrastructure, while national utilities such as Eskom and Transnet will implement specific utilities infrastructure. The various Water boards can be expected to engage with critical bulk water supply infrastructure such as dams, bulk reticulation and water treatment facilities. Expected significant impacts of enhancing organisational and implementation performance in this cluster are:

- Increased work opportunities in building and construction sector in the short to medium term, creating work, alleviating poverty and up-skilling workers.
- Demand led effect on other industries such as steel, cement, and other building materials, which will scale up to meet demand thus increasing formal and contract employment in these industries.
- Improvements in trade movements as logistics efficiencies occur based on improved infrastructure.
- Improved service delivery for communities.
- Improved access to markets for rural communities
- Increased stability of energy and inputs supply for KwaZulu-Natal Industry
- Increased availability of viable industrial land for development.
- Increased provision of housing at a faster pace.
- Significant impact on logistics efficiencies thus building on the comparative locational advantage of the province in Tourism as well as in Trade.

- Potential to attract new investment in various industries as logistics efficiencies improve business cost chains.
- Reduction and ultimate removal of the digital divide thus increasing the ability of rural communities to access work opportunities. At the same time, significant improvements in the availability and reliability of Broadband will reduce costs for firms – in particular in BPO&O as well as Financial and Business Services.

The improvement of basic and specialised infrastructure will have the ability to attract investment – in the Chemicals Industry and other designated industries, much as has been the case with the automotive industry. There is a danger of a slowing down or even halting of the growth in investment in KwaZulu-Natal Automotive Components industry (Barnes, 2009) which improved infrastructure, both generic and specialised, may be able to alleviate and even turn around. Other industry sectors, such as Clothing and Textiles (discussed later) may well be able to attract new investment to the province if effectively developed and provided with appropriate infrastructure to assist in developing competitive abilities in special niches.

All Industrial Infrastructure programmes therefore, including Hubs, IDZ, EPZ, roads, rail, ports and ICT, should fall under this workstream and be managed in an integrated manner, with particular reference to the Provincial Spatial Economic Development Strategy (PSEDS, currently under review).

3.5 Enabling Platform- Skills Development

Skills development does not fall under the Industrial Development Strategy mandate but is essential to the ability of the IDS to retain, attract and grow business in the province. If the human capital base for industry does not exist in a region, there is limited ability to grow existing businesses other than through technological means which implies limited job creation. Inadequate skills supply also affects the ability of KZN to attract new industry.

3.5.1 Objectives of Skills Development

The key objective must be to develop a competitive advantage for KwaZulu-Natal in attracting industry through ensuring that the requisite skills for industrial growth and

competitiveness are available to those seeking to grow businesses and compete in sectors. The development of skills and improved education has major consequences for the success or failure of Industrial Development.

From an Industrial Development Strategy point of view, the first critical area for skills development is *vocational training* which is perceived currently by industry to be largely unsuccessful in meeting industry needs. A practical, useful, reliable and applicable system of producing far more artisans and technical personnel in the province - who are useful to Industry from the date of graduation- is urgently needed. This includes ICT workers, engineering artisans, and other artisans with special skills required in the automotive, chemicals, pulp and paper, clothing and textiles, and agro industry sectors, inter alia. The interventions should be both industry specific, such as the highly successful AIDC intervention within the automotive sector, and general.

For SMMEs a critical factor is successful *vocational life-long training* and this should be organised and implemented in a highly practical way with immediate effect. This training can be developed in urban areas equally, targeting specific skills required.

Interventions are required at the level of vocational training but also at the level of FET and university training and development. Productive growth in manufacturing, and in particular of exports, will quite simply be neither possible nor sustainable in a highly competitive world, if this is not addressed as a matter of urgency.

An important part of such an intervention will be to ensure that a career in manufacturing industry is appealing to young people who graduate- in terms of business attraction and retention, no international manufacturing investor can invest or expand in a region where the skills that are needed to run the operations do not exist. Domestic manufacturing growth, if the requisite skills are not available, will have no choice but to focus on growth using technology rather than labour, which results in jobless growth and is antithetical to current National Industrial Policy and Strategy.

The third focus area deals with the need for basic life and business skills to be developed in those individuals who show an aptitude for entrepreneurial activity, as well as for co-operatives and other organisations of similar ilk to ensure the basic business skills are present and well understood so that there is a greater chance of success. This will be of particular importance for SMMEs and Cooperatives, as well as for entrepreneurial individuals.

3.5.2 Focus Sectors – Skills Development

The lack of essential skills is a binding constraint on the KwaZulu-Natal Economy in terms of productive growth. All sectors in KwaZulu-Natal will benefit from significant improvements in vocational and technical education and training within the province. A key issue will be the retention of the skills in KwaZulu-Natal, the prevention of skills leaving for other regions in South Africa and the Middle East is a challenge that the Province will need to tackle. A combination of lifestyle benefits, good work opportunities and good pay and benefits will be needed - a good working partnership between business, organised labour and government will be required.

Manufacturing Industry in KwaZulu-Natal, i.e. the Chemicals & Plastics, Food and Beverage, Metals and Engineering, Automotive, Pulp and Paper, Logistics and Transport, Clothing and Textiles and other industries, are in dire need of appropriate engineering and technical skills. In some cases, specific industry sectors have developed their own programmes in partnership with various institutions - such as the Automotive Sector via the AIDC. However in terms of technical training, the very high speed of technological innovation today essentially requires a lifelong commitment to training/education, depending on the industry sector involved and the strategy recommended. Continuous up-skilling and re-skilling are key requirements, as are organisational and people and project management skills.

The agriculture, agri process/agro industry and wood and wood products industries require skills development in the areas of specialisation required to successfully produce agricultural goods and wood based products, as well as life skills and basic business and work organisation skills. This is largely because opportunities in the rural areas are typically not

found (with certain exceptions) in the major processing industries and can have a large SMME and entrepreneurial component.

In Building and Construction the need will be for skills upgrade and retraining of unemployed and unskilled people to engage within the EPWP as well as more specific skills development in procurement, planning and project management. In Logistics and Transport, trade business skills, transport planning and supply chain management capabilities are critical.

In the services sectors in KwaZulu-Natal, financial literacy, competent clerical and good customer relations and ICT skills are required, while in Tourism in particular, language and customer service skills are essential. Finally in the Green and Knowledge based industries, technical skills (nursing, teaching, waste management), basic business skills (SMME focus) and engineering and linked technical and artisanal skills are required.

3.5.3 Strategic Interventions in Skills Development

The following interventions are critical to address the binding constraint on the Kwa-Zulu Natal Productive economy, in terms of skills development.

- The development, with the private sector, of a detailed skills profile per industry, linked to the scarce and critical skills assessments of the relevant SETAs. This will include a quantification of skills needed by sector *and sub sector and firm indications of what quality of skills are required.*
- The development, with the private sector, of a vocational lifelong training and education strategy³⁰ for each sector, and an implementation plan linked to each sector and sub sector strategy - in the case of sub sectors already implementing such a

³⁰Chinese Industrial strategy includes a major focus on vocational training. Vocational training in China includes pre-employment training, training for people transferred to new occupations, apprentice training and on-the-job training, covering elementary, intermediary, and advanced vocational qualification training for technicians and other types of training to help people adapt to different job requirements.

strategy, the review of outcomes and the planning and implementation of any key adjustments needed (Automotive components for example)

- The implementation of a “census” of training and development capacity within KwaZulu-Natal.
- The development of implementing agencies (and the inclusion of existing private and government training and development institutions in the implementation process) as follows with ALL agencies focussed on the provision of the required skills and training either across sectors (cross cutting) or for specific sectors as follows:
 - Higher Vocational Institutions
 - Advanced Technical Schools
 - Secondary Polytechnic Schools
 - Employment Training Centres
 - Non-Governmental Vocational Training Institutions
 - Enterprise based Employee Training Centres
- The design and implementation of a Skills Hub in Msunduzi to serve as a first pilot for KwaZulu-Natal, similar to the Jozi model, to address re-skilling, up-skilling, recognition of prior learning, and partnering skills with work opportunities in government and in the private sector-
- The development of a re-skilling programme in the Clothing and Textiles sector to ensure the essential skills are in place for the recommended niche and global leadership strategy
- The implementation of technical centres and hubs, such as Food Technology, Textile Technology etc. in order to improve local R & D and entrepreneur development in R & D
- The implementation of improved and world class nursing and medical technician training centres in KwaZulu-Natal (uMngeni, eThekweni, Msunduzi) as well as private teacher training facilities to grow the already significant private medicine and private education clusters in KwaZulu-Natal, in partnership with the private sector (Medical Aids, private hospitals, research institutions, public hospitals, private schools et al)

- The development of a strategy to implement high quality distance based learning in the rural areas in vocational and other essential skills, using the proposed broadband network, in partnership with the SETAs and private sector
- The inclusion of learning modules at late primary school level and secondary level on basic financial literacy, basic organisational skills, and basic business skills.
- The development of highly focussed and targeted SMME training in partnership with the private and public sector procurement programmes - continuous development of entrepreneurs and linked ability to move up the procurement chain of large institutions through modular and on the job learning and training.
- With Transnet, Eskom and Water Utilities, re-instate artisanal training centres and use SETA funds and Job Creation Fund to finance. As part of the programme, link with the National Tooling Initiative to ensure training in Tool and Die in KwaZulu-Natal and ensure linkages with the National Foundry Technology Network. Richards Bay and Newcastle as well as the South Basin might prove to be excellent centres for this initiative.

Key focus areas should be:

- Strengthening pre-employment training.
- Strengthening labour skill training.
- Strengthening re-employment training.
- Developing long-distance training.
- Implementing the Vocational Qualification Certificate System in an integrated way.
- Launching skills competitions and activities honouring Technical Experts.

In all cases the starting point should be a solid understanding of the needs of the employer (public or private sector) in terms of skills, now and in the future. Strategies can then be driven based on real needs.

3.5.4 Impact of Interventions in Skills Development

By developing an integrated skills delivery system in KwaZulu-Natal, the province will develop an all-round and multi-level provincial system of vocational education and training and strengthen training for the urban workforce, laid-off workers, rural migrant workers and

on-the-job employees. Technical schools will become comprehensive vocational training bases mainly engaged in training skilled workers, while offering different types of long- or short-term training programs. Employment training centres and skills hubs will become bases for training new workforce and laid-off people, mainly offering teaching in practical skills and helping the trainees to adapt to different job requirements. Specific impacts are likely to be as follows:

- Improved access to decent work on the part of the unemployed, in particular young unemployed people.
- Increased attractiveness of KwaZulu-Natal as an investment destination for industries who need specialised and technical skills, in the core sectors and sub sectors for the province- increased inward investment in the province as a result.
- Increased access to work opportunities for those located in rural areas and increased up and re-skilling capacity.
- Increased ability to retain critical industries in the province and to motivate for expansion of those industries.
- Increased competitive advantage of KwaZulu-Natal in terms of GDP and value added activities as skills become more sophisticated.
- Ability to remove poor/inappropriate skills as a binding constraint (over time) within the KwaZulu-Natal economy.
- Improved productivity and therefore productive growth over time, within the sectors and sub sectors of importance to the province.
- Improve utilisation of entrepreneurial skills and increased SMME success rates.

All related current programmes and activities should be brought together under this programme, and reviewed for efficiency in implementation and optimum use of resources, then re-organised for speedy and effective delivery, in partnership with business and labour and with a focus on practical planning and implementation. Programmes that are not useful should be discarded and the resources redeployed. It is not certain how efficient it will be to attempt to organise existing SETAs and educational institutions to deliver what is needed here, given their apparent failure to date. Any attempt to do so may simply result in more

delays when delays will have negative consequences for KwaZulu-Natal. This issue will need to be addressed by the programme leader prior to final planning. Good use can be made of donor funds in the implementation of this strategic programme.

3.6 Industrial Development Strategy- Sustainable Job Creation & Entrepreneurial Development

3.6.1 Objectives of Sustainable Job Creation & Entrepreneurial Development

The key objectives of this platform are to support commercially viable and sustainable livelihood sectors and economic activities, and encourage and develop skilled entrepreneurs to grow these opportunities and others further where this is feasible.

The objective of supporting the development and growth local commercially sustainable economic activities includes the notion that such activities will sustain local communities and increase local economic activities, resulting in a virtuous local economic cycle. The objective of developing viable entrepreneurs ensures the ongoing incubation and encouragement of innovation, and growth of smaller business into larger commercial operations.

Specific sectors and opportunities lend themselves well to achieving the goals of Job Creation and Entrepreneurial Development. There is a great deal of activity within KwaZulu-Natal which is geared towards job creation in particular as a clear goal of the New Growth path and IPAP 2, but the desired level of outcome has not been achieved.

In a province where more than 49% of the population is rural, and more than 60% is under 26 years old, with very limited education (largely under grade 12) very specific sector opportunities are needed. Expectations of outcomes should also be tailored to the reality of what is achievable commercially, versus what can offer sustainable livelihoods, versus what can be implemented by Social Services. A combination of all three interventions is clearly needed, but industrial strategy focuses on the first two. From an Industrial Strategy perspective, the first need is for viable economic opportunities in rural areas

3.6.2 Focus Sectors in Sustainable Job Creation & Entrepreneurial Development

The identification of sectors which lend themselves more readily to work and job creation, and potentially the development of entrepreneurs and SMME/Cooperative success has been undertaken as part of this review. Different sectors are involved when it comes to job creation and entrepreneurial development in rural and in urban areas. Major focus sectors will be:

- Agriculture and agro industry including various food and beverage, biofuels and other smaller niche opportunities (rural)
- Wood products opportunities (rural)
- Crafts Opportunities (rural and urban)
- Waste Management (urban)
- Recycling/remanufacturing (urban)
- Building and Construction (rural and urban)
- Personal Services (largely urban)

3.6.3 Strategic Interventions in Sustainable Job Creation & Entrepreneurial Development

Important success factors here will be matters such as access to shared equipment, vocational learning and skills development, access to markets and access to essential infrastructure in the context of the recommended interventions in Infrastructure Development. Very critical will be solid and reliable broadband, and road access to major routes and ports. All strategic interventions in the rural areas should be aligned to delivering against these specific needs. Finance, and access to finance, will also be critical. Both these sectors lend themselves well to addressing the issue of large numbers of unemployed youth in rural areas, in sustainable and SMME/entrepreneur friendly ways. They also have a significant capability to empower rural women. For these reasons, donor funding can be sought as one element of the financing of the recommended interventions.

- Per infrastructure development, the identification of key strategic link roads in the rural areas and building of same.
- Development of a programme of action to ensure access to broadband and utilisation facilities through access to internet in community facilities.

- Development of an implementation plan to ensure the utilisation of the EPWP the CIP and the MIG to create jobs in the development of rural infrastructure.
- Focus attention on community and small grower schemes which can create an extra 43,000 jobs in forestry if the challenges of licensing and communal ownership are met – investigate and determine a strategy and action plan.
- Dti has established real opportunities in short rotation hardwood (gum and wattle) for pulp and sawmilling as well as the potential to invest in shared community chipping mills to increase local capacity to process the wood- community based mobile chippers are a viable option. DEDT should develop a business plan for shared facilities in three pilot rural areas and, possibly in partnership with SEDA, set up and run the hubs with a handover period of 3 to 5 years.
- At the same hubs, the potential exists for waste board products but the equipment needs to be bought and introduced, and fibreboard produced. This will form part of the business plans for the three pilot centres referred to above, which will be multi wood product hubs.
- Small scale saw milling and charcoal production also represent significant rural SMME and work creation opportunities which again, should locate at the rural hubs and take advantage of shared marketing and sales, and back office services.
- Recycled paper and waste paper recovery is an urban opportunity. Currently Informal hawkers provide recovered paper to buy back centres or depots. Hawkers could be harnessed in suburbs if properly organised and this opportunity significantly expanded to the benefit of the urban poor as well as the improved environmental rating of the cities. DEDT should implement a hawkers' cooperative or some relevant organising structure for those who, in urban areas, collect waste paper and formalise supply arrangement to large firms.
- Develop linkages between agro process activities in rural areas and larger wholesalers to ensure access to market for products. Focus on the KZN market and possibly Gauteng and Western Cape.

3.6.4 Impact of Interventions in Sustainable Job Creation & Entrepreneurial Development

The objective is to provide job opportunities as well as work opportunities and entrepreneurial opportunities on a commercially viable rather than a welfare “make-work” basis over time. Some of the interventions can provide very quick positive outcomes and can be implemented within 12 months to the benefit of the jobless communities, while others will take up to 5 years to become viable and self-sustaining. *A key success factor here will be to ensure that the DEDT and its partners do not underfund these initiatives- as this will be tantamount to starving the initiatives due to lack of sufficient resources to ensure success.*

- Development of new industry subsectors in wood products within rural areas which are commercially viable as outlined above, and which can create both work and entrepreneurial opportunities, will assist KZN to meet the New Growth Path job creation target of 1 million new jobs in KwaZulu-Natal over the next five years.
- Work and Job opportunities created for the currently unemployed young people in rural areas will increase local disposable income and potentially offer more income to struggling municipalities.
- Waste and recycling opportunities will, if effectively organised, offer income in the shorter term to the urban poor, in particular women and hawkers and at the same time address issues of grime and land fill over utilisation in major urban centres.
- Job creation overall will benefit and assist the province to meet its targets, while improving the quality of life for unemployed people at the same time.

All current programmes and activities should be brought together under this enabling platform as an integrated programme, and reviewed for efficiency in implementation and optimum use of resources, then re-organised for speedy and effective delivery, in partnership with business and labour and with a focus on practical planning and implementation. Programmes that are not useful should be discarded and the resources redeployed. Excellent and practical outcomes oriented working relationships with agriculture and local municipalities and SMME development organisations, as well as with

vocational training, will be essential. Good use can be made of donor funds in this strategic programme if desired.

3.7 Industrial Development Strategy- Productive Industrial Growth

This is the core mandate of the Industrial Development Strategy. The implementation in the short term of catalytic projects in this area can have immediate stimulatory effects.

3.7.1 Objectives of the Industrial Development Strategy- Industrial Growth

The key objective of the Industrial Development Strategy is to stimulate industrial growth in the KwaZulu-Natal economy by building comparative advantage into competitive advantage where possible and by creating a viable, attractive and supportive environment for investment in existing or new industries. Manufacturing industry is the focus and has the most to offer in terms of productive growth in the province over time.

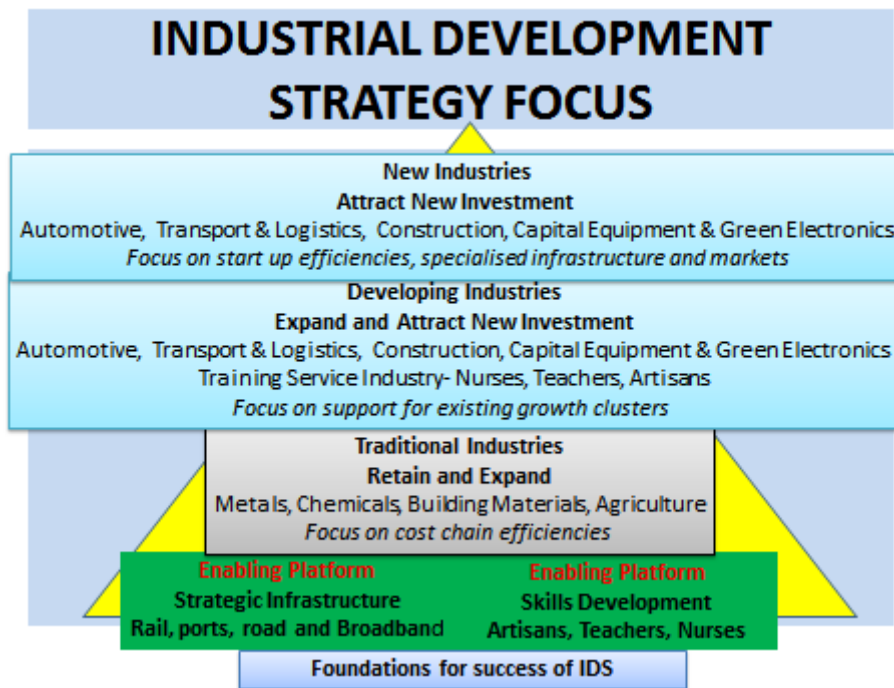
There are a number of industries which lend themselves to meeting the criteria for enhancing productive growth in KwaZulu-Natal. These include industries which have been present successfully in the province for some time and which can, with judicious intervention, be retained, industries which can be expanded with good strategic intervention, and which can attract more local and international productive investment, and new industry opportunities overall (business retention, expansion and new business development).

In the first sub category, business retention, the focus is on existing industries where job retention as well as possibly expansion is possible, sectors such as metals fabrication, (in particular Aluminium, Iron and Steel), certain agriculture and certain types of tourism are found.

It is too late to retain or claw back the vast number of jobs lost in the clothing and textiles industry, but potentially there are high value niches in these sectors where KwaZulu- Natal could intervene to attract investment for local and export consumption. Assessing potential for growth as well as understanding in very practical terms where the growth can occur, spatially and along the value chain, in conjunction with these industries, will be absolutely

essential if any progress is to be made. Once the assessments are complete, and the real, practical opportunities identified, this will be the time to plan specific interventions for these particular opportunities. To the extent to which this has already been done, these specific interventions can begin implementation.

Figure 3.4 Industrial Development Strategy Focus



Source: Blueprint (2012)

In the second sub category, business expansion, we have located industries where there are good opportunities for strategic expansion. Industries in this category have been identified as electronics, white goods, and capital equipment, as well as automotive and components and other goods including certain sub sectors of CTFL. From a manufacturing point of view, ensuring efficient infrastructure, logistics and industry specific infrastructure and skills availability at competitive cost, is the key matter. Certain service industries also fall into this category, in particular the private health and education industries in KwaZulu-Natal Midlands, as well as certain sub sectors of the Creative Industries and ICT, BPO & O, and the entire Transport and Logistics sector.

Not all of these industries will be able to create large numbers of jobs, nor develop competitive exports, but all of them can deliver some elements of importance for productive growth. Similarly, not all of these opportunities will be able to attract FDI, but many can attract enhanced local investment if properly managed. A critical focus here in any intervention, will be to properly assess the bases of competitive capability in the industry in question, and understand very practically if the intervention will render the industry more competitive, or simply ensure its survival. Based on this assessment, the industry can either stay in this category or relocate to the first category.

In the third sub category, new business development, we have located new industries- or sub sectors. This is largely made up of the Green Industries in particular renewable energy and certain services. Clear opportunities have been identified in certain sub sectors of the chemicals and the pharmaceuticals industries, the manufacture of TV decoders for digital TVs, the development of a solar panel industry and specific waste management opportunities, all of which are outlined in the section of this report dealing with current and proposed sector strategies. Industries in this category have potential for job creation, as well as export to Africa and in some cases, globally, and to increase productive inward investment.

3.7.2 Focus Sectors in Productive Growth

These have been divided into three sub categories as follows:

3.7.2.1 Business Retention Sectors

In certain sectors as a review of the economic performance of KwaZulu-Natal sectors over time indicates³¹, there is a need to first ensure that KwaZulu-Natal retains the business that is already present.

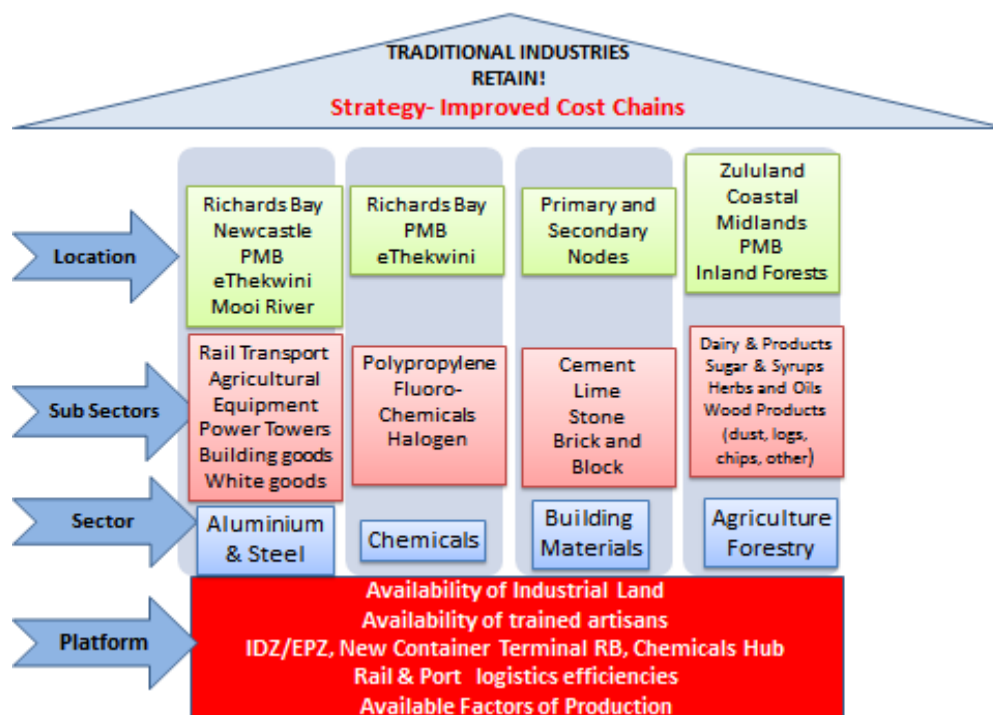
The automotive components industry has in particular been identified by Barnes, (2008) as having specific challenges to meet in KwaZulu-Natal if it is to retain, and potentially expand, production against increasing global competition. It is too late to retain or even claw back

³¹Refer Situational Analysis Report. DEDT 2011

the vast number of jobs lost in the clothing and textiles industry, but some effort can be made to retain what is left in the province.

The figure below offers a clear overview of what sectors require to be retained, where they are located and what the critical platforms are for success. Metals (aluminium and steel), chemicals, building and agriculture form the central traditional sectors of the KZN economy which should be retained, consolidated and where possible, leveraged into higher value added activities. In forestry and agriculture in rural areas, there is potential to increase existing activities to a considerable extent if catalytic infrastructure improving access to market and local economy clusters, is made available. The key issue however is that of improving the cost chains of these industries to ensure that they continue to remain competitive in the face of new entrants such as China (steel and chemicals) and where possible, increase their competitiveness.

Figure 3.5 Traditional Industries -Business Retention Strategy



Source: Blueprint (2012)

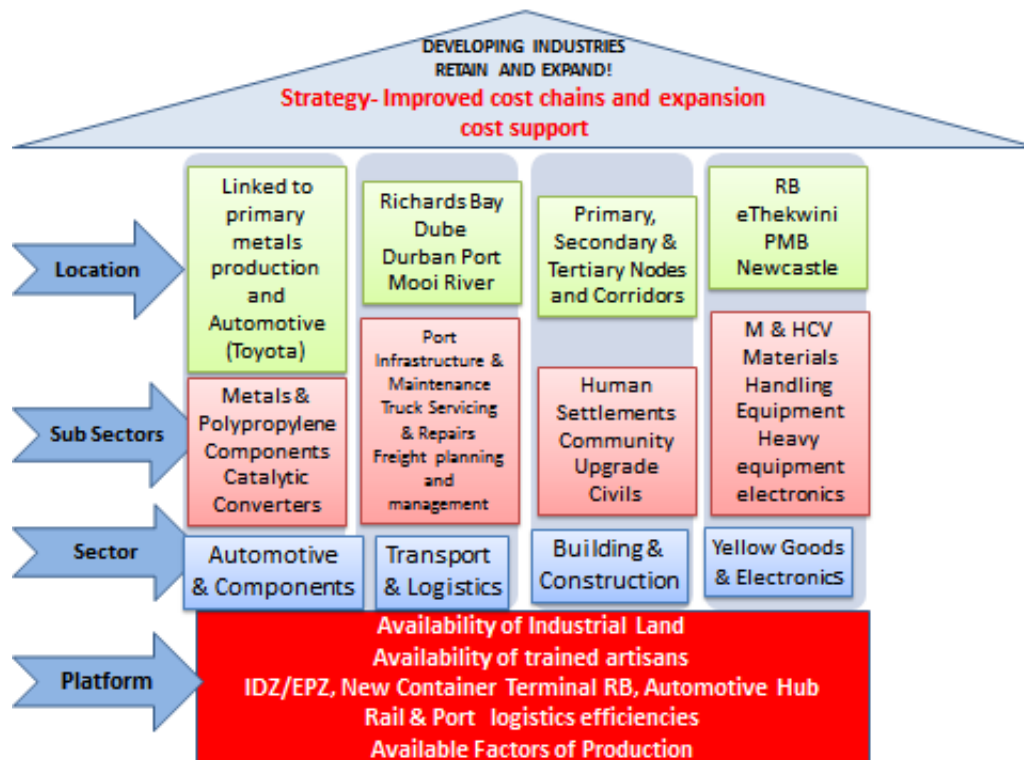
3.7.2.2 Business Expansion Sectors

Certain industry sectors show capacity to expand competitively and successfully if the correct support is given. The strategy is twofold, first to optimise the cost/activity chain for these industries, but also to provide expansion support to facilitate new capacity and/or improved productivity. Industries in this category have been identified as:

- Electronics (Digital TV decoders, Solar Heating Panels etc.)
- White goods (washing machines, ovens, tumble dryers, etc.)
- Capital equipment (M&HCV & components)
- Automotive components,
- Foundry Products
- Tool and die making
- Food and beverage (value added fruit and vegetables)
- Agro processing (essential oils, wine, olive oil etc.)
- Certain sub sectors of CTFL (flammable textiles, & clothing, water resistant, biosafe etc.)
- Certain service industries - private health and education industries in KwaZulu-Natal Midlands,
- Sub sectors of the Creative Industries
- Sub Sectors of ICT, Business Process Outsourcing and Offshoring (BPO&O)
- Crafts and Film
- The entire Transport and Logistics sector.

Expansion can be facilitated along the value chains of specific sub sectors and sectors in product families where competitive advantage is possible and the outcomes of increased SMME sustainability and increased job creation can be achieved. For example, the linkages between the primary metals sector (a traditional industry which should be retained) and the automotive OEMs such as Toyota, could be the manufacturing of certain components such as catalytic convertors, metal panels and other metal goods, which could at the same time, feed components into the agricultural equipment and M & HCV sub sectors.

Figure 3.6 Developing Industries- Business Expansion Strategy



Source: Blueprint (2012)

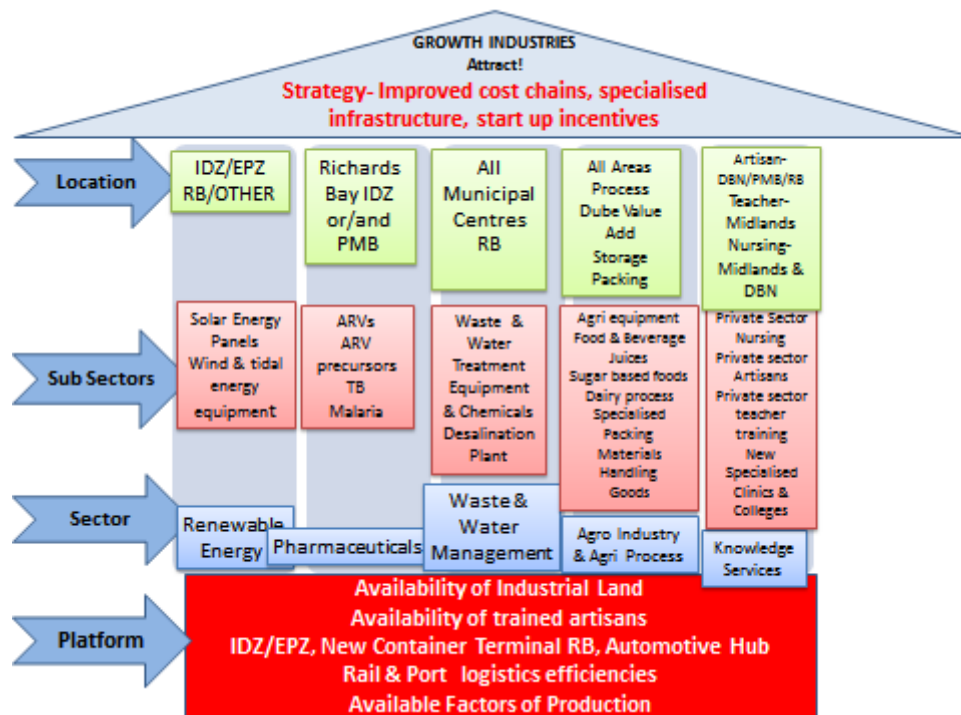
3.7.2.3 New Business Opportunities

New Business Opportunities are emerging on a regular basis and the environment needs to be regularly scanned for such opportunities, something which each business does on an ongoing basis. Certain sectors have been nationally identified as growth opportunities, such as those sectors falling into the Green Economy, and in particular, Renewable Energy. In the case of these industries, KZN will need to ensure that it is a more attractive destination for the relevant industry than other, competing destinations. Cost chains will need to be at least on a par with other regions, while incentives to set up such as the provision of specialised infrastructure and start-up grant or soft loan funding, will need to be offered. The following sectors have been identified currently as having major growth potential:

- Waste management and recycling
- Water Management and recycling
- Clean energy- solar, wind and tidal
- Chemicals and pharmaceuticals

- Geriatric medicine
- Private Medical Care & Schooling

Figure 3.7 Growth Industries- Business Attraction Strategy



Source: Blueprint (2012)

3.7.3 Strategic Interventions in Productive Growth

Strategic interventions recommended in Productive Growth are drawn from the draft sector reports available, the national focus sectors of IPAP 2 and the New Growth Path, the current mix of KwaZulu-Natal sectors relevant to the economy of the province and opportunities identified in the course of the research for the development of this strategy. They are as follows:

- Develop and implement investment plan for alternative energy options. Particular focus on tidal energy technology and hydropower opportunities.
- Plan to participate in the National Tooling Initiative and focus KwaZulu-Natal on the automotive and Medium & Heavy Commercial Vehicles (M&HCVs) sub sectors tooling needs, as well as those of road freight trucks and Eskom

- Develop an implementation plan to leverage government and State Owned Enterprise (SOE) procurement of Medium and Heavy Commercial Vehicles (M&HCVs) to drive local demand for the equipment and the after-market as well as components.
- Facilitate the upgrading of the KwaZulu-Natal white-goods industry to increase production and grow exports. Implement incentives for capital investment into the industry to meet the technological requirements needed to increase productivity, volumes and efficiencies and develop export strategy for the industry.
- Develop an investment and production roll out plan for solar water heater manufacturing in KwaZulu-Natal using the proposed DoE funding subsidy for 1 million units and other sources, to attract investment to the province either from domestic or international firms. Set specific targets for phased production roll out and monitor and evaluate progress on investment targets as well as production targets. Phase one will focus on local demand but phase two should begin exports
- Develop an investment and production roll out plan for digital TV decoder manufacturing in KwaZulu-Natal using the proposed DoE funding subsidy for 1 million units and other sources, to attract investment to the province either from domestic or international firms. Set specific targets for phased production roll out and monitor and evaluate progress on investment targets as well as production targets. Exports should be considered as part of phase one
- Lobby the IDC to set up its demonstration plant for Concentrated Thermal Solar Power (CTSP) and demonstration of its viability as a major renewable energy generation source, in KwaZulu-Natal.
- Develop specific strategies and implementation plans for other Green Industries such as bio mass, wind energy, and tidal energy.
- Lobby DAFF to set up its proposed Food Safety Agency in KwaZulu-Natal in the Midlands where there are existing facilities. Food safety is in the national interest and is increasingly a core requirement for exporting to both developed and developing countries; without a strong regulatory environment, KwaZulu-Natal's food and related product exports may be at risk.
- Develop a detailed strategy, working with the national DTI, for the organic food sector, in particular perishable foodstuffs. This sector represents a high-value niche sub-sector

with the potential to create 20 000 jobs over five years in both the primary agriculture and agro-processing stages of the value chain. Currently, South Africa imports a significant proportion of the organic food demand by consumers and there are thus both import replacement and export possibilities for the sub-sector. The dti will be establishing the South African Organics Sector Organisation (SAOSO) and registering it with the Companies and Intellectual Property Registration Office and at that point, will launch a retailer/small-farmer/processor programme. This should be piloted in KwaZulu-Natal

- Development of small scale saw milling implementation programme in conjunction with forestry sector actors and roll out of three pilot hubs
- Livestock processing plants (Abattoirs) – given that most abattoirs are concentrated in Durban area, mainly Cato Ridge
- Support the footwear sector for export
- Development, in partnership with the OEMs and components manufacturers, a strategy for implementation to expand the manufacture of components for autos and M&HCVs in KwaZulu-Natal. At the same time, investigate the potential to set up electric car plant in KwaZulu-Natal.
- Develop fast track beneficiation strategy for KwaZulu-Natal for precious metal and stones jewellery locating in Dube Trade Port, North of Durban. Processing and sale of cut diamonds, and the development of a Gold, Platinum and Diamond jewellery Hub at Dube Trade Port should be fast tracked. This is not only a priority sector in IPAP 2 but also in the new beneficiation strategy outlined by the Department of Mineral reserves released in June 2011.
- Develop an investment strategy and implementation plan to attract investment for the manufacture of active pharmaceutical ingredients for key ARVs as well as the local production of reagents for HIV and AIDS diagnostics, under licence, the domestic production of vaccines, under licence, and the domestic production of biological medicines, antibodies and vaccines
- Using the existing medical cluster in KwaZulu-Natal, stimulate investment in clinical research in (current market R2bn per year) and potential market size is R4bn to R5bn per year.

- In partnership with the IDC, investigate the production of specific high value niches for textile and clothing production in KwaZulu-Natal, as outlined above. Prepare investment business plan and locate manufacturing centre in Dube Trade Port.
- Develop investment plan and implement, for private medicine and hospitalisation (seek international and African partners) and private education (seek local actors wanting to expand operations) clusters in Midlands (and possibly eThekweni).
- Develop as recommended, Petrochemicals Hub and Halogen Cluster in KwaZulu-Natal seeking international and local investment from the firms already present (71 firms in KwaZulu-Natal in this sector) and implement Chemicals Industrial Park.
- Ensure sufficient and adequately trained government personnel for EIAs with immediate effect.
- Develop training programme for government employees to assist them in understanding the sector/s they are working with in respect of investment, trade and development strategies.
- Ensure adequate resources are made available as needed for essential cluster and clustering activities.

3.7.4 Impact of Interventions in Productive Growth

The objectives of intervention are to increase interest in expanding and investing in specific sectors in KwaZulu-Natal, because the province can offer competitive conditions which empower those industries to compete better on the local and the global stages. More efficient logistics save costs for industries, appropriately skilled people are more efficient and productive, and highly supportive investment terms and conditions will all lead to more competitive and profitable industries which can then fund expansion and employ more people.

There are clearly many opportunities- the difficulty arises in knowing which opportunities to pursue. In this case, the recommendations have been informed by national and provincial priorities, business view of what opportunities are worthwhile currently, and desk research on the various sectors of importance or future importance to KwaZulu-Natal. The generic

impact of all the interventions above will be as follows (and specific impacts will be felt by specific industries)

- Increased job creation (sustainable) if accompanied by the skills development work outlined in the Skills Development enabling platform above
- Increased trade and foreign exchange earnings
- Increased value added and contribution of industry to GDP in KwaZulu-Natal
- Increased diversification of the provincial economy
- Improved rates of productive growth
- Improved employment uptake
- Better receipts for government

In all cases the current and proposed programmes should be reviewed and re-organised under the banner of the major categories as outlined above, with a focus on efficient and effective resource utilisation and measureable outcomes. Proper marketing of KwaZulu-Natal as a life style destination and a low crime area, as well as a place of good career opportunities, will be essential to underpin all these activities- and these strategies are outlined in the draft reports on investment strategy and export strategy which have been taken into consideration in this review.

4. Prioritisation- Flagship Programmes and Project

A KwaZulu-Natal Industrial Flagship Programme is recommended consisting of projects which are sufficiently catalytic and productive to be identified for fast tracking- this is not to say that all other recommendations for implementation should be ignored, but rather that the Flagship Programme interventions should be prioritised. The following tables represents suggested projects for prioritisation based on a qualitative view of their proposed catalytic impact for industrial growth in KwaZulu-Natal and/or their ability to increase the competitiveness of industry and/or to attract increased investment. This will occur within the context of the overall Industrial Development Strategy framework.

The full tables for implementation are contained in the annexures and in more detail in the separate implementation plan report, volume three of this Industrial Development Strategy. Other projects can be extracted and prioritised from the detailed tables if required.

4.1 Proposed KwaZulu-Natal Industrial Flagship Programme

ENABLING PLATFORM-INFRASTRUCTURE	PROJECT	CATALYTIC IMPACT SCORE	RESPONSIBILITY	TIMEFRAME ³²
INFRASTRUCTURE	Specialised Infrastructure Development- Chemicals Hub, Perishables Hub	HIGH Catalytic effect high Export propensity high Contribution to GDP high GVA in Perishables very high Labour absorption high in Perishables SME potential high in Perishables	Champion- DEDT and Chemicals cluster, and DTI, DOT, DTP	Short –term (refer footnote for actual time frames)
	Identification and building of strategic access roads in agricultural hinterland to major corridors	HIGH Catalytic effect high Labour absorption high SME potential high Contribution to GDP medium	Champion-DOT, DAEA, Transnet	Medium-term
	Roll out of Broadband along Corridors and Nodes and along strategic access routes	HIGH Catalytic effect high for all industry Labour absorption medium SME potential high	Champion- DEDT Dept of Communications, ICT Cluster / Associations, TELKOM, VODACOM, Private sector.	Short -Term
	Expansion and implementation of Dube Trade Port Linkages to Agri Process	HIGH Catalytic effect high Labour absorption potential medium Export propensity high Contribution to GDP and GVA medium	Champion-DOT, DAEA, Transnet	Short-term

³² Short Term= 0 to 3 years, Medium Term = 4 to 7 years

ENABLING PLATFORM-INFRASTRUCTURE	PROJECT	CATALYTIC IMPACT SCORE	RESPONSIBILITY	TIMEFRAME ³²
	Implementation of Durban Container Port and significant improvement in turnaround times and efficiencies	HIGH Catalytic effect very high Improvement in competitive advantage very high Very high potential to impact on business retention and attraction Labour absorption high	Champion-DOT, Transnet,	Short-term
	Investigation of potential container port facilities at Richards Bay	HIGH Catalytic effect high Impact on export propensity very high Labour absorption medium Potentially significant positive impacts for automotive sector	Champion RBIDZ DEDT, IDZ	Short-term
	Implementation of proposed N3 Durban/Joburg Rail/Road route	HIGH Catalytic and improved competitiveness across the board	Champion- eThekweni DOT, Transnet	Short term and on-going
	Transnet Freight Rail as strategic partner to implement improved rail efficiencies and line upgrades	HIGH Catalytic and improved competitiveness across the board	Champion- DOT, TFR	Short term and on-going

ENABLING PLATFORM- SKILLS DEVELOPMENT	PROJECT	CATALYTIC IMPACT SCORE	RESPONSIBILITY	TIMEFRAME
SKILLS	Set up Nursing and teacher Training Colleges in KZN Midlands, eThekweni and Newcastle	HIGH Major shortage of trained nurses and teachers nationally and will offer decent work and technically skilled personnel to health clusters in KwaZulu- Natal Promoted African medical tourism and local quality of care and education. Labour absorption very high Contribution to GVA and GDP high Foreign exchange earnings medium Catalytic effect on tourism medium	Champion- DEDT and DOE, DOL	Medium-term
	Develop lifelong vocational training system using Chinese model as a basis Combine with specialised industry training linked to Infrastructure Development Flagships	HIGH Significant catalytic impact across the board	Champion- DEDT to set up New Skills Cluster with Industry and Tertiary Education DOT, DTP	Short-term
	Implement Skills Hub in Pietermaritzburg in partnership with Transnet and other SOEs focussed on Artisans and technical skills development.	HIGH Massive national and provincial shortage of artisans and imminent national programmes to be rolled out with SOEs means that KwaZulu-Natal could produce top quality artisans for focus industries	Champion-DEDT, Service Provider	Short – Medium term

INDUSTRIAL DEVELOPMENT STRATEGY- SUSTAINABLE JOBS & ENTERPRISES	PROJECT	CATALYTIC IMPACT SCORE	RESPONSIBILITY	TIMEFRAME
SME & ENTREPRENEUR DEVELOPMENT	<p>Wood and Wood Products- Cluster and Hub Based. Forestry community and small grower schemes Opportunities in short rotation hardwood (gum and wattle) for pulp and sawmilling Potential to invest in shared community chipping mills to increase local capacity to process the wood - community based mobile chippers are a viable option Charcoal Set up three pilot hubs for implementation and to achieve critical economic mass</p>	<p>HIGH Potential to create additional 43,00 jobs in forestry Potential to create and sustain viable SMEs Increased local economic activity and decreased dependence</p>	<p>Champion- Forestry Association DWAF, DEDT,DTI, DAC, SEDA, DM's</p>	<p>Short to Medium-term and ongoing</p>
	<p>Waste Management in Urban centres Hawkers harnessed and implement a hawker's cooperative for those who, in urban areas, collect waste paper and formalise supply arrangement to large firms. Make this a women's empowerment initiative. Commercial arrangements with large waste recycling firms</p>	<p>HIGH Significant catalytic impact on sustainable SME development in eThekwinini initially and then rollout to other centres Improved environment in cities</p>	<p>Champion- DEDT set up new Waste Recovery Cluster including DTI, SEDA,DEA, DM's / Metros, Private Sector (Mondi, SAPPI recycling), Industry Association</p>	<p>Short-term and ongoing</p>

INDUSTRIAL DEVELOPMENT STRATEGY- PRODUCTIVE GROWTH	PROJECT	CATALYTIC IMPACT SCORE	RESPONSIBILITY	TIMEFRAME
PRODUCTIVE GROWTH	Bankable feasibility and attraction of investment to manufacture active pharmaceutical ingredients for key ARVs and local production of reagents for HIV and AIDS diagnostics and the domestic production of biological medicines, antibodies and vaccines	VERY HIGH Major demand on the doorstep and designation of specific ARVs and precursors under new designation regulations will ensure competitive capability for South African based firms. A major but immediate opportunity	Champion- DEDT and IDC DEDT, DOH, TIKZN, Private Sector	Short-Medium term
	Bankable feasibility and attraction of investment for expansion of existing private medicine and hospitalisation cluster and private education clusters in Midlands	VERY HIGH Creates decent and sustainable jobs, ensures well educated and healthy population, attracts investment where healthy and well educated staff are a pre requisite, stimulates employment in health and education as well as specialised tourism	Champion- New Health Services Cluster DEDT, DOH, TIKZN, DOE	Short-Medium term
	Bankable feasibility to expand white goods cluster in KZN and add at the same time metals manufacturing, tool and die, solar energy, TV decoders, alternative energy et al	VERY HIGH KwaZulu-Natal economy is consumer driven and location close to coast could facilitate exports globally as well as exports to Gauteng markets. Potential location- Richards Bay IDZ	Champion- New White Goods Cluster DEDT, DTI, TIKZN, Industry Association	Short-Medium term

<p>Capital goods expansion in KwaZulu Natal linked to Automotive Components, tool and die and metals beneficiation projects</p>	<p>VERY HIGH Capital Equipment and Steel Power Lines (inter alia) are now designated products and local procurement is preferred and a quota allocated to all government departments and agencies Major opportunity to attract metals fabrication cluster to Newcastle</p>	<p>Champion- Metals beneficiation cluster, AMSA, DEDT, DTI and SAISA</p>	<p>Short-Medium term</p>
---	--	--	--------------------------

5. Summary

The situation in KwaZulu-Natal indicates that there is an urgent need to grow economic activity in the province in order to create jobs and to improve life for citizens. There are many, poor and inadequately educated people in the province who need to be able to access some level of sustainable economic opportunity. There are many industries which, if supported, become more competitive, could play a role in increasing positive economic activity and creating decent jobs.

There are some major constraints which mitigate against this - in particular inadequate infrastructure, inadequate skills levels, inadequate education and poor implementation of strategy as well as rigid labour legislation and regulation.

It is clear from the programmes identified in this strategy that implementation is not the sole responsibility of government alone, and that all stakeholders have a significant role to play- we hope that this revised Industrial Development Strategy will serve to ensure that all those participating in the KwaZulu-Natal economy will have clarity on the way forward and the priorities for action, and will act accordingly.

It is also clear that within government, all levels of government will need to contribute. National government programmes impact significantly on the KwaZulu-Natal economy, and decisions regarding such programmes need to be taken in consultation with the Province. At the same time, eThekweni metro and the district municipalities have a major role to play in implementation and their active participation is germane to achieve the vision of the industrial development strategy.

In terms of ensuring effective implementation therefore a key first step in the implementation of this Industrial Development Plan will be the organisation and implementation of an intra-government Industrial Strategy Implementation Forum, which should serve to prioritise interventions, allocate resources and ensure effective measurement of outcome is undertaken by the DEDT.

6. Annexure One- Detailed Project Options & Action Options by Major Programme

Enabling Platform	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
Infrastructure Development	Sub Programme One: Specialised Infrastructure	Port infrastructure development: - Implementation of infrastructure to improve turnaround performance at Durban Port.	Champion-DOT, Transnet,	Short-term ³³
		Expansion of Dube Trade Port	Champion –DOT, eThekwini	Short-term
		Rejuvenation and re-orientation of the previous Durban Airport	Champion- DOT, DIA	Short-term
		Consolidation and expansion of the Richards Bay IDZ and port. Investigate potential for additional container facilities there	Champion RBIDZ DEDT, IDZ	Short-term
	Sub Programme Two: Utilities Infrastructure Development	Rail infrastructure development: Construction and maintenance of rail linking major economic activity areas – refer N3 route plans	Champion- eThekwini DOT, Transnet	Short term and on-going
		Road infrastructure development: - in particular strategic rural connecting roads to permit rural areas access to markets for agricultural, agro industry and wood products.	Champion-DOT, DAEA, Transnet	Short-term
		Utility Infrastructure Development: -The Critical Infrastructure Programme for development of basic infrastructure in newly zoned land (electricity, water, link roads, etc.)	Champion- DEDT DOH, ESKOM, DWAFF, District Municipalities;	Short-term and on-going
		National Housing programmes: Housing- increased speed of implementation and roll out of housing - fully government funded housing, government guaranteed housing, and commercially funded housing.	Champion- DOH, District Municipalities and NHA	Short-term and on-going

³³³³Short Term= 0 to 3 years, Medium Term = 4 to 7 years

Enabling Platform	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
Enabling Platform		Community facilities : Service delivery- increased delivery of improved community facilities (crèche, hospitals, schools- especially in rural areas- and water and sewage reticulation) using largely the MIG and other available funds.	Champion -Dept of Social Development, DOH, District Municipalities.	Medium term
	Sub Programme Three: Communication Infrastructure Development	Broadband roll out of reliable and high speed broadband wireless throughout the province and to rural areas where the digital divide is most severe.	Champion- DEDT Dept of Communications, ICT Cluster / Associations, TELKOM, VODACOM, Private sector.	Short -Term
	Sub Programme Four: Industrial Infrastructure Development	Spatial planning and identification and rezoning of new industrial land linking with The Critical Infrastructure Programme for development of basic infrastructure in newly zoned land (electricity, water, link roads, etc.).	Champion- DMs DTI, DEDT	Short-term
		Development of specific Industrial Parks and Hubs. Particular sector strategies for KwaZulu-Natal require that specialised infrastructure be developed. These require specific facilities in order to be able to function not only efficiently but also competitively.	Champion- DEDT with eThekwini and the DMs DOT, DTP	Medium -term
	The proposed Chemicals Industrial Hub and the Perishables Hub as part of the expansion of the Dube Trade Port.	Champion- DEDT and Chemicals cluster, and DTI, DOT, DTP	Short -term	

Enabling Platform	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
Skills Development	Sub Programme One: Vocational Life Long Training	Implementing the Vocational Qualification Certificate System in an integrated manner.	Champion - DEDT DOT, Transnet, SETAs	Short-term
		The development, with the private sector, of a vocational lifelong training and education strategy for each sector.	Champion- DEDT to set up New Skills Cluster with Industry and Tertiary Education DOT, DTP	Short-term
		Implementation of private teacher training facilities to grow the already significant private education cluster in KwaZulu-Natal, in partnership with the private sector (private schools) Implementation of Nursing Colleges to expand well trained nurse availability to grow the already significant private health cluster in KwaZulu-Natal, in partnership with the private sector (private hospitals and medical aids)	Champion- DEDT and DOE, DOL	Medium-term
	Sub Programme Two: Industry Focused Training and Development	Development, with the private sector, of a detailed skills profile per industry, linked to the scarce and critical skills assessments of the relevant SETAs - Need to include a quantification of skills needed by sector and sub sector and firm indications of what quality of skills are required.	Champion- DOL and Chambers DOL, SETAs, DED, Private Sector Industry Associations.	Short-term
		The development, with the private sector, of a vocational lifelong training and education strategy for each sector.	Champion- DOL and Chambers DOL, SETAs, DED, Private Sector Industry Associations.	Short-term

Enabling Platform	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
		<p>The development of <i>effective</i> implementing agencies with ALL agencies focussed on the provision of the required skills and training either across sectors (cross cutting) or for specific sectors, namely:</p> <ul style="list-style-type: none"> • Higher Vocational Institutions • Advanced Technical Schools • Secondary Poly-technical Schools • Employment Training Centres • Non-Governmental Vocational Training Institutions • Enterprise based Employee Training Centres 	Champion DEDT DOE, Vocational and training institutions.	Short-term and ongoing
		Develop an implementation plan linked to each sector and sub sector strategy. Where sub sectors are already implementing such a strategy, the review of outcomes and the planning and implementation of any key adjustments needed.	Champion- New Skills Cluster DOL, SETAs, DED, Private Sector Industry Associations.	Short-term
		The implementation of a “census” of training and development capacity within KwaZulu-Natal.	Champion- HSRC and DEDT DOE, SETAs, Industry Associations	Short-term and on-going
		The design and implementation of a Skills Hub in Msunduzi to serve as a first pilot for KwaZulu-Natal	Champion-DEDT, Service Provider	Short – Medium term
		<p>The development of a re-skilling programme in the Clothing and Textiles sector to ensure the essential skills are in place.</p> <p>The implementation of technical centres and hubs, such as Food Technology, Textile Technology to improve local R & D and entrepreneur development.</p>	Champion- DEDT, CTLF Industry, DAERD, DST,	Short-term

Enabling Platform	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
		Implementation of improved and world class nursing and medical technician training centres in KwaZulu-Natal (uMngeni, eThekwini, Msunduzi) to grow the already significant private medicine cluster in KwaZulu-Natal, in partnership with the private sector (Medical Aids, private hospitals, research institutions, public hospitals).	Champion- DEDT to develop new health services cluster in KwaZulu-Natal DOH	Medium-term
		The development of a strategy to implement high quality distance based learning in the rural areas in vocational and other essential skills, using the proposed broadband network, in partnership with the SETAs and private sector.	Champion- ICT cluster DOE, DEDT	Short-term
		Re-instate artisanal training centres for Transnet, Eskom and Water Utilities, and use SETA funds and Job Creation Fund to finance. As part of the programme, link with the National Tooling Initiative to ensure training in Tool and Die in KwaZulu-Natal and link with the National Foundry Technology Network.	Champion - DEDT SOEs, NTI, SETAs, DTI, DEDT	Medium- term
		Richards Bay and Newcastle as well as the South Basin are potential centres for this initiative.		
		The development of highly focussed and targeted SMME training in partnership with the private and public sector procurement programmes- continuous development of entrepreneurs and linked ability to move up the procurement chain of large institutions through modular and on the job learning and training.	Champion- Chambers led by eThekwini DEDT,DTI, SEDA, DOE, SETAs, Industry Associations	Short-Medium term
The inclusion of learning modules at late primary school level and secondary level on basic financial literacy, basic organisational skills, and basis business skills.	Champion – DOE, DTI,	Medium-term		

Industrial Development Strategy	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
Sustainable jobs and Entrepreneur Development	Sub Programme One – Rural Economic Opportunity Development & Implementation	Per infrastructure enabler, the identification of key strategic link roads in the rural areas and building of same	Champion- DEDT with DOT and DM's and Metro	Short-Medium term
		Development of a programme of action to ensure access to broadband and utilisation facilities through access to internet in community facilities.	Champion- ICT cluster and DEDT,DTI, DM's, Private Sector	Short-Medium term
		Development of an implementation plan to ensure the utilisation of the EPWP the CIP and the MIG to create jobs in the development of rural infrastructure.	Champion- DEDT, DPW,DTI, DPW, DOL, DOT, DM's	Short-Term
		Focus attention on community and small grower schemes which can create extra 43,000 jobs in forestry if the challenges of licensing and communal ownership are met – investigate and determine a strategy and action plan.	Champion- Forestry Association DWAF, DEDT,DTI, DAC, SEDA, DM's	Short-term and ongoing
		Dti has established real opportunities in short rotation hardwood (gum and wattle) for pulp and sawmilling as well as the potential to invest in shared community chipping mills to increase local capacity to process the wood - community based mobile chippers are a viable option.	Champion- DEDT DEDT,DTI, SEDA, DM's, TIKZN	Short-term
		Develop a business plan for shared facilities in three pilot rural areas and, possibly in partnership with SEDA, set up and run the hubs with a handover period of 3 to 5 years.	Champion- DEDT DEDT,DTI, SEDA, DST, DWAF, DAFF, DAERD, DM's, TIKZN	Short-term
		At the same hubs, the potential exists for waste board products but the equipment needs to be bought and introduced, and fibreboard produced. This will form part of the business plans for the three pilot centres referred to above, which will be multi wood product hubs.		Short-Medium term

Industrial Development Strategy	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
		Small scale saw milling and charcoal production also represent significant rural SMME and work creation opportunities; locate at the three rural hubs and take advantage of shared marketing and sales, and back office services.		Short-term and ongoing
		Development of small scale maize milling plants at rural hubs – implementation programme in conjunction with dti programme. KwaZulu-Natal should be the pilot province for roll out. Development of agribusiness incubators / technology centres and shared equipment hubs for wood and wood products. Furniture production also presents opportunity at the hubs. .		Short-term
		Develop linkages between agro process activities in rural areas and larger wholesalers to ensure access to market for products. Focus on the KZN market and possibly Gauteng and Western Cape.	Champion- DEDT and COSATU DEDT,DTI, SEDA, DAFF, DM's, TIKZN Private Sector	Short-term and ongoing
	Sub Programme Two: Urban Economic Opportunity Development & Implementation	Recycled paper and waste paper recovery is a commercially viable urban opportunity. Currently Informal hawkers provide recovered paper to buy back centres or depots. Hawkers could be harnessed in suburbs if properly organised and this opportunity significantly expanded to the benefit of the urban poor as well as the improved environmental rating of the cities. Implement a hawker's cooperative or some relevant organising structure for those who, in urban areas, collect waste paper and formalise supply arrangement to large firms. Make this a women's empowerment initiative.	Champion- DEDT set up new Waste Recovery Cluster including DTI, SEDA,DEA, DM's / Metros, Private Sector (Mondi, SAPPI recycling), Industry Association	Short-term

Industrial Development Strategy	KZN Programmes	Strategic Interventions	Responsibility	Time Frame
		<p>EE technologies offering to SMEs: Efficient Lighting Technologies - A variety of energy efficient lighting technologies offered to participating building owners and occupiers, dependent on lighting installation upgrade objectives and scope.</p> <p>Project proponents expect that there will be three technology types that form the majority of activity under the project:</p> <p>a) Replacement of existing dichroic halogen downlights with LED equivalents (up-lamping).</p> <p>b) Replacement of existing inefficient linear fluorescent lights (T8 and T12).</p> <p>c) Installation of lighting controls such as dimmers, timers, movement and daylight linking sensors to optimize the use of the lighting system. Additional technology types and applications will be offered depending on the needs of each building involved in the project.</p>	<p>Champion- DEDT DEDT,DTI, DST DEA,SEDA,DM's /Metros, Private Sector</p>	<p>Short-Medium term</p>
		<p>Efficient Refrigeration Technologies - The project will offer participating building owners and occupiers a range of simple, cost effective refrigeration retrofit technologies that enable significant efficiency gains without the full-scale removal and replacement of existing refrigeration systems. The project does not therefore propose to replace refrigeration units, but instead to improve the operating efficiency of existing equipment through the application of several innovative technologies.</p>	<p>Champion-DEDT, set up new white goods cluster with RBIDZ DTI, DEA,SEDA,DM's /Metros, Private Sector</p>	<p>Short-Medium term</p>

Industrial Development Strategy	KZN Programmes	Strategic Interventions	Responsibilities	Time Frame
Productive Growth	Sub Programme One: Business Retention	Plan to participate in the National Tooling Initiative and focus KwaZulu- Natal on the automotive and M&HCV sub sectors tooling needs, as well as those of road freight trucks and Eskom.	Champion- DAC DEDT,DTI, NTI, Automotive Cluster	Short-term
		Develop an implementation plan to leverage government and SOE procurement of M&HCVs to drive local demand for the equipment and the after-market as well as components.	Champion- NAAMSA DEDT,DTI, SOEs, Automotive Cluster (DAC)	Short-term
		Lobby DAFF to set up its proposed Food Safety Agency in KwaZulu-Natal in the Midlands where there are existing facilities. Food safety is in the national interest and is increasingly a core requirement for exporting to both developed and developing countries. Without a strong regulatory environment, KwaZulu-Natal's food and related product exports may be at risk.	Champion DEDT DAFF	Short-Medium term
	Sub Programme Two: Business Expansion	Facilitate the upgrading of the KwaZulu-Natal white-goods industry to increase production and grow exports. Implement incentives for capital investment into the industry to meet the technological requirements needed to increase productivity, volumes and efficiencies and develop export strategy for the industry.	Champion- New White Goods Cluster DEDT, DTI, TIKZN, Industry Association	Short-Medium term
		Develop a detailed strategy, working with the national DTI, for the organic food sector. This sector represents a high-value niche sub-sector with the potential to create 20 000 jobs over five years in both the primary agriculture and agro-processing stages of the value chain.	Champion DAEA and DUBE DTI, DEDT, TIKZN, Service Provider	Short-term
		The dti will be establishing the South African Organics Sector Organisation (SAOSO) and registering it with the Companies and Intellectual Property Registration Office and at that point, will launch a retailer/small-farmer/processor programme. This should be piloted		

Industrial Development Strategy	KZN Programmes	Strategic Interventions	Responsibilities	Time Frame
		in KwaZulu-Natal.		
		Implement as recommended, Petrochemicals Hub and Halogen Cluster in KwaZulu-Natal seeking international and local investment from the firms already present and implement Chemicals Industrial Park. Ensure sufficient and adequately trained government personnel for EIAs with immediate effect. In the meantime appoint expert panel to deal with backlog.	Champion-Chemicals Cluster DEDT, DTI, TIKZN, IDC, Private Sector	Short-Medium term
	Sub Programme Three: Business Attraction	Develop investment plan and implement, for private medicine and hospitalisation (seek international and African partners) and private education (seek local actors wanting to expand operations) clusters in Midlands (and possibly eThekweni).	Champion DEDT and TIKZN with new Health Services Cluster DEDT, DOH, TIKZN, DOE	Short-term
		Development, in partnership with the OEMs and components manufacturers, a strategy for implementation to expand the manufacture of components for autos and M&HCVs in KwaZulu-Natal. At the same time, investigate the potential to set up electric car plant in KwaZulu-Natal.	Champion-Automotive Cluster DEDT,DTI, NTI, Automotive Cluster (DAC), NAAMSA	Short-term
	Sub Programme Four: New Business Development	Develop an investment and production roll out plan for solar water heater manufacturing in KZN using the proposed DoE funding subsidy for 1 million units and other sources, to attract investment to the province. Set specific targets for phased production roll out and monitor and evaluate progress on investment targets as well as	Champion- DEDT, DTI, DST, TIKZN, IDC, DBSA, Private Sector	Short-term

Industrial Development Strategy	KZN Programmes	Strategic Interventions	Responsibilities	Time Frame
		production targets. Phase one will focus on local demand but phase two should begin export targeting		
		Using the existing medical cluster in KwaZulu-Natal, stimulate investment in clinical research in (current market R2bn per year) and potential market size is R4bn to R5bn per year	Champion- New Health Services Cluster DEDT, DOH, TIKZN, DOE	Short-Medium term
		Develop an investment strategy and implementation plan to attract investment for the manufacture of active pharmaceutical ingredients for key ARVs as well as the local production of reagents for HIV and AIDS diagnostics, under licence, the domestic production of vaccines, under licence, and the domestic production of biological medicines, antibodies and vaccines	Champion- DEDT and IDC DEDT, DOH, TIKZN, Private Sector	Short-Medium term
		Develop specific strategies and implementation plans for other Green Industries such as bio mass, wind energy, and tidal energy. And in particular, tidal energy.	Champion- DEDT, set up Green Industries Cluster DEDT, DEA, DTI, ADST, SASA as stakeholder for Biomass Energy	Medium-term
		Develop and implement investment plan for alternative energy options. Particular focus on tidal energy technology and hydropower opportunities.	Champion- New Green Industries Cluster DEDT, DEA, DTI, DST	Short-Medium term

Industrial Development Strategy	KZN Programmes	Strategic Interventions	Responsibilities	Time Frame
		<p>Develop an investment and production roll out plan for digital TC decoder manufacturing in KwaZulu-Natal using the proposed DoE funding subsidy for 1 million units and other sources, to attract investment to the province either from domestic or international firms. Set specific targets for phased production roll out and monitor and evaluate progress on investment targets as well as production targets. Exports should be considered as part of faze one.</p>	<p>Champion- New White Goods Cluster DEDT, DTI, DST,</p>	<p>Short-Medium term</p>
		<p>Lobby the IDC to set up its demonstration plant for Concentrated Thermal Solar Power (CTSP) and demonstration of its viability as a major renewable energy generation source, in KwaZulu-Natal.</p>	<p>Champion- New Green Industries Cluster DEDT, DTI, DST, IDC</p>	<p>Short-term</p>
		<p>In partnership with the IDC, investigate the production of specific high value niches for textile and clothing production in KwaZulu-Natal, as outlined above. Prepare investment business plan and locate manufacturing centre in Dube Trade Port.</p>	<p>Champion Cosatu DTI, DST, IDC Clothing Export Council SA Textile Industry Export Council (SATIEC)</p>	<p>Short-Medium term</p>
		<p>Develop fast track beneficiation strategy for KwaZulu-Natal for precious metal and stones jewellery locating in Dube. Processing and sale of cut diamonds, and the development of a Gold, Platinum and Diamond jewellery Hub at Dube Trade Port should be fast tracked for the purposes of value added export. A cluster should be formed in the area.</p>	<p>Champion DEDT and DMR DTI, SA Jewellery Council, Dube</p>	<p>Short-Medium term</p>

7. Annexure Two- Industrial Policy and Strategy- Definitions

Industrial Policy focuses on removing constraints and enhancing resources in an area in such a way that it makes the region more attractive for the investment it wishes to target. Usually the ability to undertake this is based on the comparative and competitive advantages present in the area and their relevance and impact to the target sectors. Industrial strategy is the process by which the policy is put into effect. South African policy in terms of IPAP-2 and the New Growth path require the state to intervene to ensure productive growth and job creation but KwaZulu Natal will compete for investment along industrial values chains with other regions which have similar objectives.

In order to achieve increased industrial investment in KwaZulu Natal focus will be on the continuous expansion of manufacturing industry as the growth engine to stimulate economic growth. Growth in demand for goods and services either originating from or passing through the province will in turn stimulate manufacturing growth and investment, while manufacturing investment will increase provincial ability to trade and export goods and services into existing and new markets in a reinforcing and virtuous cycle.

The success of the KwaZulu Natal Industrial Development Strategy can be measured in terms of the durability of manufacturing growth as well as the sustained contribution of manufacturing to provincial GDP and the levels of labour absorption in the formal industrial economy. Innovation and technology development will drive investment in more complex technology and simultaneous investment in an increasing skills base will attract more investment over time.

8. Annexure Three- The Consultative Process

The development of the 2012 Industrial Development Strategy was informed by all the social partners. Its preparation was undertaken in three phases, each phase concluding in a consultative workshop where the results of each phase were tabled and comment and criticism and new inputs sought.

Phase one involved the preparation of a Situational Analysis which reviewed the status quo of Industrial Strategy in KwaZulu-Natal in the context of National and Provincial Policy, as well as the socio economic reality of the Province. Phase two involved the development of a revised Industrial Development Strategy for KwaZulu-Natal, based on the Situational Analysis and Phase three saw the preparation of a high level strategic implementation plan of action. All workshops generated constructive inputs from stakeholders. A perception and opinion based survey was conducted within the stakeholder base to elicit views on the performance of KwaZulu-Natal in the implementation of strategies pertaining to Industrial Development in general and in specific sectors.³⁴

³⁴Industrial Development Strategy, 2012, Volume One- Situational Analysis

9. Annexure Four- References

- A Beneficiation Strategy for the Minerals Industry of South Africa – Paper for Public Comment (2008) Department of Mineral and Energy Pretoria
- A National Climate Change Response Strategy for South Africa (2004) Department of Environmental Affairs Pretoria
- A Project Pipeline for Investors, Planners and other LED Role Players in KwaZulu-Natal (2007) Department of Economic Development
- A Review of Industrial Policy, Instruments and Support Programmes: 1994-2008 : A Contribution to the Presidency's 15-year Review of Government Performance (2010) Z Rustomjee, S Hanival
- Abstract of Agricultural Statistics (2010) Department of Agriculture, Forestry and Fisheries, Directorate Agricultural Statistics
- Accelerating Growth and Development: The Contribution of an Integrated Manufacturing Strategy (1999) Department of Trade and Industry, Pretoria
- Additional Funds to be provided for Green Energy Development (2001) Deloitte and Touche, South Africa, D Newman dnewman@deloitte.co.za
- An Economic Development Strategy for Cornwall and the Isles of Scilly 2007- 2021 (2007) Cornwall Council with the Isles of Scilly Council (EU)
- Assessing Africa's Business Future: An Interview with the CEO of ABSA (2010) , D Fine, McKinsey Quarterly
- Assessment of Spatial Development Frameworks for KZN (2010) Consolidated Report, Sibuko se Africa
- Baseline Survey and Product Identification for the iLembe Agri-Processing Hub Report Number: 10413/11380/1/B (2008) Zitholele Consulting
- Best Practises and Policy Convergence (2001) F Serkovitch , Competition and the World Economy UNIDO
- Biofuels Industrial Strategy of the Republic of South Africa (2007) Department of Minerals and Energy, Pretoria
- Cabinet endorses New Growth Path .Statement issued by Themba Maseko, Government Communications (GCIS), October 26 2010, Politicsweb 26 October 2010
- Chemicals Strategy for Kwa-Zulu Natal (2009) Blueprint (Pty) Ltd
- China's Industrial and Foreign Trade Policies: what are they and how successful have they been?, Arthur Kroeber, May 2006

- Confronting South Africa's Water Challenge (2010) G Boccaletti, M Stuchtey, M van Olst, McKinsey Quarterly
- Consolidated LED Strategy- Ilembe District Municipality (2008) Urban Econ
- Development of an ICT and Electronics Cluster Strategy for KZN (2005) Kaiser Associates for the Department of Economic Development
- Draft Preferential Procurement Regulations (2009) National Treasury, Pretoria
- Durban Economic Database (2011 Q1) Provincial Treasury, KwaZulu-Natal
- Economic Prospects Update (2010) Bureau of Economic Research, Stellenbosch
- Effect of Financial Factors on Manufacturing Competitiveness (2001) M Mrak, University of Ljubljana, Slovenia
- Energy Security Master plan 2007-2025- Electricity (2006) Department of Minerals and Energy, Pretoria
- Export Strategy and Policy for the Province of KwaZulu-Natal – Draft One (2010) Graham Muller Associates
- Feasibility Study for the establishment of a Creative Animation Institute un eThekweni (2010) KZN ICT Cluster
- Fundamentals of our Economic Policies & the National Government's Response to the Crisis (2006), Speech by Ebrahim Patel. Minister of Economic Development, at Conference: Roadmap to KZN Economic Recovery
- German Industrial Policy: An Overview (1999) S Vitols
- Ilembe Informal Economy Plan (2009) Urban Econ
- Ilembe Investment Incentives Strategy (2009) Urban Econ
- Important Excerpts from China's Employment Situation and Policies (April 2004) No author given
- Industrial Development Strategy (2005) Department of Economic Development, KwaZulu-Natal
- Industrial Development Strategy Phase One Report Ilembe (2009) Urban Econ
- Industrial Policy (Oct 2010) C Bruggemans FNB newsletter
- Industrial Policy and Competition Policy (2000) D Begg, S. Fischer and R. Dornbusch, Economics, 6th Edition, McGraw-Hill
- Industry and Industrial Policy in Canada (2004) Industry Canada published in Athena Global

- Integrated Resource plan for Electricity – Revision 2, Draft (2010) Department of Minerals and Energy
- Integrated Small Enterprise Development Strategy: Unlocking the Potential of South African Entrepreneurs (2005) Department of Trade and Industry Pretoria
- Interventions to assist unemployed youths: An integrated approach to address the problem (2008) M. Durieux – Labour Market Analysis (2)
- IPAP, IPAP-2, IPAP-2 Revised (2008, 2009, 2011) Department of Trade and Industry, Pretoria
- Job Opportunities for the Green Economy (2008) R Pollim, J Wicks-Lim, Political Economy Research Institute, University of Massachusetts, Amehurst
- KZN Automotive Industry Strategy Report (2009) J Barnes, T Hartogh for the Department of Economic Development
- KZN Economic Development & Tourism Provincial Budget Vote 2010/11 by M. Mabuyakhulu, KZN MEC for DEDT
- KZN Industrial Strategy for Rail, Transport & Logistics (2009) CSIR for Department of Economic Development and Tourism
- KZN Provincial Industrial Strategy for the Capital Goods Sector (2009) Mintek for the Department of Economic Development and Tourism
- KZN Provincial Treasury, IGR Unit (2010) Monthly Economic Newsletter (October)
- KZN Wood Processing Strategy- Final report (2010) Department of Economic Development and Tourism
- Manufacturing Competitiveness: Concept, Measurement and Policies (1999) C Frischtak, World Invest Ltd, Brazil
- Manufacturing Production and Sales: February 2010, National Treasury
- Manufacturing Sector Plan – Draft Final (2006) Ugu District Municipality
- Medium Term Strategic Plan 2010-2100, 2012-2013 (2009) Ministry for Economic Development, Pretoria
- Mining production and Sales: February 2010, National Treasury
- National Innovation Systems of Singapore & Malaysia (2006) T Munroe, Self Study Paper
- New Growth Path (2011) Ministry for Economic Development, Pretoria
- Newly Industrialising Economies- the case of the Republic of Korea, C Y Ahn (2004) Economic Research Unit, Chung Ang University, Seoul
- Policy Benchmarking: Principles and Practise (2001) F Serkovitch, Competition and the World Economy, UNIDO

- Promotion and Facilitation Imperatives Investment Strategy and Implementation Plan – Working Draft (2010) Department of Economic Development and Tourism KZN
- Provincial Agribusiness Strategy Report One: Situational Analysis (2010) Department of Economic Development and Tourism, KZN
- Provincial Agribusiness Strategy Report Two: Strategic Framework (2010) Department of Economic Development and Tourism, KZN
- Provincial Economic Review and Outlook – Gauteng (2010) Department of Finance, Gauteng
- Provincial Growth and Development Strategy KZN (2006) Department of Economic Development
- Provincial Growth and Development Strategy KZN (2011) Department of Economic Development
- Provincial Spatial Development Framework KZN (2005) Department of Economic Development
- Punjab & Haranya: A Comparison of Industrial Growth (2007) S Singh
- Reinventing Industrial Strategy: The role of government policy in building Industrial Competitiveness (2003) Working Paper Number 111 S Lall
- Rethinking the World Economy (1998) D Rodrick, <http://www.ksg.harvard.edu/rodrick/TNRpiece.html>
- Review of KZN Industrial Strategy & Implications for Skills (2009) J McCarthy & K Owusu-Ampomah
- Review of the South African Coal Industry (2007) Blueprint (Pty) Ltd for the Department of Minerals and Energy Coal and Gas Division
- Rural Transport Strategy for South Africa (2007) Department of Transport, Pretoria
- South Africa's Automotive Industry (2009) Creamer Media, Research Channel Africa <http://www.researchchannel.co.za>
- South African Budget Speech (2011) P Gordhan Minister of Finance <http://www.saica.co.za>
- South African Chemicals Industry (2009)) Creamer Media, Research Channel Africa <http://www.researchchannel.co.za>
- Southern African Regional Poverty Network (SARPN): "A National Industrial Policy Framework (South Africa)", www.sarpn.org.za (Sourced from DTI)
- Spatial Representation of KZN (2006) Department of Local Government and Traditional Affairs

- State of the Province Address (2011) N Mokonyane, Gauteng Legislature, Johannesburg
- State of the Province Address (2011) Z Mkhize, KwaZulu-Natal Legislature, Pietermaritzburg
- Strategic Plan for the Environmental Sector 2009- 2014 (2008) Department of Environmental Affairs, Pretoria
- Strategy for the Development of the KZN Integrated Arts and Crafts Industry - Draft (2009) Futureworks for the Department of Economic Development and Tourism
- Thai Industrial Policy Formulation (2005) Vietnam Development Forum, MOI-VDF Joint Mission
- The Dinokeng Scenarios (2010) The Dinokeng Team
- The Future of South Africa's Port Capacity (2010) 3rd South African Ferro-alloys Conference, D. Stromberg, Transnet Capital Projects
- The Global Revival of Industrial Policy (2010) The Economist, Print Edition August 5th 2010
- The Macro/Micro Policy Dichotomy: Implications for Cross Country Replicability (1999) F Serkovitch, Competition and the World Economy, UNIDO
- The Political Economy of Industrial Policy in the Middle East and North Africa (2006) M Nabli, J Keller, C Nassif, C Silva-Jauregui, World Bank
- The South African Renewables Initiative: Advancing South Africa's Low Carbon Industrial and Economic Strategy, working paper prepared for the Department of Minerals and Energy (2010) Zadek, S, Ritchken, E, Fakir, S and Forstater, M (2010) Developing South Africa's Economic Policies for a Low Carbon World, <http://www.zadek.net>
- The Triple C Approach to Industrial Policy (1996) J Humphrey, H Schmitz, World Development. Vol. 24, No. 12, pp. 1859-1877, Elsevier Science Ltd
- Transnet National Infrastructure Plan (2010) Transnet
- Trends Analysis (2010) Bureau for Economic Research, Stellenbosch
- Tunisia's Industrial Strategy for the years leading up to 2016 (2010) SIAL "For a win-win partnership ThinkTunisia" Conference, October 2010
- Umdoni Industrial Strategy Project- Situational Analysis Composite Report (2007) Umdoni Municipality
- Youth unemployment and discouraged youth in the labour market (2007) M. Danstle - Labour Market Analysis (1)