



REGIONAL SECTOR SKILLS PLAN

Eastern Cape Region

October, 2013

Regional Sector Skills Plan for Eastern Cape

Prepared for

Manufacturing, Engineering and Related Services SETA (merSETA)

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FOREWORD

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List of Acronyms

AATP	Accelerated Artisan Training Program
APDP	Automotive Production and Development Programme
Asgi-SA	Accelerated and Shared Growth Initiative for SA
BER	Bureau of Economic Research
CDC	Coega Development Corporation
CDM	Cacadu District Municipality
CETEMF	capital equipment, transport equipment, metal fabrication
CPUT	Cape Peninsula University of Technology
CSP	Customised Sector Plan
CTF	Clean Technology Fund
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DoL	Department of Labour
DTI	Department of Trade and Industry
EC	Eastern Cape
ECDC	Eastern Cape Development Corporation
FET	Further Education & Training
FS	Free State
GDP	Gross Domestic Product
GDPR	Gross Domestic Product per Region
GET	General Education & Training
GP	Gauteng Province
GVA	Gross Value Added
GWM&E	Government-Wide Monitoring and Evaluation
HET	Higher Education & Training
HRDS	Human Resources Development Strategy
IDC	Industrial Development Corporation
IDS	Industrial Development Strategy
IDZ	Industrial Development Zone
IPAP	Industrial Policy Action Plan
IRP	Integrated Resource Plan
KZN	KwaZulu-Natal
LP	Limpopo Province
MBSA	Mercedes Benz South Africa
merSETA	Manufacturing, Engineering and Related Services Sector Education and Training Authority
MP	Mpumalanga Province
NAAMSA	National Automotive Association of South Africa
NC	Northern Cape Province
NFTN	National Foundry Technology Network
NIPF	National Industrial Policy Framework
NGP	New Growth Path

NMBLP	Nelson Mandela Bay Logistics Park
NMMM	Nelson Mandela Metropolitan Municipality
NMMU	Nelson Mandela Metropolitan University
NSC	National School Certificate
NSDS	National Skills Development Strategy
NSF	National Skills Fund
NW	North West
OEM	Original Equipment Manufacturer
PERO	Provincial Economic Review and Outlook
PGDP	Provincial Growth and Development Plan
PGWC	Provincial Government of the Western Cape
PICC	Presidential Infrastructure Coordinating Committee
QLFS	Quarterly Labour Force Survey
RND	Rural Nodal Development
RSSP	Regional Skills Sector Plan
SBIDZ	Saldanha Bay IDZ
SDA	Skills Development Act
SDI	Spatial Development Initiatives
SERO	Socio-Economic Review and Outlook
SETA	Sector Education & Training Agency
SET	Science, Engineering and Technology
SEZ	Special Economic Zone
SIC	Standard Industrial Classification
SIP	Strategic Integrated Projects
SSP	Skills Sector Plan
StatsSA	Statistics South Africa
UCT	University of Cape Town
US	University of Stellenbosch
UWC	University of the Western Cape
VWSA	Volkswagen South Africa
WC	Western Cape
W&RSETA	Wholesale and Retail SETA
WSPs	Workplace Skills Plans
WTO	World Trade Organisation

EXECUTIVE SUMMARY OF THE REPORT

1. Introduction

The Manufacturing, Engineering and Related Services Education and Training Authority (merSETA) established through the Skills Development Act, (Act 97 of 1998). The merSETA facilitates skills development in the following five sub-sectors (or chambers); Metal, Plastics, Auto (including only the seven local assemblers of new vehicles), Motor (including automotive components manufacturers and the motor retail and service subsector) and New Tyre.

This Regional Sector Skills Plan (RSSP) is aimed at unpacking the regional specificity of the merSETA subsectors. The objectives of this RSSP is to identify and map key features, trends, forecasts and legislative initiatives at the regional level regarding skills development. This RSSP provides valuable insight into regional and local developments in the sector and links to skills development planning. To this end, the RSSP presents a regional socio-economic analysis, profiles regional companies, explores the labour supply and demand imperatives and offers regional scarce and priority skills analysis.

2. Research Methodology

The research methodology used for this Regional Sector Skills Plan (RSSP) included both primary research and secondary research which involved both quantitative and qualitative research methods. The document and literature review covered provincial Growth and Employment Development Strategies (GEDSs), Economic Review and Outlook (PERO), Socio-Economic Review and Outlook (SERO) and these highlight the performance of the provincial economy and the social changes occurring in each province.

Some of the main data sources are Stats SA, SARB, DHET, DoL, BER, SARB, NAAMSA, and Quantec among others. The research also benefited from previous merSETA SSPs and workplace skills plans (WSPs) data. Furthermore, the demand projections are based on the merSETA Sector Skills Plan 2012/13 – 2017/2018 national estimations, as per the econometric modelling performed by EcoQuant. Based on the distribution of manufacturing employment per province for Quarter 1 of 2013 the projections in the national SSP were proportioned to give a regional outlook.

The research study was designed to be as interactive as possible with the merSETA Regional Committees which have representatives from all chambers, labour and employers' associations. At the inception of the project the research team attended the Regional Committee meetings to introduce the project, initiate task teams and outline the objectives.

Table 1: List of participants in the research process¹

Region	Number of participants
Introductory Meeting	12
Regional Committee Meetings	20
Task Team	7
Primary Interviews	14

The primary research aspect of the study involved in-depth interviews with employer representatives, labour union representatives, FET colleges, and provincial government representatives. Interviews were conducted on a face-to-face basis and some were done telephonically. Information obtained from the primary research was used extensively to determine:

- Factors affecting the skills development in the region;
- Scarce and priority skills; and
- Implementation strategies and recommendations to address regional priorities.

A draft report was presented at the Regional Committee meeting and further discussions were undertaken to refine the report and formulate region specific strategies. The draft report was widely circulated to internal and external merSETA stakeholders for comments and inputs.

3. Profile of merSETA Sector in the Region

The Eastern Cape constitutes 13.9 % of South Africa's land area and is the third most populous province in the country. According to the Statistics South Africa (Stats SA) 2011 census data, Eastern Cape had a total population of 6,6 million people, which is 12.7% of the national population. Approximately 86.2% of the Eastern Cape's population are Africans, 8.3% Coloureds, 4.7% Whites and 0.4% Indians/Asians. The largest age brackets in the province are the 0-4 years and 15-19 years, for both genders.

¹ Some of the interviewees were part of the introductory meeting, regional committee meeting and task team meeting

Approximately two thirds of the provincial population stay in rural areas, which is a major factor for the high unemployment levels.

The Eastern Cape's economy is the fourth largest contributor to the national economy, after Gauteng, KZN and the Western Cape. The province's percentage contribution to the national economy has been decreasing over the years from 8.3% in 1996 to 7.7% in 1996 and 7.5% in 2011. The biggest sector in Eastern Cape in terms of contribution to provincial economy is general government services (24.5%) followed by finance and business services (20.7%), manufacturing is the fourth largest sector with a contribution of 13.6% in 2011. Manufacturing in the Eastern Cape contributed 13.2% of national GDP.

4. Major Policy Drivers in the Region

4.1. Regional Economic Growth and Development Strategies

A. *Eastern Cape Growth and Development Plan (PGDP)*

The Provincial Government of the Eastern Cape and its social partners have formulated a Provincial Growth and Development Plan (PGDP) 2004-2014, whose vision is *to make the Eastern Cape a compelling place to live, work and invest in*². Some of the PGDP targets include maintaining an economic growth rate of between 5% and 8% per annum and halving the unemployment rate³ by 2014.

B. *Eastern Cape Rural Development Strategy (ECRDS)*

The strategy is the main thrust of one of the pillars of the PGDP; the Agrarian Transformation and Rural Development Pillar. The ECRDS notes that the urban population in Eastern Cape constitutes around 39% while the remaining 61% reside in rural localities.

C. *Eastern Cape Provincial Industrial Development Strategy (PIDS)*

The Provincial Industrial Development Strategy (PIDS) is framework through which the provincial government commits to coordinate its efforts towards altering the structure and distribution of industrial activity in the province and to promote economic growth and development. The priority sectors identified are;

² Eastern Cape Provincial Government (2002) *Provincial Growth and Development Plan (PGDP) 2004-2014*, East London, South Africa.

³ Which was 47.6% in 2002.

Agro Processing, Capital Goods sector, Auto sector, Green Industries, Tourism and Petrochemicals

D. Eastern Cape Provincial Job Strategy (2012)

The strategy has five pillars, namely:

- (i) retaining existing jobs,
- (ii) stimulate new jobs in priority sectors,
- (iii) building social economy,
- (iv) increasing the pace of economic infrastructure investment in critical areas, &
- (v) radically improve skills development processes.

4.2.Summary Factors Impacting on Future Demand and Supply of Skills in the Region

- i. *NIP and SIPs:* According to Eastern Cape Department of Economic Development and Environmental Affairs- Transnet will create 87,774 direct and indirect jobs in the Eastern Cape over the next seven years to 2018/19. This is as a result of the R7.3 billion which will be spent on the expansion of the Port of Ngqura and R2.7 billion on the upgrading of the vehicle terminal and grain silo as well as the container terminal in East London. Transnet estimate that these projects will provide employment opportunities in Eastern Cape as follows:
 - 2015/16 financial year 19,557 direct and 123,000 indirect jobs,
 - 2016/17 financial year 21,760 direct and 136,000 indirect jobs, and of these a total of 2,000 artisans are required.
- ii. *The Provincial Job Strategy* estimates that the province will need an additional 30,000 people which need artisan placements, learnerships, post-school training and educational opportunities.
- iii. *Other Initiatives which will affect demand for skills in the region:*
 - Daimler AG preparing to inject R2.5 billion in East London manufacturing plant;
 - Freidrich Boysen GmbH & Co. to invest R180 million into a plant for complete exhaust systems;
 - ELIDZ 16ha Automotive Supplier Park extended;
 - Lighting Innovations to build new factory in Port Elizabeth for R60 million;

- First Automobile Works (FAW) to invest R600 million (R200 million construction and R400 million operations) in a truck assembly plant at Coega Industrial Development Zone (CIDZ);
- VWSA investment in new press shop (part of 5 year R5 billion investment program at Uitenhage);

5. Regional Scarce and Critical Skills

The regional scarce skills list⁴ (below) was developed through review of the merSETA national SSP (2012/2013); current chamber projects; in-depth interviews with labour representatives, employer organisations, provincial government officials and other stakeholders; and discussed through the regional committee and regional SSP task team workshops.

Table 2: Eastern Cape Scarce Skills, 2013

Motor Scarce skills	Auto Scarce skills	New Tyre Scarce Skills
-Diesel mechanics	Human Resource Manager	-Rubber Production Machine Operator
-Fitter & Turner	-Supply and Distribution Manager	-Production / Operations Manager (Manufacturing)
-Automotive machinist	- Industrial Engineer	-Rubber Factory Worker
-Boilermaker	- Mechanical Engineer	-Fitter (General)
-Toolmaker, jig and dye maker	- Chemical Engineer	-Electrician (General)
-Autotronics	- Electrical Engineer	-Product Examiners
- Spray painting	- Accountant	-Rubber Manufacturing Technician
- Dual logic skills	- Marketing Practitioner	Production / Operations Manager
- Quality Systems Manager	- ICT Systems Analyst	-Mechanical engineering technologist
-Production/Operations Manager	- Mechanical Engineering Technician	-Organisation and methods analyst
- Industrial Engineer	- Chemical Engineering Technician	-Sales representative /Salesman (Industrial Products)
-Industrial Engineering Technologist	- Retail buyer	- Integrated manufacturing line technician
- Human Resource Manager	- Purchasing officer	- Fitter & Turner
- ICT Systems Analyst	-Electronic Equipment Mechanician	- Electrician
- Retail buyer	- Mechatronic technician	- Rubber production machine operator
- Purchasing officer	- Millwright	- Plastics, composites and rubber
- Mechanical Engineer	- Auto-electrician	
- Mechanical Engineering		

⁴ The list is work in progress subject to any additional input which may arise prior to finalisation of the research process

Technician - Robotics - Motor Vehicle Examiners	<ul style="list-style-type: none"> - Electrician - Tool makers - Fitter and Turner - Metal Machinist - Special Class Electrician - Machinery Assembler -National Certificate Automotive Manufacturing and Assembly - Civil Engineer - Technical Trainer Skills Development Facilitators - Motor mechanics - Spray painters 	<ul style="list-style-type: none"> factory worker - Product examiners
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6. Regional Strategic Plan

6.1. Regional Strategic Plan Linked to merSETA Priorities

The RSSP aimed to identify interventions which the merSETA regional and national offices can implement in line with the National Skills Development Strategy III Priorities. Input was obtained from stakeholders in the region and as well as from the research team.

Table 3: Summary of regional strategic priorities

NSDS III Priorities	Regional Strategic Plan
Priority 1: develop a labour market intelligence system and facilitate sector specific research initiatives	<ul style="list-style-type: none"> i. Short to Medium Term Priorities <ul style="list-style-type: none"> – Commission the RSSP update for 2014/15 – Track all the merSETA trained people and develop a database for possible placement in the SIPs programme. – Ensure artisans who have obtained training get assistance in being deployed in regional projects and in some instances to other provinces ii. Long Term <ul style="list-style-type: none"> – Speed up the development of a merSETA Rural Development Strategy, which sets out the principles of Training for Rural Economic Empowerment (TREE)
Priority 2: promote artisan and sector-specific priority skills	<ul style="list-style-type: none"> Short to Medium Term Priorities <ul style="list-style-type: none"> – Ensure grant allocation according to identified scarce and priority skills. – Encourage employers to: <ul style="list-style-type: none"> ○ Take up more learners for experiential learning, ○ Retain trained artisans to help them get experience. ○ Release employees to get up-skilled with artisans standing in to reduce potential production downtime – Identify future projects in the region plus the attendant skills

		<p>requirements and put in place mechanisms to ensure these requirements will be met by training institutions</p> <ul style="list-style-type: none"> – Identification of priority skills should be done drilled down to an occupation level (when clustered into broad categories the specific skills needs tend to remain unaddressed)
<p>Priority 3: establish and facilitate strategic partnerships</p>	<p>i.</p>	<p>Short to Medium Term Priorities</p> <ul style="list-style-type: none"> – Encourage partnerships and collaboration between employers and FETs so that FETs can have: <ul style="list-style-type: none"> o Modern training equipment (e.g. East Midlands College receiving two robots from VWSA) o Curriculum review, development and upgrade o Qualified lecturers with industry know-how, and o More learners being taken up by industry for experiential learning – Form partnership with FETs which offer green skills such as Port Elizabeth College – Form collaborative partnerships Eskom, Transnet, Energy SETA, Provincial Government and other stakeholders involved in the rollout of SIPs. This will help merSETA trained people who are currently unemployed <p>ii.</p> <p>Long term</p> <ul style="list-style-type: none"> – SMMEs often lack administrative capacity required to enable the training of their workforce. merSETA can create a facility/company to help with administration by the SMMEs – merSETA in collaboration with the provincial government can use its influence to facilitate establishment of small scale manufacturing in rural areas. Further collaboration with FETs in these areas will ensure the appropriate skills are developed for these manufacturing entities
<p>Priority 4: increase the flow of appropriately skilled new entrants into the system</p>		<p>Short to Medium Term Priorities</p> <ul style="list-style-type: none"> – Develop and strengthen partnership with GET schools to increase pass rates especially in Maths, English and Science – Set up career development support desks at major FETs in the province – Incorporate soft skills training to ensure learners and artisans develop holistically i.e. they can be able to take on supervisory and management roles – Training institutions must be quick to adapt to changes in the industry requirements (e.g. welding courses to focus on a wider range of welding types including modern techniques such as laser welding, water based welding etc)
<p>Priority 5: develop the skills of the existing workforce</p>	<p>i.</p>	<p>Short to Medium Term Priorities</p> <ul style="list-style-type: none"> – To address the lack of fundamental basics bridging courses for unskilled, possibly through ABET programmes must be implemented – Address the growing demand for individuals who have practical and theoretical experience to function within the supervisory roles in the sector – Train current workers on green skills, especially through partnership with HETs and FETs which offer green skills such as Port Elizabeth College – merSETA to move into being a change agent in the region by giving direction and setting the pace for skills development – Constant up-skilling of employees in the usage of modern technologies is essential – Employment of people with technical knowledge in roles traditionally regarded as non-technical i.e. motor parts salesman

In order for the RSSP to contribute to the skills development needs of the Eastern Cape, the identified regional strategic plan needs to be implemented. Although there are some specific issues raised in the Eastern Cape task team and interviews with regional stakeholders, most of the inputs mirror those given in other regions.

1. INTRODUCTION AND BACKGROUND

1.1. Introduction

The Manufacturing, Engineering and Related Services Education and Training Authority (merSETA) was established through the Skills Development Act, (Act 97 of 1998). The merSETA facilitates skills planning in the following five sub-sectors (or chambers); Metal, Plastics, Auto (including only the seven local assemblers of new vehicles), Motor (including automotive components manufacturers and the motor retail and service subsector), and New Tyre.

The merSETA, sub-sectors are demarcated on the basis of the three-digit Standard Industrial Classification (SIC) codes that are used in capturing the data for the National Accounts, these activities cover: basic iron & steel, non-ferrous metal, and metal products manufacturing (SIC codes 351 to 355); machinery manufacture (SIC codes 356 to 357); rubber products manufacturing (SIC code 337); plastics products manufacturing (SIC code 338); motor vehicles, parts and accessories manufacturing (SIC codes 381 to 383); and sale, maintenance and repair of motor vehicles, and fuel station operations (SIC codes 631 to 635).

It is important to note that revised SETA landscape associated with NSDS III (and thus applicable from 1 April 2011 to 31 March 2016) led to the transfer of the petrol retail subsector from the merSETA to the Wholesale and Retail SETA (W&RSETA)⁵, it is at this stage not possible to separate fuel station operations from the data for the rest of the group. The subsector was transferred to the W&RSETA as it was deemed a more relevant grouping given the wholesale and retail activities associated with the subsector.

The merSETA National Sector Skills Plan (SSP 2012/13-2017/18) notes that geographically, the merSETA sector is clustered in four main regions: Gauteng (including sections of the North West Province, which has the most significant concentration of firms and employment); Western Cape (mostly Cape Town and surrounds); the central Eastern Cape coast including Port Elizabeth and East London; and the Durban/Pietermaritzburg region of KwaZulu-Natal. Regardless of domestic location, a key characteristic of firms in

⁵ Dr Blade Nzimande (2010). *Press briefing the new SETA landscape for the period April 2011 till March 2016*, 09 November 2010. Online: <http://www.dhet.gov.za/portals/0/documents/SETA%20Landscape.pdf> (Accessed on 10 January 2013).

almost all of the merSETA's sectors is their high level of global integration. This factor impacts at many levels, including the adoption of technology and growth in production volumes and, through this, on employment levels and skills needs.

This Regional Sector Skills Plan (RSSP) is aimed at unpacking the regional specificity of the merSETA sectors. MerSETA is the first SETA to develop region or provincial specific SSPs.

1.2. Background

SETAs are expected to facilitate the delivery of sector specific skills interventions that help achieve the goals of the NSDS III, address employer demand and deliver results. SETAs should be the authority on labour market intelligence and ensure that skills needs and strategies to address these needs are set out clearly in SSP. Thus, SETAs must be able to:

- coordinate the skills needs of the employers; both levy-paying and non-levy paying in their respective sectors,
- undertake sector-based initiatives, and
- Collaborate on cross-sector skills areas to enable collective impact.

Developing SSPs is core to the SETAs' mandate. The SSPs must:

- outline current and future learning and qualifications needs of workers and their employers,
- develop interventions that are agreed with stakeholders and can improve the match between education and training supply and demand, and
- Outline the current and projected needs of the sector and sector employers.

The SSPs are also a critical instrument for building a connected labour market information system across all the sectors, which is an important evidence base for skills development and its impact.

The objective of developing a Regional Sector Skills Plan (RSSP) is to identify and map key features, trends, forecasts and legislative initiatives at the regional level regarding skills development. This RSSP provides valuable insight into regional and local developments in the sector and links to skills development planning. To achieve this, the RSSP undertakes a regional socio-economic analysis, profiles regional companies, explores the labour supply and demand imperatives and offers regional scarce and priority skills analysis.

1.3. Research Methodology

The research methodology used for this Regional Sector Skills Plan (RSSP) included both primary research and secondary research which involved both quantitative and qualitative research methods.

- Secondary (desktop) research was conducted on each region's economic, social and development status and strategies. The regional socio-economic analysis was done by doing a literature review of existing data and research papers. MerSETA has done a range of research projects, these were reviewed and helped in understanding the chambers that make up merSETA.
- Research conducted by government departments, national research institutions, industry publications and the media were used extensively in the report. Provincial governments publish annual reports such as the Provincial Economic Review and Outlook (PERO) and the Socio-Economic Review and Outlook (SERO) and these highlight the performance of the provincial economy and the social changes occurring in each province.
- The merSETA workplace skills plans (WSPs) were analysed to provide data on sector employment by chamber, demographic profile of employees, occupations by province. Although the database provided was only for 8% of the companies on merSETA's database it represents 35% of levy-paying companies. The WSPs represent the majority of the employees in the sector because there is a direct relationship between levies paid and employment. The data was assumed to be a representative sample of the merSETA sector and was analysed as is.
- Regional and municipal economic data was obtained from Quantec and this was used extensively in the report. National Accounts data is not captured according to the merSETA chambers; Quantec data that most closely resembled the merSETA chambers was used.
- National data sources and a range of statistical publications by Statistics South Africa (Stats SA), the DHET, the DoL and data from industry associations.
- The demand projections in Chapter 4 were based on the merSETA Sector Skills Plan 2012/13 – 2017/2018 national projections. The demand projections are based on new demand resulting from economic growth and economic creation – as well as for replacement demand that will occur because of mortality, emigration, and the retirement of employees. The employment growth figures used in the model were derived from econometric modelling performed by EcoQuant. The econometric modelling was based on the sectoral demarcations found in the National Accounts data. Based on the distribution of manufacturing

employment per province for Quarter 1 of 2013 the projections in the national SSP were proportioned to give a regional outlook. In essence, 35% of manufacturing employment was from Gauteng and 35% of the projected demand was assigned to Gauteng. The customisation was limited as it assumed the distribution of manufacturing employment will remain the same in the foreseeable future.

The research study was designed to be as interactive as possible with the merSETA Regional Committees which have representatives from all chambers, labour and employers. At the inception of the project the research team attended the Regional Committee meetings to introduce the project, initiate task teams and outline the objectives.

The primary research aspect of the study involved in-depth interviews with employer representatives, labour union representatives, FET colleges, and provincial government representatives. Majority of interviews were conducted face-to-face and some were done telephonically.

Table 4: List of Research Participants

Engagement	Number of participants
Introductory Meeting	13
Regional Committee Meetings	20
Task Team	7
In-depth interviews	14

Information obtained from the primary research was used extensively to determine:

- Factors affecting the skills development in the region
- Scarce and priority skills
- Implementation strategies and recommendations to address challenges faced

A draft report was presented at the Regional Committee meeting and further discussions were done to refine the report and formulate region specific strategies. The draft report was put on the merSETA website for two weeks for stakeholder's comments and inputs.

1.3.1 Limitations and areas for further research

Limitations

The research project for regional skills sector plans was initiated in the fourth quarter of 2012 with the base year being 2011. Major statistical data sources used for the report were StatsSA and Quantec. Apart from labour data which is updated quarterly, most of the data still available is up to 2011 hence some figures and tables have 2011 data instead of 2012 or 2013.

The database which was used for the analysis of company employee data for merSETA was not complete. There were 4,800 companies on the database which was provided. Although the total should be around 53,150 the companies which were on the database were said to constitute around 70% of the employment in the merSETA chambers. Analysis of the occupational breakdowns and the age, gender and race analysis must therefore be taken with the above caveat in mind.

Identification of scarce and priority skills via primary research was conducted by engaging with stakeholders from different chambers in the region. Companies within the same chamber (sector) might have different specific skills needs which might not get outlined or are overemphasised depending on the respondents interviewed. Finalisation of the scarce and priority skills lists are given with the need to take the aforementioned into account.

Areas of further research

Research into the readiness of FET colleges in delivering the identified skills required for the region must be conducted to ensure the region is not caught unawares when the skills are required. This current study does not give exact numbers of the people that require being skilled in particular areas; further research can be conducted to determine this.

1.4. Skills Development Legislation and Strategies

Each SETA is required to develop a SSP within the framework of the National Skills Development Strategy (NSDS) as prescribed by the Skills Development Act of 1988, Section 10 as amended (2008). Sector skills planning in South Africa must take into account a wide range of policy imperatives that seek to support inclusive sector growth paths that advance economic growth and the social development and transformation agenda. These policies include those that relate directly to skills development, those that focus more directly on economic growth and social development, and those that focus on monitoring and evaluation.

1.4.1. The Constitution of the Republic of South Africa

The Bill of Rights, contained in the Constitution of the Republic of South Africa (1996), stipulates that everyone has the right to a basic education, including adult basic education and further education, which the State, through reasonable measures, must progressively make available and accessible. The Constitution legitimises the need for quality education and training, human resources development (HRD) and human development (HD) for all South Africa's citizens⁶. As a result, HRD and HD are critically important items on South Africa's developmental agenda to improve the quality of life for all its citizens.

1.4.2. Human Resources Development Strategy for South Africa

The first Human Resource Development Strategy for South Africa (HRDSA) was approved and implementation started in 2001. This first National Human Resource Development Strategy (herein referred as HRDSA I) was a national strategic response to HRD challenges, led by both the National Department of Education and the Department of Labour.⁷

According to the Revised Human Resource Development Strategy of South Africa, 2010-2030 (herein referred to as HRDSA II), HRDSA provides an over-arching framework to improve and reinforce alignment, coordination, planning, management, monitoring, evaluation and reporting of all HRD imperatives in collaboration with all social partners, professional bodies and research communities⁸.

⁶ Republic of South Africa (RSA). (1996). Constitution of the Republic of South Africa Act 108 of 1996. Pretoria: Government Printer. 1996:14.

⁷ Republic of South Africa (RSA). (2001). *Human Resource Development Strategy of South Africa*. Pretoria: Government Printer.

⁸ Revised HRDSA, 2009:30. Online. Available: <http://www.info.gov.za/view/DownloadFileAction?id=117580> (Accessed: 11 January 2013)

The HRDSA is a coordinated framework intended to combine key levers of the constituent parts of the HRD System into a coherent strategy⁹. Therefore, much of the implementation of the HRDSA's strategic priorities will be resourced and implemented by the constituent parts and national strategies such as the Occupational Learning System, which includes Sector Education and Training Authorities (SETAs), the Further Education and Training (FET) Sector the HRDS (steered by the DPSA), and the Technology and Innovation System of the public service (steered by the Department of Science and Technology)¹⁰.

One of the HRDSA II strategic objectives is to audit and establish a policy framework on the level of planning capacity required in the Skills Development Act (SDA) institutions, namely Department of Labour (now DHET), SETAs, NSA; GET; FET and HET for the optimal implementation of their mandates.

1.4.3. Skills Development Act

The Skills Development Act, 1998 (SDA) and the Skills Development Levies Act, 1999 (SDLA) created an enabling regulatory framework for the developing the skills of the South African workforce. The two Acts, together with the other regulations published in terms of them (and the amendments thereof¹¹), constitute a single regulatory structure and deals with funding of skills development and the allocation of grants by SETAs.

The SDA mandates the SETA to, among others:

- develop a SSP within the framework of the NSDS,
- implement its SSP,
- liaise with the provincial offices and labour centres of the Department and any education body established under any law regulating education in the Republic to improve information—
 - about [employment] placement opportunities; and
 - between education and [training] skills development providers and the labour market; and
- Liaise with the skills development forums established in each province in such manner and on such issues as may be prescribed;

1.4.4. National Skills Development Strategy (NSDS) III

⁹ Republic of South Africa (RSA). (2009:31-32). *Revised Human Resource Development Strategy of South Africa 2010 - 2030*. Pretoria: Government Printer.

¹⁰ Republic of South Africa (RSA). (2009:31-32). *Revised Human Resource Development Strategy of South Africa 2010 - 2030*. Pretoria: Government Printer.

¹¹ Skills Development Amendment Act, No. 37 of 2008.

The National Skills Development Strategy (NSDS) is the overarching strategic guide for skills development and provides SETAs with direction for sector skills planning and implementation that is in line with wider national goals and objectives. The new NSDS III (2011-2015) was launched in January 2011. It draws on lessons learned from NSDS I and II. The key driving force of this strategy is improving the effectiveness and efficiency of the skills development system. It represents an explicit commitment to encouraging the linking of skills development to career paths, career development and promoting sustainable employment and in-work progression.

The emphasis is particularly on those who do not have relevant technical skills or adequate reading, writing and numeracy skills to enable them to find employment.

The NSDS II emphasised that developing SSP is core to the SETAs' mandate, and that the SSP must outline current and future learning and qualifications needs of workers and their employers and develop interventions that are agreed with stakeholders and can improve the match between education and training supply and demand - the current and projected needs of the sector and sector employers.¹²

1.5. Conclusion

The regional skills sector plan is aimed at assisting merSETA in mapping out strategies to tackle the education, training and development needs within the different provinces. All skills development related interventions have to be aligned with the Skills Development Act and within the framework of the National Skills Development Strategy. South Africa's NSDS provides guidance as to how skills development programs can be formulated and implemented in alignment with national goals and objectives.

2. ECONOMIC ANALYSIS OF THE EASTERN CAPE

¹² DHET (2011) *National Skills Development Strategy III*

2.1. Introduction

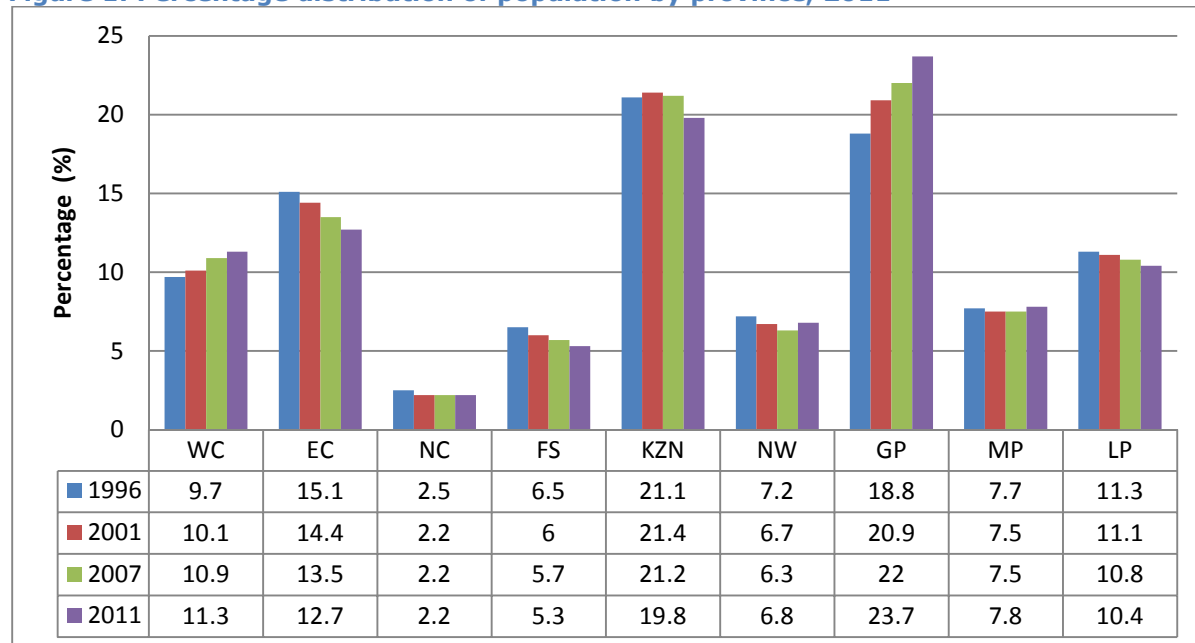
According to Census 2011 results, South Africa had a population of 51.7 million people in 2011. The provinces of Gauteng and KwaZulu-Natal account for 42% of South Africa's population. Gauteng is the most populous with 12.3 million people.

Table 5: Population by province, 2012

Province	Population	Share of total
Eastern Cape	6 562 053	12.7%
Free State	2 745 590	5.3%
Gauteng	12 272 263	23.7%
KwaZulu-Natal	10 267 300	19.8%
Limpopo	5 404 868	10.4%
Mpumalanga	4 039 939	7.8%
Northern Cape	1 145 861	2.2%
North West	3 509 953	6.8%
Western Cape	5 822 734	11.3%
TOTAL	51 770 560	100%

Source: Stats SA 2011 National census

The provincial share of the total population has fallen in the Eastern Cape from 15.1% in 1996 to 12.7% in 2011. The fastest growing province is the Western Cape, growing by 29% between 2006 and 2011. Gauteng's population grew by 31% to 12.8-million people by 2011, up from 9.4- million a decade ago.

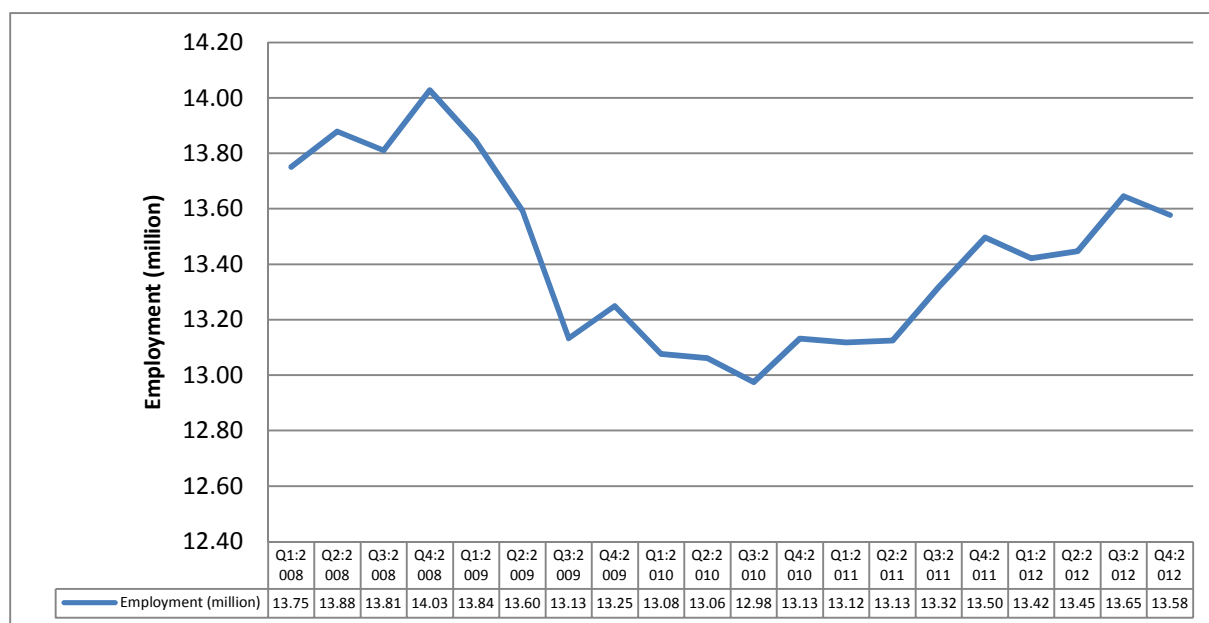
Figure 1: Percentage distribution of population by province, 2011

Source: Statistics SA Census 2011

Gauteng has a higher share of the South African population relative to the other provinces. This share has been steadily rising over the analysed period. Geographically the province accounts for only 1.5% of the South African land area. Eastern Cape constituted 12.7% of the country's population in 2011 and the land area is 13.8% of the country.

According to the 2011 population census, approximately 86.2% of the Eastern Cape's population are Africans, 8.3% Coloured, 4.7% White and 0.4% Indian/Asian. The age brackets with the greater share of the population in the province are 0-4 years and 15-19 years, for both genders. The province has potential to increase the workforce, but this also means there is need for concerted efforts to increase employment opportunities.¹³

¹³ *The Eastern Cape Socio-Economic Analysis & Forecast 2013- A Coega Development Corporation Publication*

Figure 2: Total Employment in South Africa, 2012

Source: Stats SA Statistical Release P0211¹⁴

Employment in South African reached a peak in Quarter 4 (Q4) of 2008 at 14.03 million people employed. The global economic downturn along with local contraction in demand resulted in job losses in the country as reflected in the lowest point in Q3:2010 where employment was at 12.98 million. Employment has been slowly rising over the past 2 years, although the peak levels of 2008 are yet to be reached. The South African government has embarked on a drive to ensure there is economic growth and job creation, under the New Growth Path policy initiative.

¹⁴ StatsSA Quarterly Labour Force Survey, Q4 2012

Figure 3: Unemployment rate by province, 2012

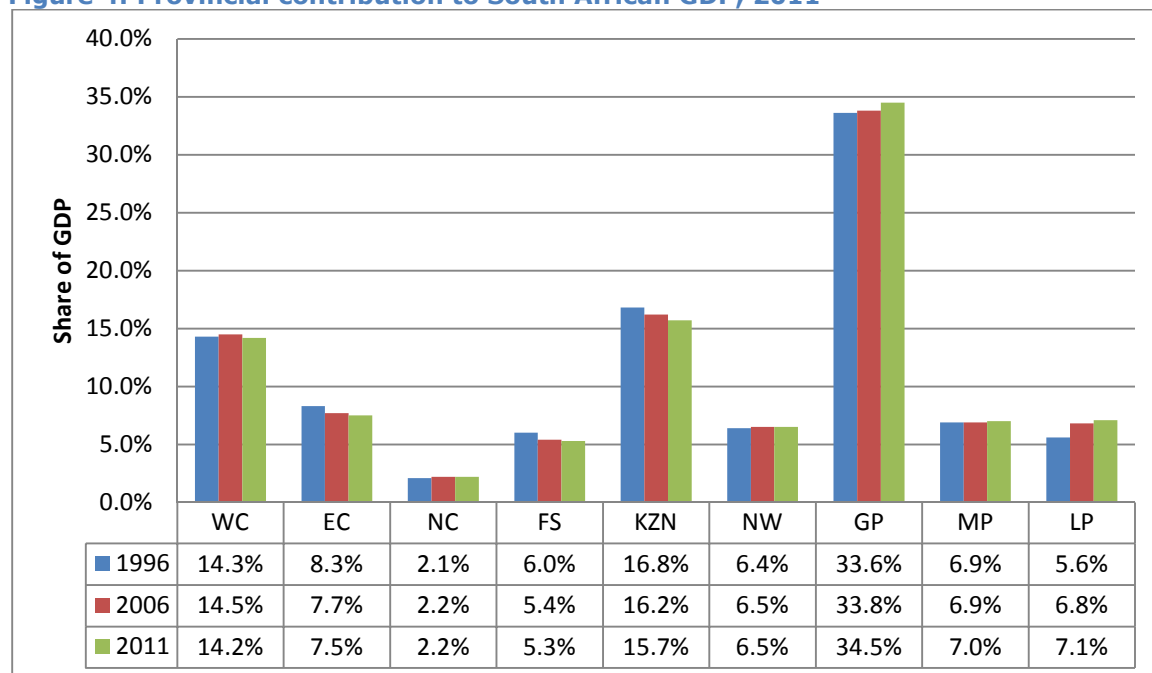
Source: Stats SA- Quarterly Labour Force Survey 2012

The South African unemployment rate was relatively stable in all the four quarters of 2012, with an average rate of 25.12% being recorded for the year. Only KZN, LP and WC provinces recorded unemployment rates lower than the national rate. Eastern Cape had a Q4:2012 unemployment rate of 29.8%. According to the Stats SA Labour Force Survey (2012), EC unemployment increased from 28.3% in first quarter of 2012 to 29.8% in the fourth quarter.

2.2. Economic Overview

2.2.1. Broad economic overview

Eastern Cape's economy is the fourth largest contributor to the national economy, after Gauteng, KZN and the Western Cape. Its contribution has slightly decreased from 7.7% in 1996 to 7.5% in 2011.

Figure 4: Provincial contribution to South African GDP, 2011

Stats SA: P0441

As shown below KZN, Eastern Cape and Free State's contributions to the national economy are decreasing while that for Gauteng and Limpopo is increasing. The Gauteng Province constitutes more than a third of the nation's Gross Domestic Product (GDP).

Table 6: Regional distribution of economy activity, 2011

Industry	WC	EC	NC	FS	KZN	NW	GP	MP	LIM	SA
Agriculture, forestry and fishing	22.6	5	6.1	10.3	26.8	6.2	6	9	8.1	100
Mining and quarrying	0.4	0.2	6.8	7.9	3.4	24.8	12.8	20	23.7	100
Manufacturing	14.6	8.0	0.4	3.9	21.6	2.5	40.5	7.1	1.5	100
Electricity, gas and water	11.2	4.1	2.7	6.4	15.9	3.6	33	15.	8.1	100
Construction	17.9	4.7	1.1	3.1	13.	4.8	43.3	6.8	5.1	100
Wholesale ,retail and motor trade; catering and accommodation	17.4	8.0	1.6	4.7	17.6	4.4	35.5	5.2	5.5	100
Transport storage and communication	15.4	7.1	2.1	4.5	22.4	4.8	34.2	4.9	4.6	100
Finance, real estate and business services and business services	19.7	7.3	1.4	3.9	13.6	3.8	41.1	4	5.2	100
Personal services	13.7	12.9	3.4	10.	17.	8.5	23.5	5.7	5	100
General government services	9.8	11.2	1.9	5.2	14.2	5.3	39.7	5	7.7	100

Stats SA: P0441

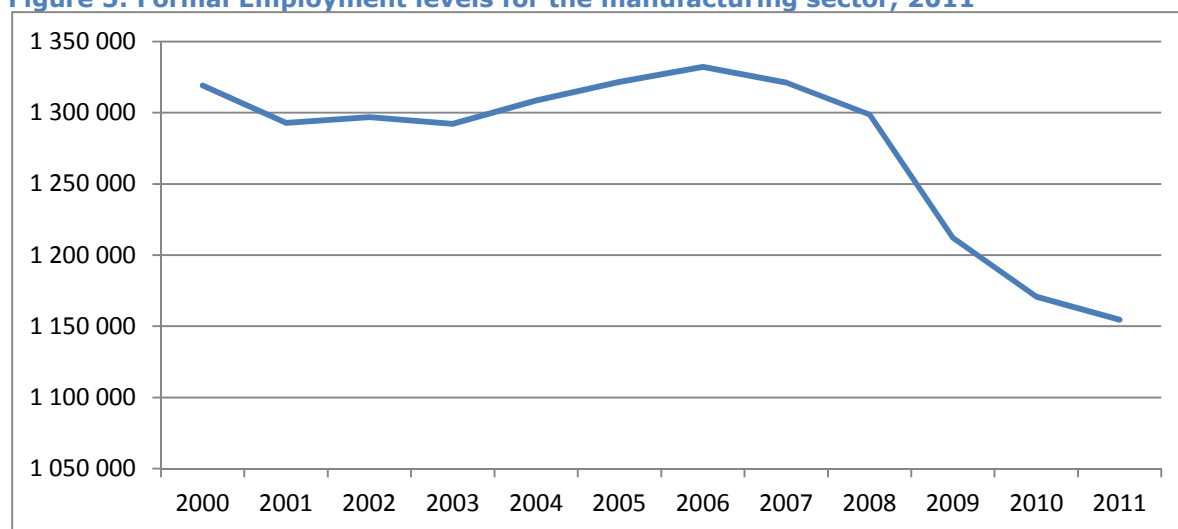
The Eastern Cape manufacturing sector constituted 8.0% of the South African manufacturing sector. Gauteng comprised 40.5% of the national manufacturing output

with KZN constituting 21.6%. Eastern Cape's manufacturing sector is dominated by the automotive industry.

2.2.2. Manufacturing Sector South Africa

The manufacturing sector's contribution to the national GDP has been falling over the last decade, from 19.3% in 2001 to 17.5% in 2011.¹⁵ As shown in Figure below, formal employment in the sector has been following the same trend.

Figure 5: Formal Employment levels for the manufacturing sector, 2011

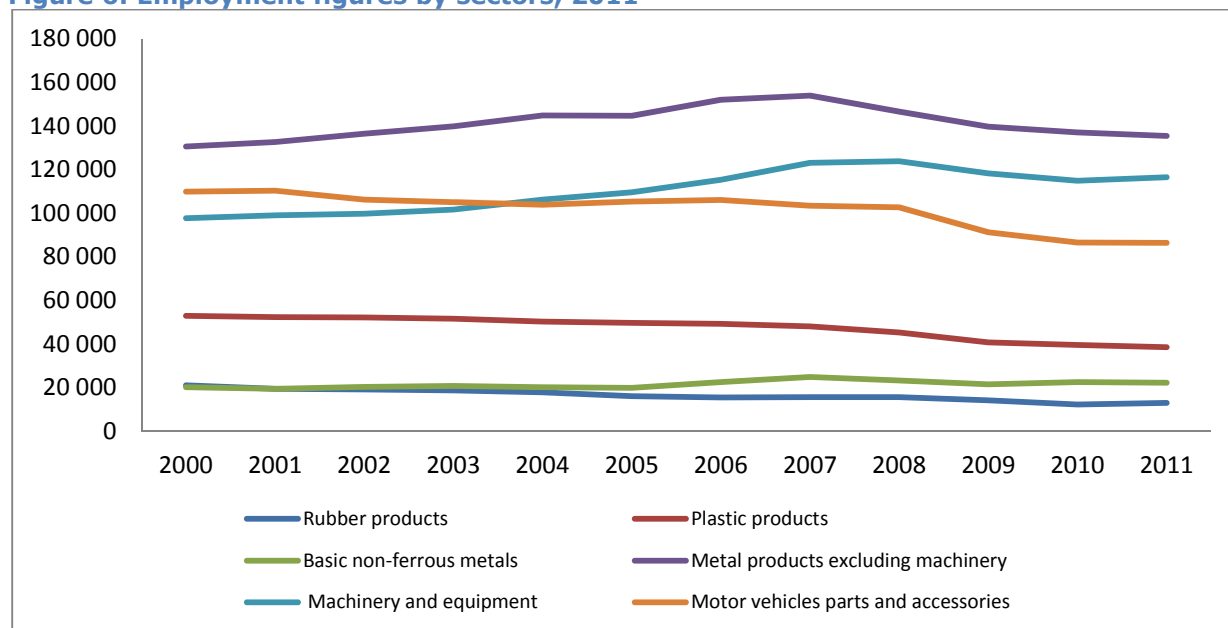


Source: Quantec, 2013

Employment in the manufacturing sector started declining in 2006 and an accelerated decline occurred in 2008. A lot of jobs were shed in the manufacturing sector due to subdued global demand following the setting in of the global economic downturn in 2008/2009.

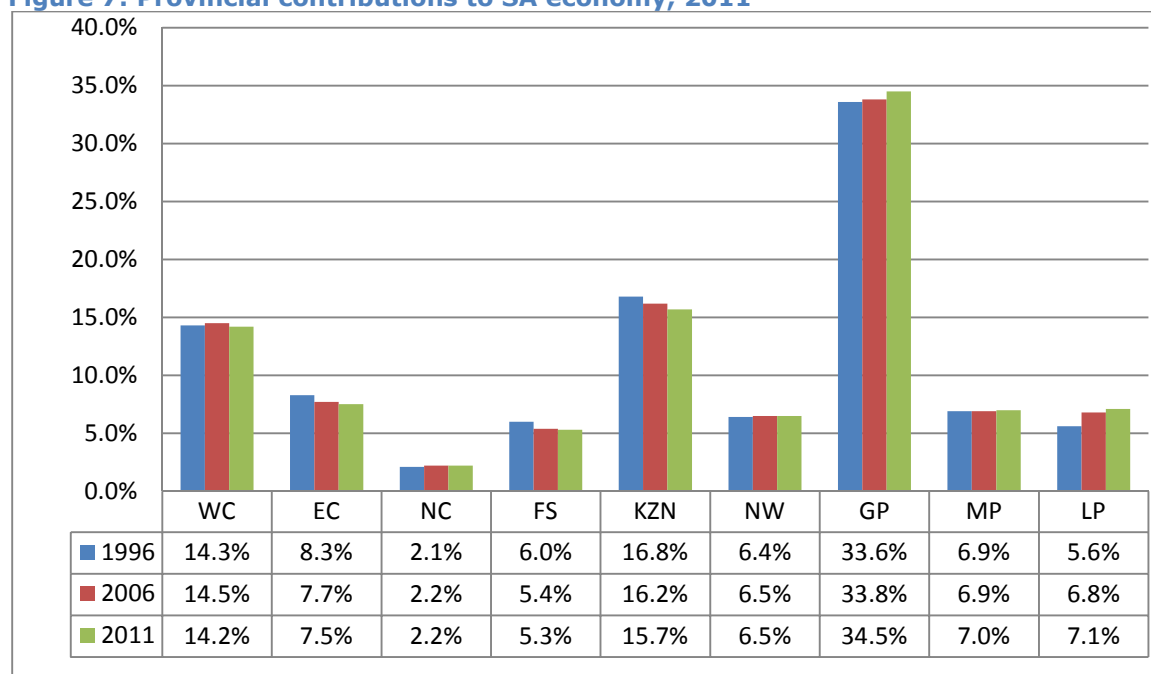
The financial crises which the Euro region experienced in 2011/2012 also put a strain on the demand for output from the South African manufacturing sector. To ensure viability, some companies downsized their employees resulting in the decline in total employment in the manufacturing sector.

¹⁵ Source: Calculated from Stats SA, First Quarter 2012, P0441.

Figure 6: Employment figures by sectors, 2011


Source: Quantec, 2013

Figure 6 shows all merSETA sectors have been shedding jobs since the global financial crises in 2008. Only the Basic no-ferrous metal sector had employment rising to pre-crisis levels by 2011. Metal products sub-sector has historically been the largest employer in the country.

Figure 7: Provincial contributions to SA economy, 2011


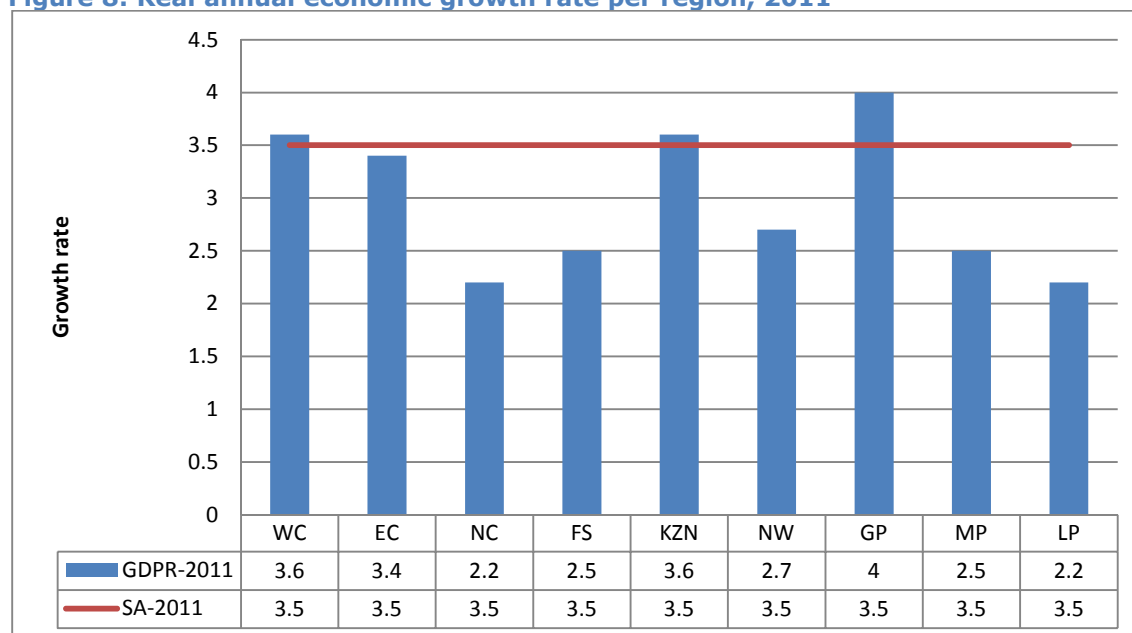
Source: Stats SA, P0441 2012

The Eastern Cape contributed 9% of the country's GDP in 2011. Gauteng is the largest contributor due to the large concentration of manufacturing activities in the region. KwaZulu-Natal is the second biggest contributor with the province which contributes the least to the country's GDP being Northern Cape (2.2%). Northern Cape does not have a greatly diversified economy with mining being the major activity.

The Eastern Cape's contribution to the nation's GDP has experienced a decline over the past 15 years with 2011 having recorded 7.5%. The major economic activities in the Eastern Cape in 2011 were the General government services and the finance, real estate and business services segments. In the province the tertiary sector constituted 72.4% (at basic prices) of the total economic contribution. Manufacturing in the Eastern Cape contributed 13.2% of national GDP. The province constitutes 8% of the country's manufacturing output.

The underdevelopment of the Eastern Cape follows on as a legacy of the apartheid era when the homelands were deliberately neglected and economic development was concentrated in other regions. The highest share of the province's contribution to national economic activity is the Personal services sector which was 12.9% in 2011.

Figure 8: Real annual economic growth rate per region, 2011



Source: Stats SA, P0441 2012

In 2011 the province recorded a growth rate of 3.4% which was slightly below the national growth rate of 3.5%. The only provinces which managed to perform above the national rate were Gauteng, KwaZulu-Natal and the Western Cape which recorded 4%, 3.6% and 3.6% respectively.

2.3. Eastern Cape Economic Overview

2.3.1. Economic Sector Performance

The Eastern Cape constitutes 13.9 % of South Africa's land area and is the third most populous province in the country with approximately 14.0 % of the national population. More than 80.0 % of the Eastern Cape population speak Xhosa with Afrikaans, English and Sotho being the other languages mainly spoken in the region.

Location of the Eastern Cape on the South-Eastern coast of Africa places the region in a suitable position for handling international trade and logistics. The province has easy access to shipping lines that connect Europe, Asia and the Middle East. The Eastern Cape has a strong agricultural base with the province being the leading livestock province. Agricultural activities in the region encompass dairy farming, wool production from Merino sheep and mohair production from Angora goats, tea plantations and forestry.

Automotive and automotive supplier sectors dominate the province's manufacturing industry. The Eastern Cape serves as a manufacturing base for four of the country's largest automotive companies i.e. Mercedes-Benz SA in East London, Volkswagen in Uitenhage, General Motors and Ford both in Port Elizabeth. Mention has been made of the potential for Optimal Energy to choose location of the manufacturing plant for their Joule Electric car in the East London Industrial Development Zone.¹⁶

The presence of two major airports in the region (Port Elizabeth and East London) along with three major ports (including the new Ngqura Port) enables the Eastern Cape to be well served logistically. Businesses operating in the region therefore benefit from the availability of adequate transport networks.

Eastern Cape's main mineral resources are coal, kaolin, granite, clay and mineral sands (titanium). The Tronox-Exxaro Namakwa Sands titanium mine is close to the end of its useful life and plans are underway to commence operations at the Fairbreeze Mine in order to supply feedstock to the smelters at Namakwa.

Plans are underway for the construction of a R4.2 billion manganese smelter at Coega with expected production of 300,000 tons of high-carbon ferromanganese per annum.

¹⁶ Eastern Cape Business *Economic Sectors: Automobiles* www.easterncapebusiness.co.za

The Halberg Guss Foundry supplies the automotive sector with cast iron and aluminium. The company is located in the Nelson Mandela Bay Logistics Park (NMBLP).

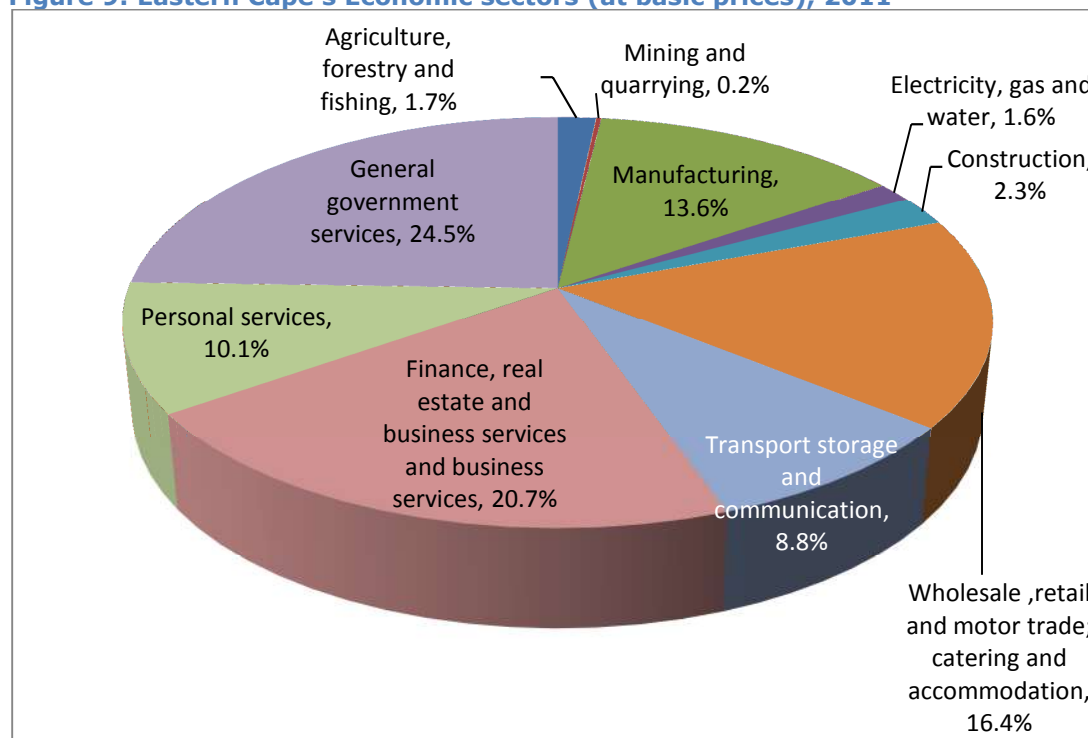
"The Nelson Mandela Bay Logistics Park (NMBLP) serves as an automotive cluster and supplies logistical support and economies of scale for companies servicing the motor industry in Port Elizabeth and Uitenhage."¹⁷ The Eastern Cape is expected to remain the major automotive hub in South Africa as evidenced by planned expenditure of R2.2 billion by Mercedes-Benz SA to enable manufacturing of the Mercedes-Benz C-Class. General Motors SA also spent R250 million on a Pan African Parts Distribution Center at the Coega Industrial Development Zone. Volkswagen SA (VWSA) also made plans to invest R500 million in its Uitenhage plant. Ford Motor Company of Southern Africa is also investing R3 billion in expanding its two South African facilities.¹⁸

It is estimated that more than 75% of the parts and components made in the South African automotive industry are exported. Exports in 2010 were approximately R30 billion (a 12.0 % increase from 2009). "The parts are expected to more than 70 countries such as Japan, Australia, the UK, the USA, Algeria, Zimbabwe and Nigeria."¹⁹ The automotive-parts sector was identified by the Industrial Development Corporation (IDC) as a specialist field which the Eastern Cape has a competitive advantage. Catalytic convertors constitute approximately half of all component exports. Manufacturing of catalytic convertors in the Eastern Cape Province is therefore expected to remain a major economic activity in the regions manufacturing sector. VWSA manufactures right-hand-drive Polo vehicles for the international market. In 2010 Volkswagen manufactured 119,614 vehicles of which 76,931 were exported. According to VWSA, R100 million was spent on training in the last three years.

¹⁷ South African Business 2011/2012 Edition

¹⁸ South African Business 2011/2012 Edition *Eastern Cape Development Focus* p178

¹⁹ Eastern Cape Business *Economic Sectors: Automobiles* www.easterncapebusiness.co.za

Figure 9: Eastern Cape's Economic sectors (at basic prices), 2011

Source: Stats SA and own calculations

The Eastern Cape's secondary sector accounted for 15.7% of the province's economic output. Mining and quarrying constituted only 0.2% of activities in the province. A well-developed automotive sector in the province is reflected by the 16.4% contribution of the Wholesale, retail and motor trade; catering and accommodation sector.

Figure 9 shows share of the economic sectors in the Eastern Cape at basic prices. Table 3 shows these economic sectors exclusive of net taxes (i.e. taxes less subsidies on products). A historical analysis of the Eastern Cape economy from 2002-2011 is presented in Table 3. This sector analysis also identifies the sub-sectors that are growing and those that are shrinking in terms of their economic contribution.

Table 7: Sector composition of the Eastern Cape economy, 2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Primary industries	2,4	2,4	2,2	1,8	2,1	2,2	2,1	2,1	1,7	1,7
Agriculture, forestry and fishing	2,3	2,2	2,0	1,6	1,8	1,9	1,8	1,8	1,5	1,5
Mining and quarrying	0,1	0,2	0,2	0,1	0,2	0,2	0,3	0,4	0,2	0,2
Secondary industries	20,3	20,4	20,0	19,3	19,0	18,8	19,6	18,4	17,1	15,7
Manufacturing	17,9	17,5	17,0	16,3	16,1	15,6	16,0	14,1	13,2	12,2
Electricity, gas and water	1,0	1,2	1,1	1,1	1,2	1,2	1,1	1,4	1,3	1,4
Construction	1,4	1,7	1,9	1,9	1,8	2,0	2,5	2,8	2,7	2,1
Tertiary industries	68,3	68,0	67,5	68,0	67,7	67,9	68,1	70,0	71,7	72,4
Wholesale, retail and motor trade; catering and accommodation	13,2	13,1	11,9	12,8	12,4	12,3	12,8	13,2	14,6	14,7

Transport storage and communication	8,0	8,0	8,1	7,9	8,2	7,6	7,9	7,7	7,8	7,9
Finance, real estate and business services	18,2	18,3	19,1	19,1	19,0	19,8	19,2	19,2	18,4	18,6
Personal services	9,3	9,4	9,4	9,5	9,5	9,4	9,1	9,7	9,1	9,1
General government services	19,5	19,1	19,0	18,7	18,7	18,8	19,0	20,2	21,7	22,0
All industries at basic prices	91,0	90,8	89,8	89,1	88,8	88,8	89,8	90,5	90,5	89,8
Taxes less subsidies on products	9,0	9,2	10,2	10,9	11,2	11,2	10,2	9,5	9,5	10,2
GDP at market prices	100	100	100	100	100	100	100	100	100	100

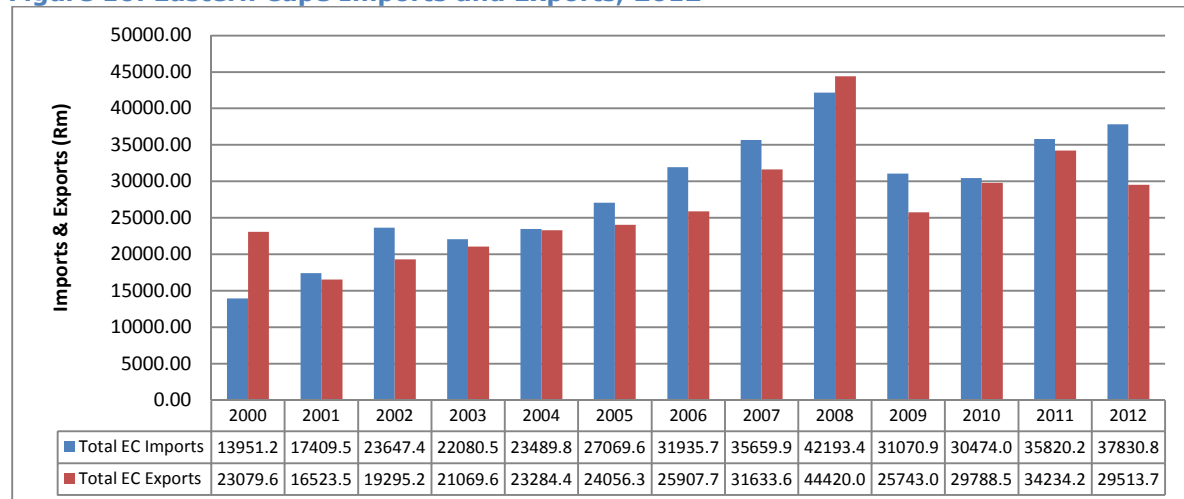
Source: Stats SA, P0441 2012

Primary and secondary industry contributions in the Eastern Cape have been declining from 2002 to 2011. This decline is largely attributed to the reduced contribution of the agriculture, forestry and fishing sector and the decline in the manufacturing sector activities. In 2002 the manufacturing sector contributed 17.9% and decreased to 12.2% in 2011.

Following on from the global economic downturn in 2008/2009, the manufacturing sector has been experiencing a decline in its contribution to the region's GDP. The marked decline in both the primary and secondary industry contributions is contrasted to the growth experienced in the tertiary industry from 68.3% to 72.4% over the same period.

2.3.2. Imports and Exports

Manufacturing in the Eastern Cape is mainly geared toward exports, particularly in the automotive sector. This makes the region vulnerable to international market fluctuations.

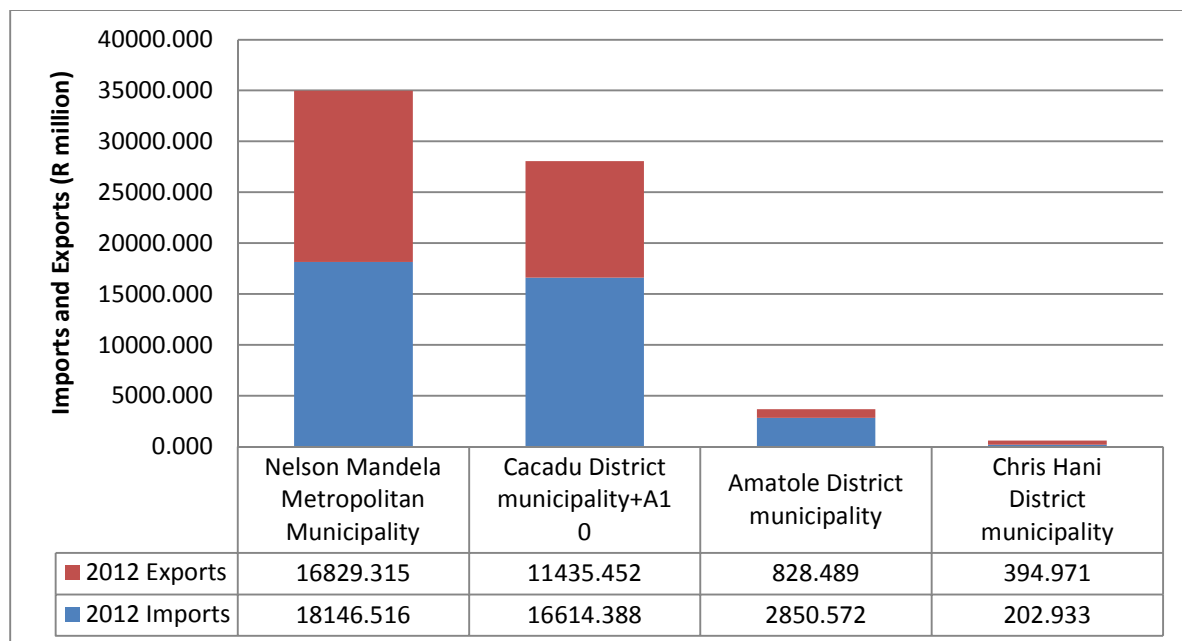
Figure 10: Eastern Cape Imports and Exports, 2012

Source: Quantec, 2012

The Eastern Cape has experienced growth in imports and exports from 2000 to 2012. For the greater part, the province has been maintaining a negative trade balance- with imports being greater than exports. In 2008, the province recorded the highest imports and exports over the period. When the global economic slowdown commenced in 2008/2009, imports and exports fell by 35.8% and 72.6% respectively from 2008 levels.

A positive trade balance (exports greater than imports) was recorded in 2000 and 2008 which can be mainly attributed to the rand valuation in these periods. The currency had weakened which made exports cheaper i.e. less foreign currency (e.g. dollars) was required than previously.

Recovery in the global outlook resulted in improvements in the trade outlook, although the peak of 2008 has not yet been reached and surpassed. Exports in 2012 declined from the 2011 levels due the contraction in demand for South African (and other emerging country) exports by the Eurozone region.

Figure 11: Eastern Cape Imports and Exports by district, 2012

Source: Quantec, 2012*

*NB: The Alfred Nzo District municipality was not included in the list because it had no recorded imports and exports in 2011. Ukahlamba and OR Tambo district municipalities had imports and exports less than R10 million and were thus excluded from the figure

The Automotive Industry is concentrated in the Nelson Mandela Metropolitan Municipality (NMMM) which accounts for the high imports and exports in the district. Exports from NMMM constituted 57.02% of the Eastern Cape's exports and Cacadu District Municipality (CDM) contributed 38.75% of exports. These two municipalities accounted for 95.8% of the Eastern Cape's 2012 exports.

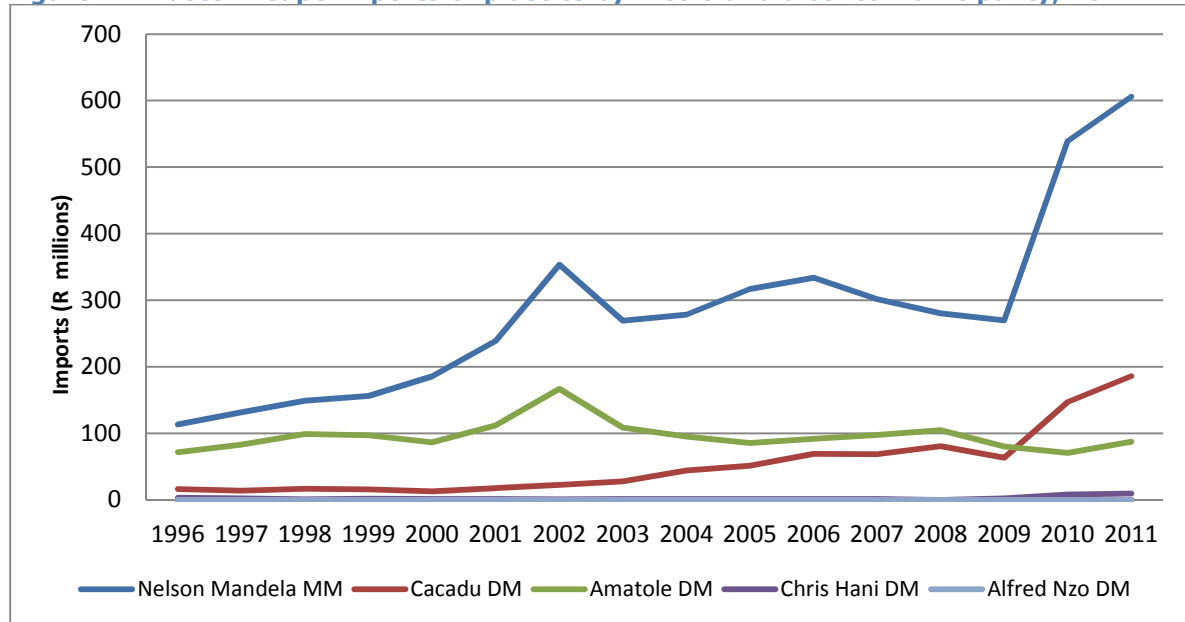
Imports into Cacadu DM in 2012 accounted for 56.3% of the total imports to the Eastern Cape province. Nelson Mandela MM constituted 47.9% of the imports.

The Eastern Cape is the least developed province in South Africa emanating from deliberate neglect of homeland areas during the apartheid period. Most of the rural inhabitants in the province survive on subsistence agriculture, migrant labour and welfare grants. The provincial government has devised interventions such as the Provincial Growth and Development Plan (PGDP) which is aimed at moving the population into the mainstream economy. The plan was formulated in line with the National Planning Framework for socio-economic planning at provincial level.²⁰

²⁰ Eastern Cape Development Corporation www.ecdc.co.za/about_the_eastern_cape/economy

In a bid to attract investment into the region, the government is supporting the establishment of Industrial Development Zones (IDZs) in the province. Expected key growth areas expected to stimulate investor interest are automotives, agro-processing, tourism and forestry.

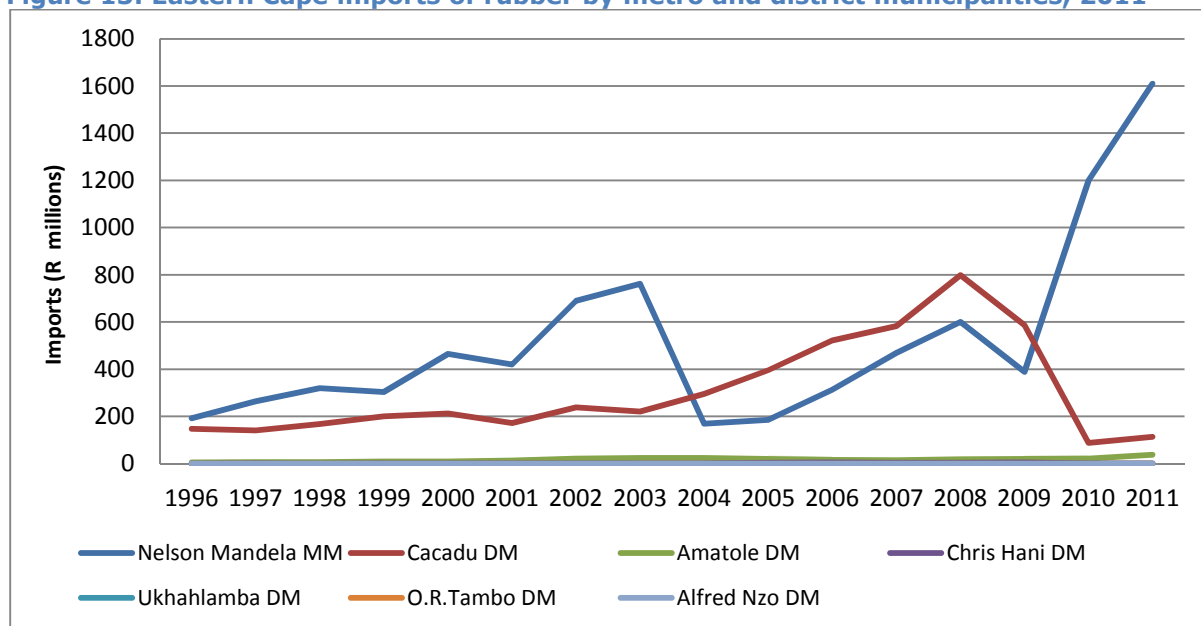
Figure 12: Eastern Cape imports of plastics by metro and district municipality, 2011



MM- Metropolitan Municipality DM- District Municipality

Source: Quantec, 2013

Plastics which are utilised in the manufacturing of parts for the automotive industry are consumed more in the Nelson Mandela Metropolitan Municipality compared to the other districts. Demand for the plastic follows the trend in demand for the automotive sector in line with the prevailing economic outlook.

Figure 13: Eastern Cape imports of rubber by metro and district municipalities, 2011

Source: Quantec, 2013

The Automotive sector in the Eastern Cape is mainly based in the Nelson Mandela Metropolitan Municipality (MM). Tyre manufacturers are located close to car manufacturers and assembly plants which accounts for the relatively higher imports of rubber into the region.

2.4. Economic Outlook – Opportunities and Challenges

Relative to other provinces in the country, the Eastern Cape is largely undeveloped and the economic activity is lower than the economic potential. Currently, economic activity is concentrated in Port Elizabeth, East London and Mthatha. The province is characterised by high unemployment levels and poverty.

Approximately two thirds of the provincial population stay in rural areas, which is a major factor for the high unemployment levels. In 2011 the Eastern Cape constituted 12.7% of the national population. Investment in machinery and other equipment, and building and construction works accounts for 86% of the fixed domestic investment in the province.²¹

²¹ The Eastern Cape Socioeconomic Review and Outlook
<http://www.dedea.gov.za/Newsletters%20and%20Publications/EC%20Socio%20Economic%20Review%20and%20Outlook%202011.pdf>

2.4.1. Opportunities

Expansive tracts of land in the Eastern Cape offer extensive agricultural capacity for the province. Automotive production is the main segment in the provincial manufacturing sector. Eastern Cape is one of the provinces most susceptible to changes in the global economic outlook.

Eastern Cape's automotive industry is one of the main sources of local economic development in the Eastern Cape, and the East London Industrial Development Zone (ELIDZ) has attracted major participants in the industry. Manufacturing in the province primarily centres on meeting the needs of the automotive sector which is the biggest manufacturing sector in the Eastern Cape.²²

2.4.1.1. Metal and engineering sector

Activities in this sector revolved around the provincial automotive industry located in Port Elizabeth and East London. Lack of access to metal raw materials limits the opportunities in the sector. Some indirect opportunities are presented through metal-related and engineering industries located in the province's IDZs.

The Eastern Cape Development Corporation (ECDC) identified opportunities for business development and investment in the manufacture of high-value machine tools for both the domestic and international market.²³ Supporting engineering and related services are expected to benefit from the growth in the metal and engineering sector.

2.4.1.2. Chemicals

The Coega IDZ has land allotted for investors interested in entering the chemical and chemical beneficiation industry in the province. Plans for PetroSA to establish a refinery at the IDZ are expected to result in the development of a number of downstream chemical plants in the region.²⁴

2.4.1.3. Electronics manufacture

The ECDC anticipates development potential for the currently underdeveloped electronics manufacturing sector. The East London IDZ is undertaking establishment of

²² Eastern Cape General Manufacturing http://www.ecdc.co.za/sectors_and_industries/general_manufacturing

²³ Eastern Cape Metal http://www.ecdc.co.za/sectors_and_industries/general_manufacturing

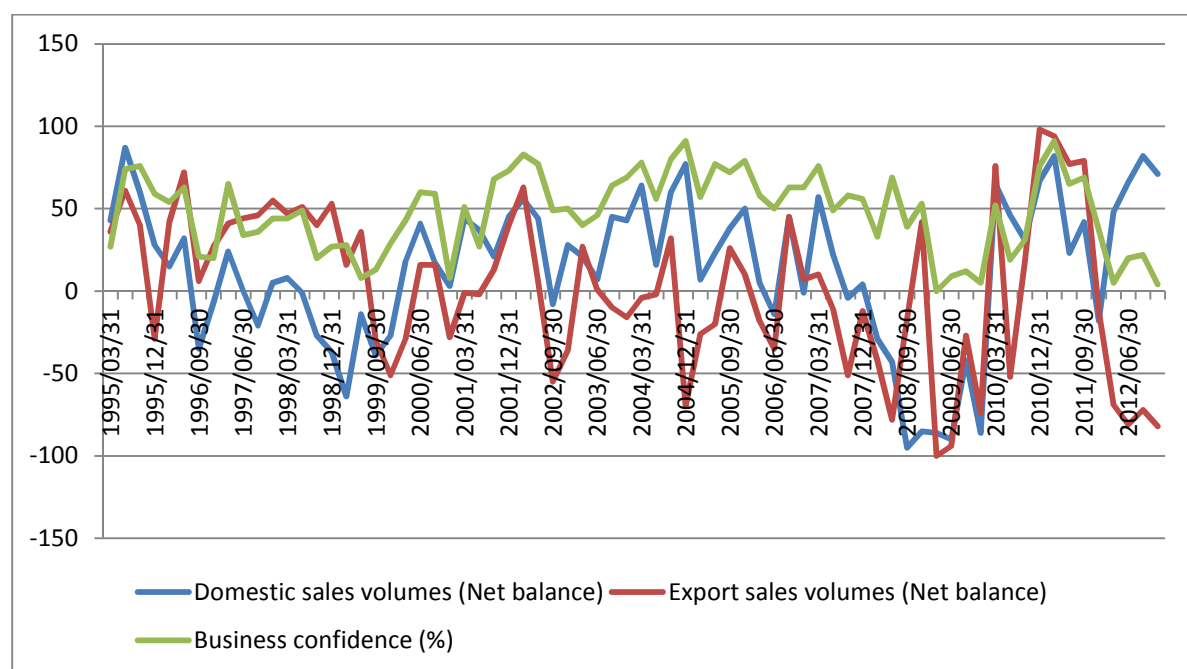
²⁴ Eastern Cape Chemicals <http://www.ecdc.co.za/chemicals>

a Science and Technology park. This park is expected to spearhead technological innovation in the Eastern Cape and provide significant support to businesses engaged in electronics manufacture by way of research and development.

According to the ECDC "Opportunities in electronics manufacture include:

- *Electronics manufacture for the automotive industry* - significant opportunities exist for investors and business to manufacture and produce electronic systems and control modules, navigation systems, instruments, components and software for the automotive industry in the Eastern Cape."²⁵

Figure 14: Business confidence and sales in the Eastern Cape, 2012



Source: Quantec, 2012

The Eastern Cape net balance of the export sales since 1999 has mainly been negative. Domestic sales and business confidence in the country have strong correlation with business confidence being a leading indicator.

Export sales reached an all-time low in 2008/2009 during the global economic downturn where there was a contraction in global demand. The Eastern Cape's dependence on the export sector accounted for the significant decline in the export sales and also the business confidence. Slowdown in demand in 2011 into 2012 in the Euro zone region resulted in a decline in export sales from the Eastern Cape.

²⁵ Eastern Cape Electronics <http://www.ecdc.co.za/electronics>

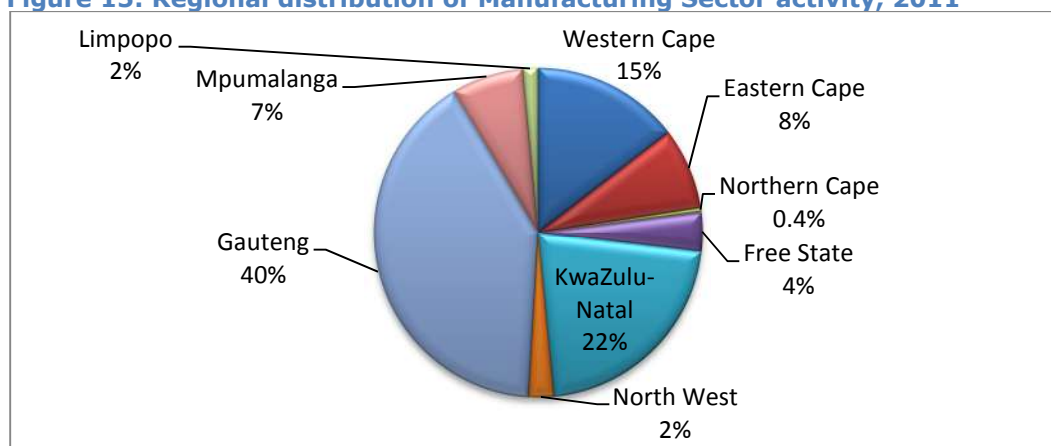
2.4.2. Challenges

Lack of a large industrial base, high unemployment are some of the factors contributing to the province not being able to generate revenues which are sufficient to meet its requirements. Approximately 98% of provincial government revenue receipts are supplied by the national government.²⁶ There is need to diversify the economic activities in the Eastern Cape by stimulating investment by businesses with a high labour absorption capacity, which are also able to contribute toward economic growth

2.5. Manufacturing Sector

Eastern Cape's manufacturing sector contributed 8% of the 2011 national manufacturing output.²⁷ The manufacturing sector is the fourth-largest contributor to the national manufacturing sector. In 2011 the secondary sector in the province contributed 15.7% (at basic prices) of the Eastern Cape's GDP.²⁸ Manufacturing constituted approximately 78% of the region's secondary sector output, construction 13% and electricity & water 9%.²⁹

Figure 15: Regional distribution of Manufacturing Sector activity, 2011



Source: Quantec, 2013

Government's increased focus on job creation and economic growth is expected to result in increased emphasis on support programs for manufacturing subsectors, mainly due to their relatively higher labour intensity compared to other economic sectors.

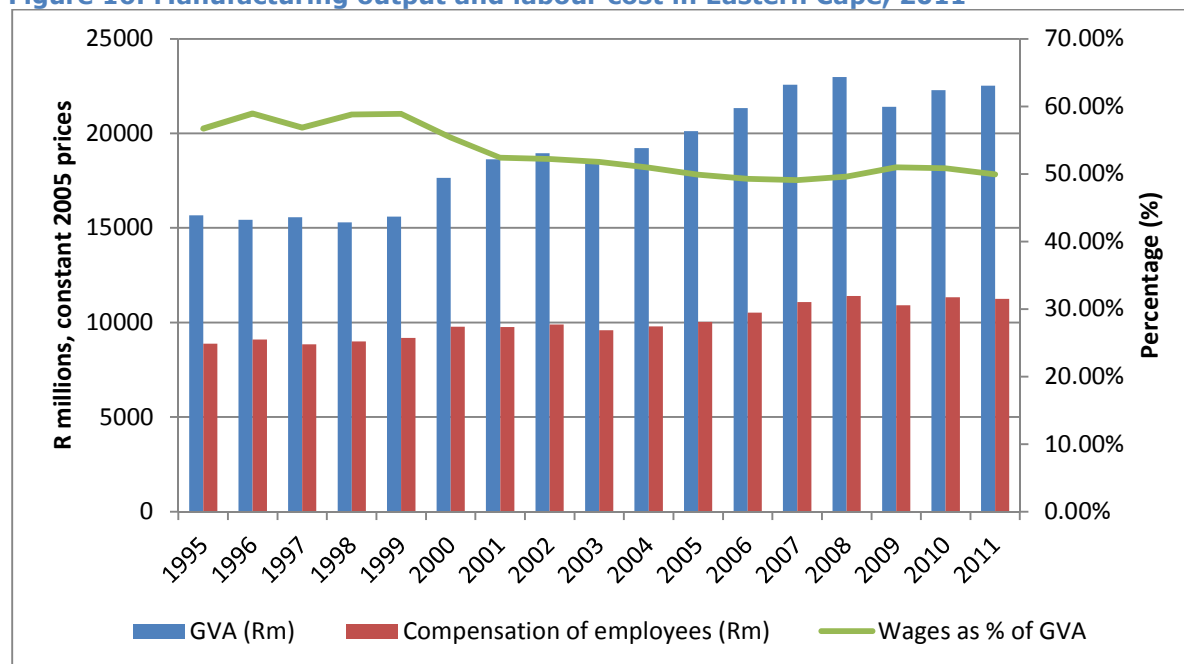
²⁶ The Eastern Cape Socioeconomic Review and Outlook

<http://www.dedea.gov.za/Newsletters%20and%20Publications/EC%20Socio%20Economic%20Review%20and%20Outlook%202011.pdf>

²⁷ <http://www.southafrica.info/about/geography/western-cape.htm#ixzz2HYcdEsAw>

²⁸ StatsSA- P0441 (own calculations)

²⁹ StatsSA- P0441 (own calculations)

Figure 16: Manufacturing output and labour cost in Eastern Cape, 2011

Source: Quantec, 2013

Gross value added (GVA) in the Eastern Cape has been on a steady rise since 1995 and reached a peak in 2008. Following the commencement of the global economic slowdown a contraction occurred in the GVA. Compensation of employees has followed a similar trend of the GVA. The increasing GVA has enabled the wages as a percentage of GVA to decline over the period of analysis.

2.6. Overview of the merSETA Sectors

The definition of the manufacturing sector from the National Accounts includes sub-sectors that do not fall under the merSETA jurisdiction. MerSETA companies are grouped into five chambers. The table below is a conceptual map of the sub-sectors and their relation to merSETA chambers.

Figure 17: merSETA Sector Grouping

merSETA						SECTORS / INDUSTRIES
SERVICES			MANUFACTURING			
OTHER	RETAIL	AUTOMOTIVE	METAL	PLASTICS	OTHER	SUBSECTORS
		Automotive Assembly	Capital Equipment	Polymer Producer		
		New Tyre	Transport Equipment	Plastics Convertors		
	Motor Retail Motor Repair	Components	Metal Fabrication	Plastic Fabrication		
			Other	Other		
Colour Key		merSETA Chambers				
		Metal Chamber				
		Plastics Chamber				
		Auto Chamber				
		New Tyre Chamber				
		Motor Chamber				

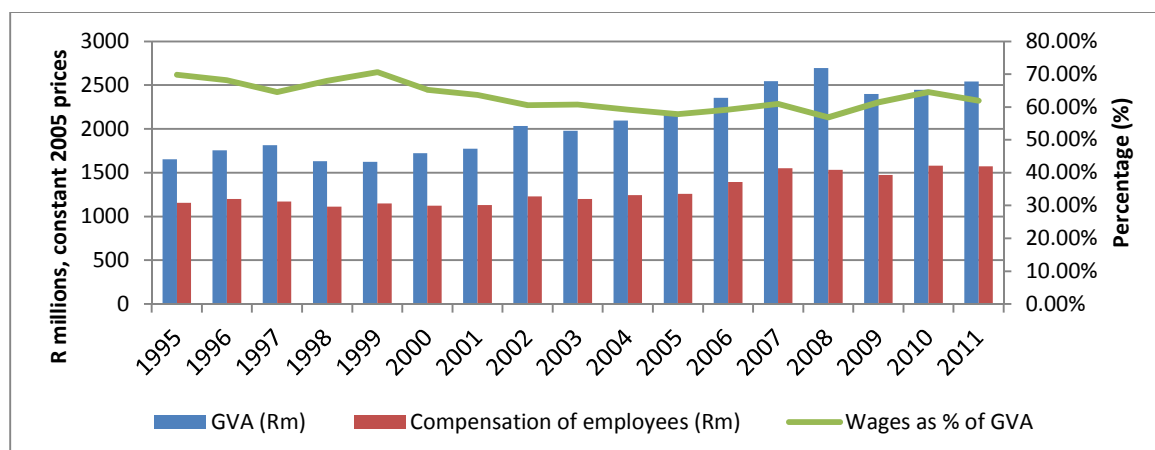
Source: merSETA SSP Update 2012/13-2016/2017

2.6.1. The Metal sector

The Metal Chamber comprises firms involved in the manufacturing and servicing of capital equipment including transport equipment. The metal sector, including the capital equipment, transport equipment, metal fabrication (CETEMF) and related subsectors, forms a substantial part of SA's manufacturing.

This sector is at the centre of economic development, as what they produce is used across the entire economy: infrastructure programmes, construction, general engineering, mining, automotive production, furniture manufacture, transport, home appliance manufacture, defence and packaging³⁰.

³⁰ MerSETA SSP 2010/2011-2015/2016

Figure 18: Metal products and labour cost in Eastern Cape, 2011

Source: Quantec, 2013

The metal products sector's gross value added was slightly above R2.5 billion in 2008 which was a significant rise relative to the just over R1.5 billion a decade before. Compensation of employees is around 40% of the cost of production in the sector.

Figure 19: Machinery & equipment and labour cost in Eastern Cape, 2011

Source: Quantec, 2013

Compensation in the machinery and equipment sector has on average been above 55% of the cost of production. Gross value added reached a peak of close to R1.1 billion in 2008. Although the global economic downturn affected operations in the sector, the sector did not see too significant a decline in the GVA. In 2011 the GVA was R1.0 billion.

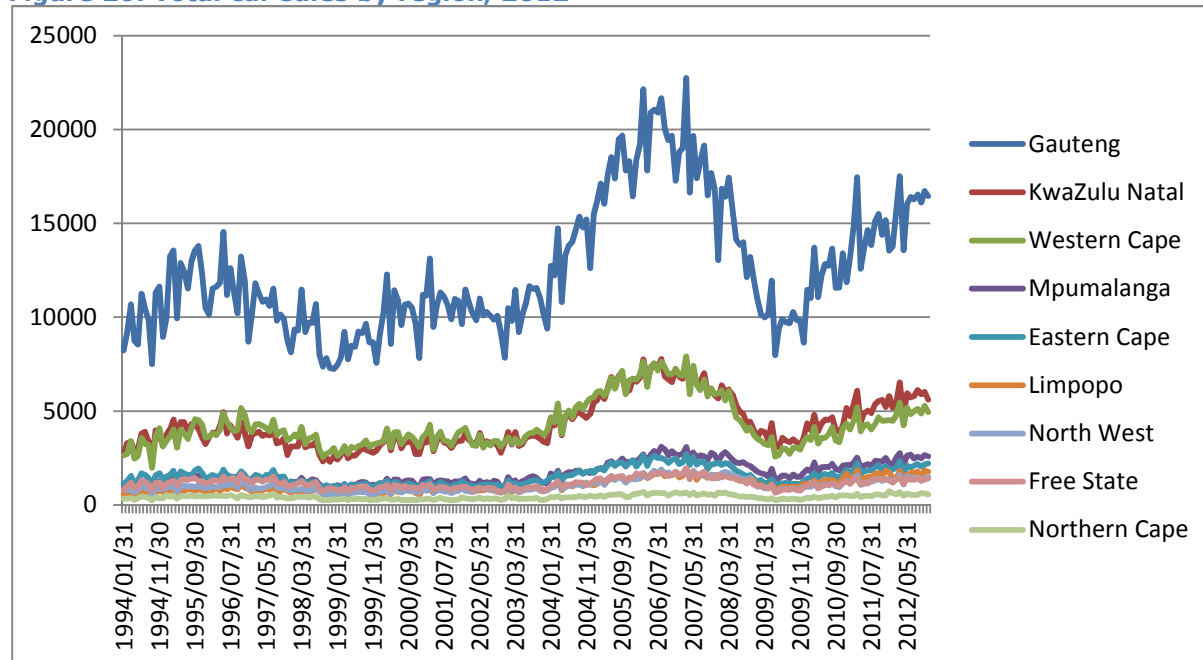
Some major skills required in the machinery and equipment sector include millwrights, and moulders.

2.6.2. The Auto sector

The automotive industry, broadly defined includes vehicle retail, distribution and servicing, auto parts production and vehicle production. The Automotive covers South Africa's seven large automotive assemblers, also known as original equipment manufacturers (OEMs); a number of smaller, specialist medium and heavy commercial vehicle assemblers and approximately 400 automotive component manufacturers which are then tiered according to their position in relation to OEM supply.

Of the seven locally based (multinationals) vehicle assembly operations (OEMs), three are located in northern Gauteng namely BMW South Africa, Nissan South Africa and Ford Motor Company South Africa. General Motors South Africa and Volkswagen South Africa are based in Port Elizabeth; the Mercedes-Benz South Africa plant is in East London, while Toyota South Africa is situated in Durban. merSETA's Auto Chamber comprises the seven OEMs.

Figure 20: Total car sales by region, 2012



Source: National Association of Automotive Manufacturers South Africa (NAAMSA), 2012

Demand for vehicles in South Africa follows a similar trend across the nine provinces. Vehicles sales have been on an upward trajectory since 1994, with intermittent peaks and troughs. Gauteng is the largest market for vehicle sales in the country while Eastern Cape is around the fifth largest. A peak in vehicle sales happened in the period

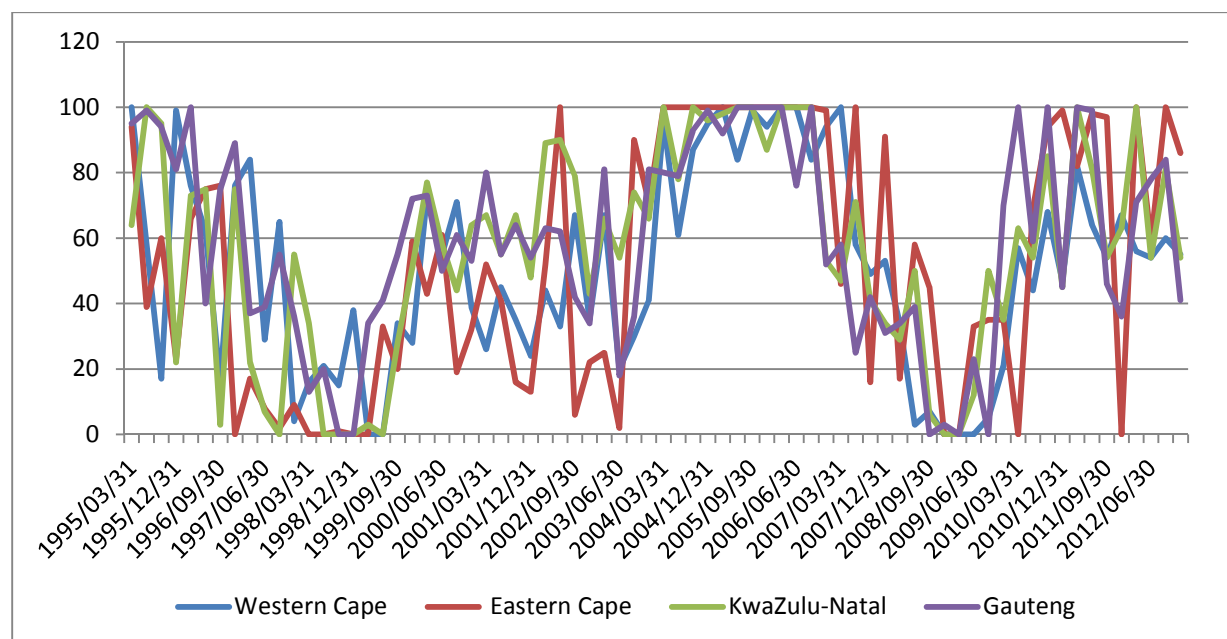
Q3:2005 and Q2:2007. A possible reason for the decline in sales from the peak include; the passing into law of the National Credit Act which resulted in it being harder for consumers to access credit and declining incomes in the South African economy in the period leading to Q2:2012.

2.6.3. The Motor sector

The Motor Chamber includes firms involved in the motor retail and service industries, as well as in the manufacture of automotive components. The motor retail and components sector is closely linked to the automotive sector, since the supply of components for motor vehicle assembly and after sales market is a prime source of trade.

Motor vehicles are sold into the export market which results in the sector being exposed to demand fluctuations due to global sentiment and currency fluctuations. When there is a slowdown in demand, employment levels are also affected as there is a slowdown.

Figure 21: Motor trade business confidence (index), 2012



Source: Quantec, 2012

Vehicle sales are a leading indicator of the business confidence for the automotive sector. The Eastern Cape (which is the automotive hub in South Africa) recorded the highest confidence for the sector's prospects.

2.6.4. The New Tyre manufacturing sector

The New Tyre Chamber consists of firms involved in the manufacture of new tyres for OEMs and aftermarket supply. The South African tyre manufacturing industry comprises of four companies, operating six factories, all of which are controlled by international groups. Many other companies also import other international brands of tyres into South Africa.

2.6.5. The Plastics sector

The Plastics Chamber includes firms involved in the manufacture of plastics products from locally manufactured and imported polymers. The plastics manufacturing sub-sector is part of a supply chain from the polymer manufacturing industry (chemical companies) through to a variety of end-use markets, and is characterised by ease of entry because of its low economies of scale and high degree of mechanisation. This means that the sector is characterised by the following:

- Many micro and small companies and a few medium sized plants
- Is not a large scale employer
- Plastics manufacturing cells can be found within manufacturing plants of other manufacturing industries

Figure 22: Petroleum products output (including rubber and plastics) in Eastern Cape, 2011



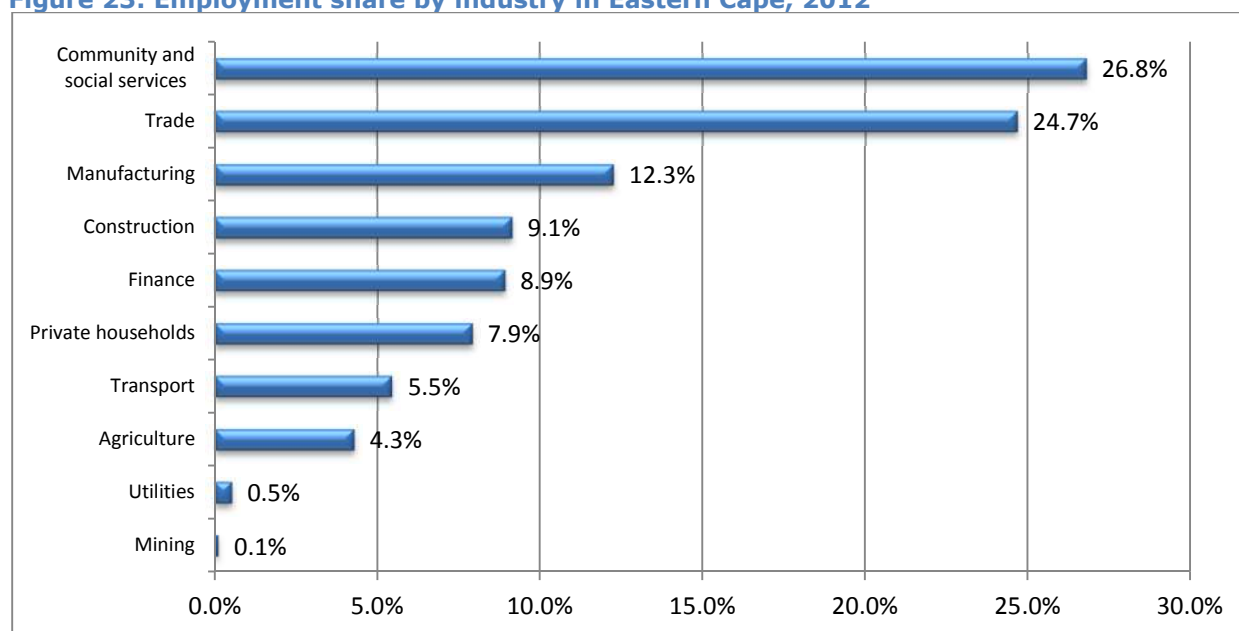
Source: Quantec, 2013

The petroleum product sector is a major contributor to the Eastern Cape provincial economy. Peak Gross Value Added (GVA) of above R3.5 billion was recorded in 2007 and in 2011 following the recovery from the global economic downturn. General economic outlook points to a potential sustained moderate growth for the province going into the short to medium term.

2.7. Employment Trends in the Sector

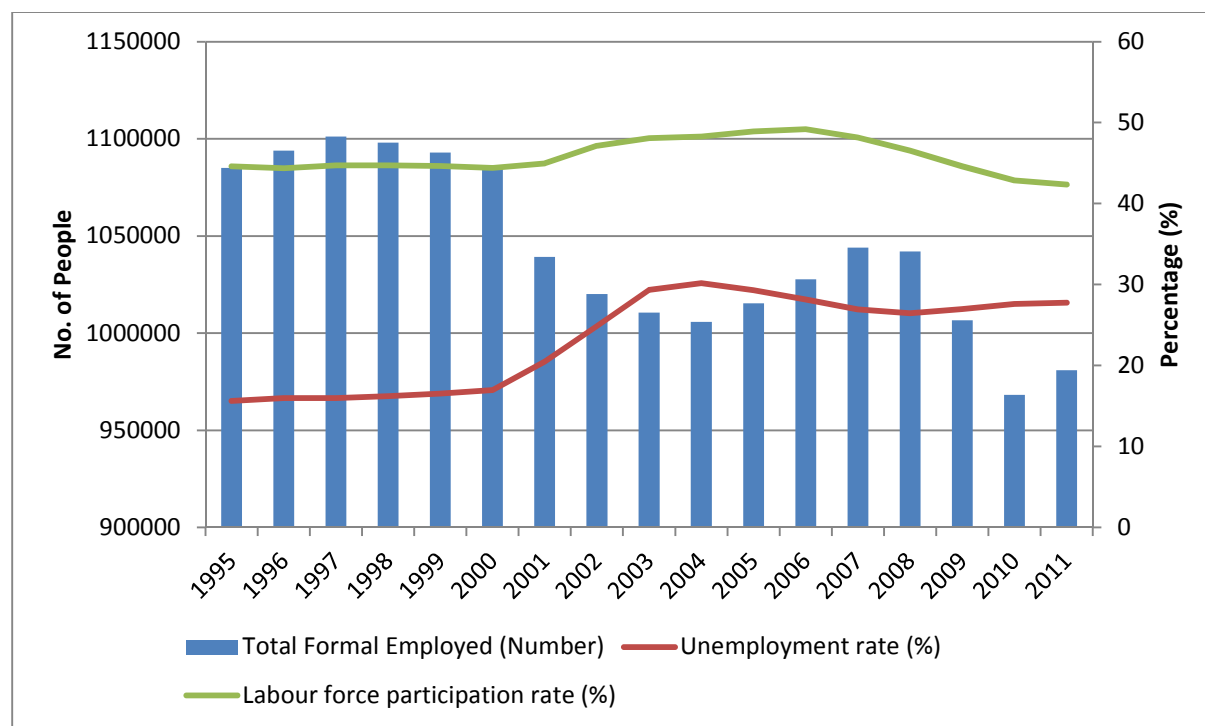
In South Africa the Eastern Cape had the fourth largest employment share (9.6%) for the first three quarters of 2012. Gauteng 31%, KwaZulu-Natal 18% and the Western Cape 13.5% were the top 3. The Eastern Cape has a high level of unemployment with approximately two thirds of the provincial population residing in the rural areas.

Figure 23: Employment share by industry in Eastern Cape, 2012



Source: Stats SA, P0211 2012 and Own calculations

According to StatsSA, the number of people employed in the Eastern Cape as of September 2012 stood at 3.908 million. This represented 9.6% of the total national employment over the three quarters of 2012. Manufacturing was the third largest employer in the province with a 12.3% contribution to the region's employment.

Figure 24: Employment and Unemployment in Eastern Cape, 2011

Source: Quantec, 2013

Unemployment in the Eastern Cape is slightly above the national unemployment rate. There has been a significant decline in the level of employment from a peak of 1.1 million people in 1997 to levels around 975,000 people. Eastern Cape exports are highly affected by the global economic outlook and demand dynamics. The global downturn which started in 2008 added to the waves of declining employment for the region.

2.8. Conclusion

The Eastern Cape Province constituted 12.7% of the South African national population as established by the 2011 census. Provincial contribution to GDP was 7.5% while manufacturing in the Eastern Cape was 8.0% of the country's total manufacturing. Automotive industry is the major manufacturing activity within the province and it has spurred the development of related industries such as the New Tyre and Automotive Components manufacturing.

Eastern Cape's unemployment is relatively higher than the national average. The province is located strategically and is well positioned to entrench itself as a major international trade and logistics hub. Automotive components manufactured in the province are mainly exported. The global economic downturn in 2008/2009 had a

negative impact on the manufacturing sector which resulted in a slowdown in activity. This in turn led to restriction in economic growth and job creation.

Nelson Mandela Metropolitan Municipality is the municipality with a large concentration of manufacturing activity in the province. The provincial government through the Industrial Development Strategy (IDS) has identified other sectors which offer potential for future growth. This strategy was formulated in a bid to diversify the province's economic activities in order to minimise overdependence on the automotive sector.

Some of the sectors identified as holding economic growth and job creation potential for the Eastern Cape include renewable energy manufacturing, agro-processing, the maritime industry, petrochemicals and tourism.³¹

³¹ Nelson Mandela Bay Business Chamber- *Industrial Development Strategy underway in the city*
11 April 2013

3. POLICIES AND STRATEGIES THAT IMPACT ON SKILLS DEVELOPMENT IN THE REGION

3.1. National Economic Growth and Development Strategies

3.1.1. The New Growth Path and National Development Plan

The New Growth Plan (2010) is the SA government's latest macro-economic policy. Together with the National Development Plan (2011), the two documents position SA as a 'developmental state' and give the government an important role in the development of the economy, especially employment creation. The policy focus is to increase labour-absorbing activities, promote economic growth, and equity (which is to be measured by decreasing inequality and poverty). The targeted 'job-drivers' are the labour absorbing sectors such as mining, agriculture, manufacturing and services.

New Growth Path (NGP) emphasised that improvements in education and skill levels are a fundamental prerequisite for achieving many of its goals. It noted that NGP requires a radical review of the training system to address shortfalls in artisanal and technical skills. Overall, NGP aims to create 5 million jobs over the next 10 years. Some of the SETA related specific targets include:

- at least 30 000 additional engineers by 2014,
- at least 50 000 additional artisans by 2015,
- improve skills in every job and target 1,2 million workers for certified on-the-job skills improvement programmes annually from 2013;
- expand enrolment at FET colleges, targeting a million students in FET colleges by 2014; and
- Create 250 000 jobs a year in infrastructure (energy, transport, water, communications) and housing through 2015.

3.1.2. Industrial Policy Action Plan

In January 2007, Cabinet adopted the National Industrial Policy Framework (NIPF), which sets out government's broad approach to industrialisation. Guided by the NIPF, the implementation of industrial policy was set out in an Industrial Policy Action Plan (IPAP), and in August 2007, Cabinet approved the first IPAP. The current IPAP, IPAP 2011/12 – 2013/14 (IPAP 2) constitutes a consolidation of plans and programmes outlined in the previous iteration of IPAP 2.

The IPAP 2 notes that the SETAs and National Skills Fund (NSF) system have an extremely important role for sector-specific training programmes and skills facilitation that emerge directly from industry demands in relation to detailed Customised Sector Programmes. The DTI therefore committed to working with the Department of Higher Education and Training (DHET) to introduce the necessary window within the SETA and NSF system for new Skills Centres based on the needs of IPAP sector strategies³².

3.1.3. Metal Customised Sector Plan (CSP)

The CSP for the priority sector metal was published by the dti in 2005. The strategic vision of the plan is that “by 2014, SA will have a globally competitive metal sector, optimally utilising the comparative advantages of abundant mineral resources, skilled labour force and world-class technologies to produce and market high value-added products in the prioritised industries.” Programmes in the plan include the promotion of local metal beneficiation, maximising local content through backward linkages, and upgrading production capabilities in downstream industries.³³

3.1.4. Industrial Development Corporation (IDC) Jobs Scheme

In 2011 the IDC launched a R10 billion scheme to tackle the country’s chronic unemployment problem. The scheme was aligned with the government’s New Growth Path and the Industrial Policy Action Plan (IPAP2). Funding would be available to entrepreneurs across the IDC’s mandated sectors over a five year period. The scheme aims to create an additional 40 000 to 50 000 employment opportunities. The sectors geared to benefit include the green economy, manufacturing, the mining value chain, agriculture and infrastructure.

3.1.5. National Foundry Technology Network (NFTN)

NFTN is the culmination of a significant government and industry association-led effort to develop a globally competitive South African foundry industry through appropriate skills training, technology transfer, and diffusion of state-of-the-art technologies. Its main outcome is to reduce import leakage, increase investments in key manufacturing processes and activities, employment and exportability.

³²DTI (2011). *Industrial Policy Action Plan (IPAP 2011/12-2013-/14)*. Department of Trade and Industry. Pretoria, South Africa.

³³dti (2006) Metal Sector Development Strategy: Trade and Investment South Africa – Customised Sector Programme – Metal.

3.1.6. Automotive Production and Development Programme (APDP)

The APDP replaced the Motor Industry Development Programme and is in line with World Trade Organisation (WTO) regulations. The APDP design has evolved from an export based incentive to a local manufacturing incentive, regardless of whether the motor vehicles are sold locally or abroad.³⁴ The programme aims to increase local production to 1.2 million vehicles by 2020. The APDP will extend support to the South African automotive industry until 2020. The objectives of the APDP include:

- improving the international competitiveness of the South African automotive industry
- stabilize and potentially increase employment levels
- and encourage the rationalization of platforms to achieve economies of scale in assembly
- Continue to encourage growth, particularly through exports and thereby improve industry's current trade balance

The focus under the APDP is to provide assistance to the component manufactures so that they can provide cost competitive components to the Original Equipment Manufacturers (OEMs) and to international markets via exports. The APDP offers an incentive to up-skill employees and to invest technology, research and development.

3.1.7. Special Economic Zones

South Africa's drive to encourage regional industrial development dates back to the 1960's and has been part of government policy initiative. "In the early 1990s, industrial policy was markedly less focused on location. However more recently the Spatial Development Initiatives (SDI) and Industrial Development Zone (IDZ) programmes have both involved the identification of industrial locations and used incentives to encourage firms to locate in these areas"³⁵. IDZs are aimed at stimulating the local economy of the region in which they are located, by attracting investment, increase exports and the competitiveness of South African products.

There are four designated IDZs in South Africa: East London Industrial Development Zone (ELIDZ) and Coega Industrial Development Zone (Coega IDZ) in the Eastern Cape Province, Richards Bay Industrial Development Zone (RBIDZ) in KwaZulu-Natal (KZN) and OR Tambo International Airport IDZ (in Gauteng Province). Only 3 are currently

³⁴ http://www.automotiveonline.co.za/site/files/6860/APDP_Deloitte.pdf

³⁵ Trudi, H. (2001). *South African regional industrial policy: from border industries to spatial development initiatives*. Journal of International Development, 2001, vol. 13, issue 6, pages 767-777

functional namely, Coega, East London and Richards Bay³⁶. Plans are underway for the Saldanha Bay IDZ (in Western Cape Province) to obtain designation by the end of 2013.

A Special Economic Zones (SEZs) Bill was gazetted in January 2012 by the Minister of Trade and Industry Dr Rob Davies. Under this Bill, IDZs will no longer be classified as a separate entity but will be classified as SEZs³⁷. Previously, a key requirement for a region to qualify as an IDZ was proximity to either an international sea or airport. The Bill is expected to facilitate spatial development of other regions previously side-lined by the IDZ framework.

The DTI (2013) argues that the IDZ programme has delivered good results, particularly the ELIDZ whose private sector investment rose from R600-million in 2009 to R4-billion in 2012/13.

Table 8: DTI Funding and Employment Creation by IDZs 2002/3 - 2012/13

IDZ	Number of investors	Value of investment (R'000)	Funding transfers by the dti (R'000)	Direct employment	Construction & indirect jobs	Total employment
Coega	20	1,131,750	4,364,680	3,778	37,156	40,934
ELIDZ	21	1,082,700	1,394,983	1,179	6,379	7,558
RBIDZ	1	650,000	331,123	126	54	180
Total	42	2,864,450	6,090,786	5,169	43,589	48,758

Source: The DTI (2013)

As shown above, the Eastern Cape IDZs have received the highest amount of funding, has the greatest number of investors and have in turn created a total of 48 492 jobs. The IDZs hold great potential for contributing to economic growth and job creation, the major focus points of the government's New Growth Path.

3.1.8. National Infrastructure Plan and Strategic Integrated Projects

The Government adopted a National Infrastructure Plan (NIP) in 2012, which is aimed at transforming the economic landscape, creating significant numbers of new jobs, and strengthen the delivery of basic services in South Africa. The plan also supports the

³⁶ The DTI (2013) *Special Economic Zones Bill, 2013*; Presentation to Portfolio Committee On Trade And Industry, 26 April 2013. Available at: <http://www.thedti.gov.za/parliament/SEZ-Bill.pdf> (Accessed 11 July 2013).

³⁷ The DTI (2013) *10 Potential Special Economic Zones Have Been Identified*, Media Statement. Available at: <http://www.thedti.gov.za/editmedia.jsp?id=2685> (Accessed 11 July 2013)

integration of African economies. The costs of the 18 strategic projects identified are estimated at about R4-trillion over the next 15 years³⁸. The government pledged to invest R827 billion in building new and upgrading existing infrastructures over the three years from 2013/14 financial year³⁹. State owned enterprises (SOEs) such as Eskom, Transnet and others are also expected to fund a further R400 billion of projects next three years, supported by National Treasury guarantees⁴⁰. Some of this investment is earmarked for the construction of ports, roads, railway systems, electricity plants, hospitals, schools and dams with the ultimate aim of contributing to faster economic growth.

In order to coordinate, integrate and accelerate the implementation of this massive infrastructure development drive, Cabinet established the Presidential Infrastructure Coordinating Committee (PICC). The PICC has already identified, developed and approved 18 strategic integrated projects (SIPs), which covering 150 social and economic infrastructure across all nine provinces (with an emphasis on lagging regions). Each SIP comprises a large number of specific infrastructure components and programmes⁴¹. The SIPs comprise of:

- Five geographically-focussed SIPs,
- Three spatial SIPs,
- Three energy SIPs,
- Three social infrastructure SIPs,
- Two knowledge SIPs,
- One regional integration SIP, and
- One water and sanitation SIP.

Though it might too early to review the impact of the NIP to date, the Draft Infrastructure Development Bill (2013) estimate that around R24 billion spent to date creating 145 000 jobs⁴².

SIPs which are likely to benefit the Eastern Cape economy are (i) SIP 3 (South-Eastern node & corridor development), (ii) SIP 6 (Integrated municipal infrastructure project), (iii) SIP 11 (Agri-logistics and rural infrastructure), (iv) SIP 12 (Revitalisation of public

³⁸ Business Day (2012) *Infrastructure projects will 'not come cheap'*. Available at: <http://www.bdlive.co.za/economy/2012/10/21/infrastructure-projects-will-not-come-cheap> (Accessed 11 July 2013)

³⁹ National Treasury (2013) *2013 Budget Speech* by Minister of Finance.

⁴⁰ National Treasury (2013) *2013 Budget Speech* by Minister of Finance.

⁴¹ Presidential Infrastructure Coordinating Commission (PICC) (2012) *A Summary of the South African National Infrastructure Plan*. Pretoria, South Africa.

⁴² Department of Economic Development (2013) *Draft Infrastructure Development Bill (2013)*

hospitals and other health facilities), (v) SIP 13 (National school build programme) and SIP 18 (Water and sanitation infrastructure). However SIP 3 and 18 directly beneficial as their specific projects include:

- Building a new dam at Mzimvubu with irrigation systems.
- N2-Wild Coast Highway which improves access into KwaZulu-Natal and national supply chains.
- Strengthen economic development in Port Elizabeth through a manganese rail capacity from Northern Cape.
- A manganese sinter (Northern Cape) and smelter (Eastern Cape).
- Possible Mthombo refinery (Coega) and transshipment hub at Ngqura and port and rail upgrades to improve industrial capacity and performance of the automotive sector.

By 2012, the Higher Education Department estimated that South Africa had experienced a shortage of about 46 000 artisans in the past three years. According to Eastern Cape Department of Economic Development and Environmental Affairs, Transnet will create some 87 774 direct and indirect jobs in the Eastern Cape over the next seven years to 2018/19⁴³. This is as a result of the R7.3 billion which will be spend on the expansion of Port of Ngqura and R2.7 billion on the upgrading of the vehicle terminal and grain silo as well as the container terminal in East London. Transnet estimate that these projects will employment opportunities in Eastern Cape as follows:

- 2015/16 financial year 19 557 direct and 123 000 indirect jobs,
- 2016/17 financial year 21 760 direct and 136 000 indirect jobs, and of these
- A total of 2 000 artisans are required⁴⁴.

3.2. Regional Economic Growth and Development Strategies

3.2.1. Eastern Cape Growth and Development Plan (PGDP)

The Provincial Government of the Eastern Cape and its social partners have formulated a Provincial Growth and Development Plan (PGDP) 2004-2014, whose vision is *to make*

⁴³ Eastern Cape Economic Development and Environmental Affairs (2012) *Transnet to create 87 000 jobs in the Eastern Cape over next seven years*. Available at: <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=29708&tid=79383> (Accessed 11 July 2013)

⁴⁴ Eastern Cape Economic Development and Environmental Affairs (2012) *Transnet to create 87 000 jobs in the Eastern Cape over next seven years*. Available at: <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=29708&tid=79383> (Accessed 11 July 2013)

*the Eastern Cape a compelling place to live, work and invest in*⁴⁵. Some of the PGDP targets include maintaining an economic growth rate of between 5% and 8% per annum and halving the unemployment rate⁴⁶ by 2014.

3.2.2. Eastern Cape Rural Development Strategy (ECRDS)

The Eastern Cape provincial government, leadership of the Department of Agriculture and Rural Development and the Office of the Premier, embarked on a process of developing a Rural Development Strategy (ECRDS) in 2008. The ECRDS⁴⁷ gives effect to a national and provincial political mandate as well as the Provincial Growth and Development Plan and the Medium-Term Expenditure Framework for 2009-2014 for the Eastern Cape. The strategy is the main thrust of one of the pillars of the PGDP; the Agrarian Transformation and Rural Development Pillar. The ECRDS notes that the urban population in Eastern Cape constitutes around 39% while the remaining 61% reside in rural localities.

The ECRDS seeks to align and effectively coordinate all policy interventions in order to ensure that the strategy draws from, and is aligned with all major policy frameworks from across all spheres of government, including such frameworks as the Provincial Strategic Framework (PSF); the national Medium Term Strategic Framework; the Provincial Growth and Development Plan; the War on Poverty, Comprehensive Rural Development Programme, Local and Regional Economic Development Strategy, Industrial Strategy Municipal IDPs; the Expanded Public Works Programme among other national and provincial strategies.

3.2.3. Eastern Cape Provincial Industrial Development Strategy (PIDS)

The Provincial Industrial Development Strategy (PIDS, 2010), is framework through which the provincial government to commits to coordinate its efforts towards altering the structure and distribution of industrial activity in the province and to promote economic growth and development⁴⁸. The PIDS has a time horizon of fifteen years, and its vision is "*A state-led industrialisation path towards a robust, resilient and sustainable industrial base by 2025.*" Its socio-economic strategic objectives include stabilisation; protection; expansion; diversification; and transformation. The priority sectors identified are:

⁴⁵ Eastern Cape Provincial Government (2002) *Provincial Growth and Development Plan (PGDP) 2004-2014*, East London, South Africa.

⁴⁶ Which was 47.6% in 2002.

⁴⁷ Eastern Cape Provincial Government. (2010). Rural Development Strategy. <http://www.ecsecc.org/publication-details/128/Rural-Development-Strategy->

⁴⁸ Eastern Cape Provincial Government (2010) *Provincial Industrial Development Strategy (PIDS)*, East London, South Africa.

- Agro Processing
- Capital Goods sector
- Auto sector
- Green Industries
- Tourism
- Petrochemicals

The PIDS notes that the entire success of the industrial strategy of the province, as well as the general attainment of the PGDP goals by 2014, depends on continued interventions on the supply side to increase the provincial skills base, as well as supporting activities that promotes entrepreneurial dynamism amongst society. It further pointed out that there is currently insufficient integration between industrial policy objectives and skills and education systems. The strategy then recommended that the province:

- Work on the alignment between industry policy and skills and education development, particularly with respect to sector strategies.
- Ensure greater co-ordination between the development and implementation of sector strategies and the corresponding SETAs.

The PIDS also listed the priority skills in the province, and high among them are engineers and high level development specialists. Some specific occupations are listed below.

Table 9: Provincial Skills Requirements

Main Occupation	Minor Occupation Category
Engineers and high level development specialists	Experienced and qualified engineers in: • Mining • Agriculture • Chemical • Electrical • Mechanical • Electronics • Civil • Design • Nuclear • Clinical • Surveying • Valuers • Train drivers
Craft and related trade workers	• Plumbers • Electricians • Mechanics
Plant and machine operators	• Machine operators • Plant operators

Source: PIDS (2010)

3.2.4. Eastern Cape Provincial Job Strategy (2012)

In line with the national NGP and IPAP2 and the province's PIDS, a Provincial Jobs Strategy was developed in 2012⁴⁹. The strategy has five pillars, namely: (i) retaining existing jobs, (ii) stimulate new jobs in priority sectors, (iii) building social economy, (iv) increasing the pace of economic infrastructure investment in critical areas, and (v) radically improve skills development processes. The document notes that the province has potential and comparative advantage in the following sectors:

- Agriculture and animal husbandry.
- Fishing and aquaculture.
- Minerals.
- Energy.
- Forestry.
- Tourism.

Table 10: Summary of Jobs Targets, 2012-15

Strategic pillar	Jobs targets (over three years)	Comments
Jobs retention	3,000	Ensuring existing jobs are maintained
Priority sectors	24,000	Manufacturing: 3,000 new jobs per year Agriculture: 4,000 new livelihoods per year
Social economy	98,000	New full time equivalent jobs
Economic infrastructure	25,000	New construction jobs (assuming most major projects start), short term jobs
Total	150,000	
Skills acquisition	30,000	Artisan placements, learnerships, post-school training and educational opportunities

Source: Eastern Cape Provincial Government, 2012

As shown in Table 5, it is projected that the province will retain and create at least 150,000 jobs over the next three years. Manufacturing sector is estimated to create 3,000 new jobs per year. These projections should be taken with caution given the dependency of the province on the export market. Any slowdown in global demand as was experienced during the 2008/9 downturn can affect the local manufacturing industry.

⁴⁹ Eastern Cape Provincial Government (2012) *Eastern Cape Provincial Job Strategy*, East London, South Africa.

3.2.5. Nelson Mandela Bay Logistics Park (NMBLP)

The NMBLP which is located in Uitenhage is managed by the Coega Development Corporation and provides infrastructure and services to the automotive manufacturing industry. Integrated logistics services and infrastructure allows the NMBLP to aid manufacturers in the reduction of automotive manufacturing costs, which in turn improves suppliers' competitiveness.⁵⁰

3.3. Other Factors Impacting on Future Demand and Supply of Skills in the Region

3.3.1. Renewable energy (wind and solar farms)

Wind farms are being set up in Cookhouse, Adelaide and Bredarsdorp. Delivery of turbines has started and these farms will be set up soon. Stakeholders in the province need to ensure the green skills required for this sector for setup and maintenance are made available. Skills required include electricians, mechatronic technicians and fitters.

Jeffries Bay is set to have 30 turbines installed for generation of clean energy. The Nelson Mandela Metropolitan University is one of the institutions in the region which has been approached to offer qualifications in Renewable Energy, as there were no qualifications already in place.⁵¹

Linkages need to be established between stakeholders in the Eastern Cape responsible for skills development and the Department of Energy (DoE) to ensure that the education and training institutions in the region formulate programmes aligned with anticipated future skills needs in the country.

3.3.2. Rural areas

The development in the Transkei-Umzuvumbu Water Basin (which borders KZN, Mbatha, Mt Frere and Port Elizabeth) offers job creation potential in areas such as construction, electrical engineers (hydroelectricity) and water supply related skills [water treatment plant: electricians, fitters, motor mechanics].

⁵⁰ <http://www.coega.co.za/Content2.aspx?objID=89>

⁵¹ Findings from primary interview, NMMU April 2013

Apart from hydroelectricity to be derived from the dam under construction, opportunities are expected to be created in areas such as irrigation and potentially agro-processing. Institutions in the Umzuvumbu basin region need to be capacitated in order to be able to supply the relevant skills for the project.

3.3.3. Petrochemicals

Project Mthombo is a major petrochemicals refinery project being developed in the Coega IDZ. The construction phase will require people with construction skills, operators, technicians and artisans [boiler makers and electricians] etc. Once the refinery is operational there will be a need for skills sets such as operators, artisans and engineers (chemical analytic engineers). Establishment of the refinery is also anticipated to result in a number of downstream industries being established resulting in a multiplier effect for growth in the province.

3.3.4. Nuclear power plants

In order for the government's plans to reindustrialise and increase industrialisation in the country, there is need for increased power supply. Current power projects in the pipeline such as Medupi are expected to offer some reprieve, albeit limited. The Eastern Cape provincial government has mooted establishment of a nuclear power plant in the province. Establishment of such a plant will result in a great need for skills for the sector. Stakeholders in the province therefore need to already start liaising with the DoE and other stakeholders to ensure educational qualifications are either aligned with the anticipated skills needs or if no qualifications are in place, that these are instituted.

3.3.5. Establishment of skills programmes

Coega Development Corporation has developed a R220 million skills programme covering artisans, water engineers, road builders, automotive workers and smelter workers⁵².

3.4. Conclusion

Major economic policies guiding the development of the Eastern Cape include the Provincial Industrial Development Strategy (PIDS), the Eastern Cape Growth and Development Strategy and the Eastern Cape Rural Development Strategy. All these

⁵² Eastern Cape Provincial Government (2012) *Eastern Cape Provincial Job Strategy*, East London, South Africa.

policies are aligned with national policies guiding the economic trajectory of the country. Major national economic policies include the New Growth Path (NGP) Industrial Policy Action Plan (IPAP) and the National Industrial Policy Framework (NIPF).

Eastern Cape's manufacturing industry has historically been dominated by the automotive sector. The provincial government formulated the PIDS which is aimed at ensuring the development of a more diversified economy. Sectors which are expected to offer growth potential include the renewable energy sector, agro-processing, petrochemicals and tourism.

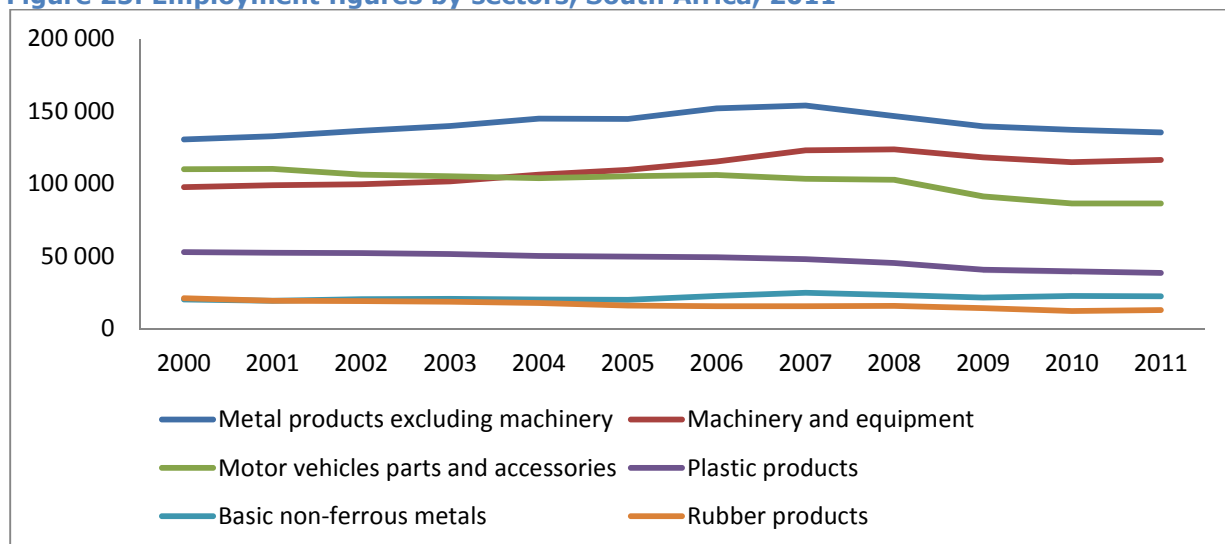
Stakeholders involved in the different merSETA chambers need to ensure they formulate their strategies in collaboration with major influencers of the direction to be taken nationally as pertains to economic development. Such role players include the Department of Energy and the Department of Trade and Industry.

4. THE DEMAND FOR LABOUR

4.1. Introduction

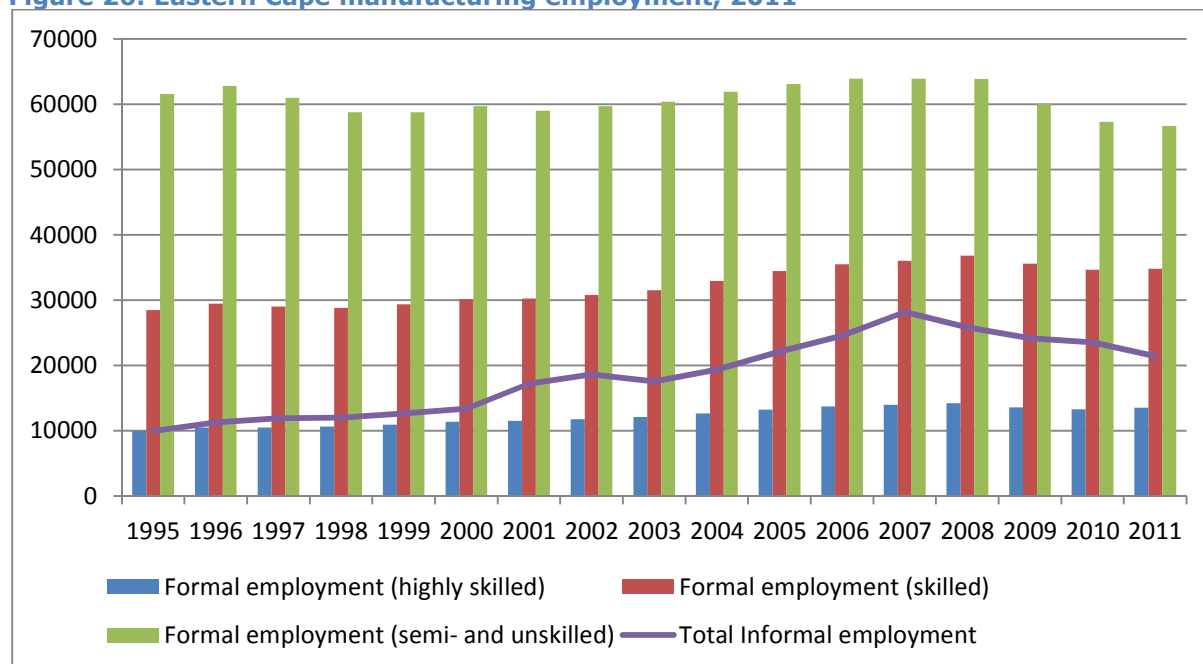
An analysis of the employment trends (at a national level) of the sectors that make-up the merSETA cluster show that employment numbers have gradually decreased over the period 2000-2011. The graph below shows the sectors that fall under Manufacturing in the National Accounts and does not include the sector: Sale, maintenance and repair of motor vehicles and motor cycles and the retail trade in automotive fuel which falls under the Wholesale and Retail sector.

Figure 25: Employment figures by sectors, South Africa, 2011



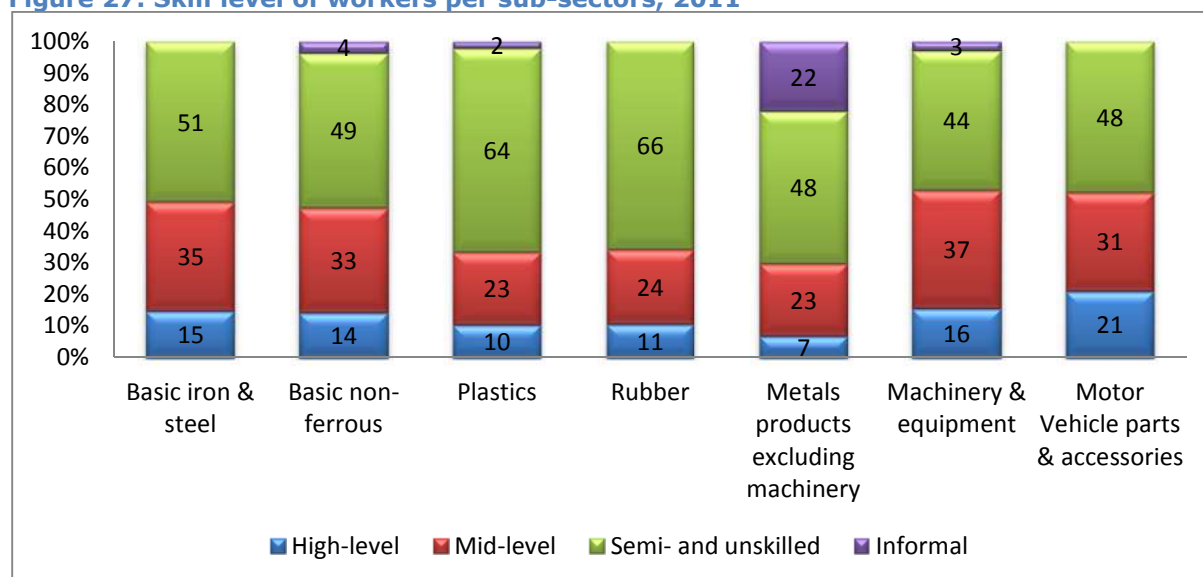
Source: Quantec, 2011

The metal products excluding machinery subsector employs greater numbers than all the other sectors.

Figure 26: Eastern Cape manufacturing employment, 2011

Source: Quantec, 2011

Formal employment of highly skilled workers has not experienced much change from 1995 to 2011. Demand for semi and unskilled workers is higher than for the highly skilled due to factors such as low level qualifications required and lower wage bills.

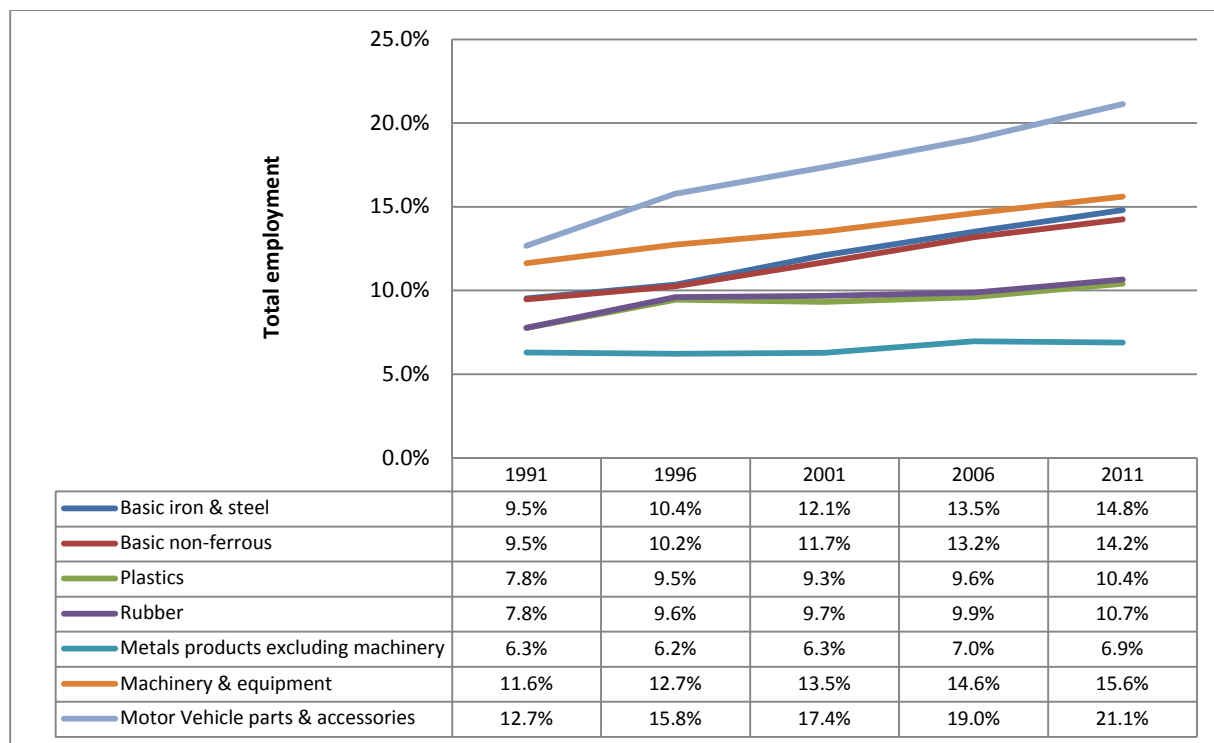
Figure 27: Skill level of workers per sub-sectors, 2011

Source: Quantec, 2011

The sectors that have the greatest proportions of unskilled and semi-skilled workers are the plastics and rubber products sectors according to 2011 statistics. The motor vehicle

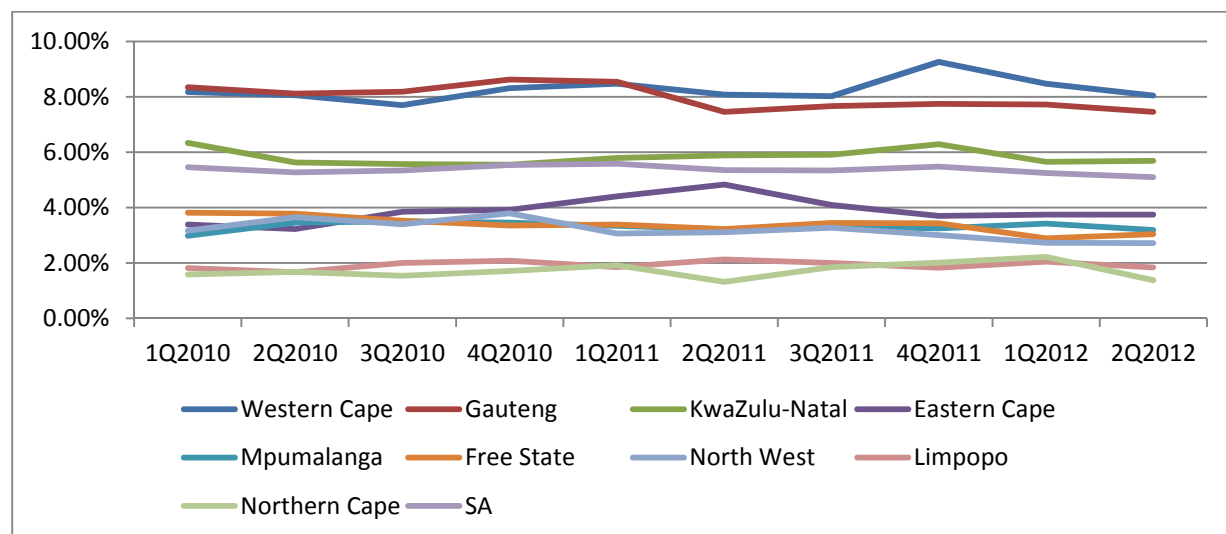
parts & accessories subsector had the highest proportion of skilled workers of all the sectors.

Figure 28: Trends in high-level skills per subsector, 2011



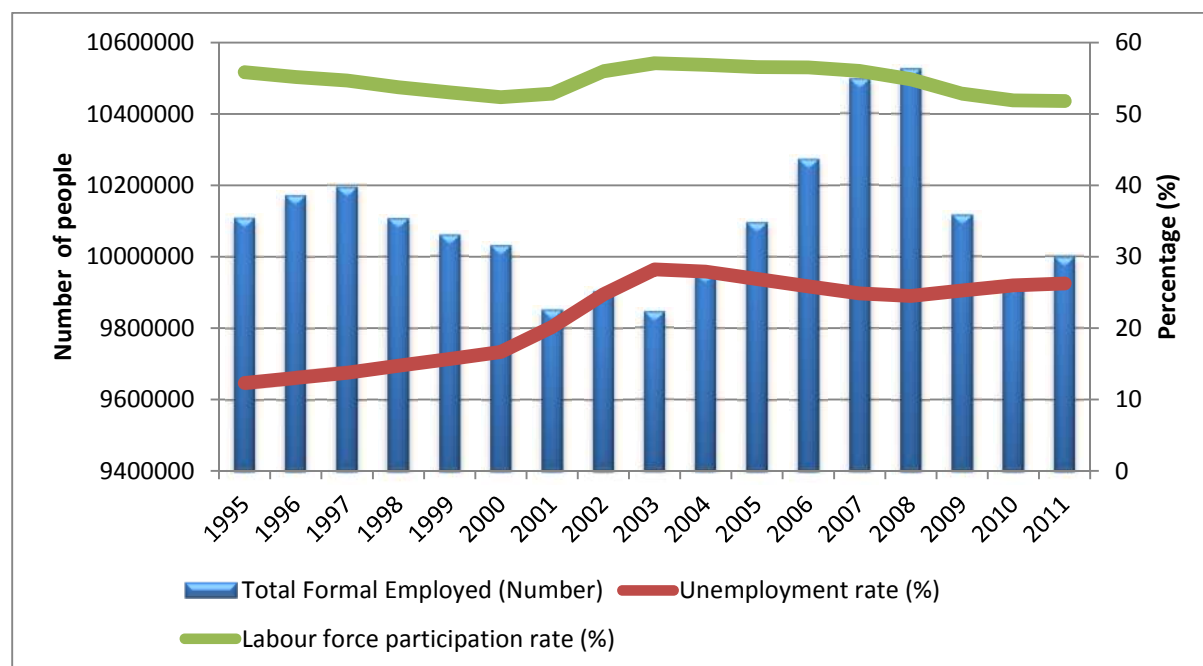
Source: Quantec 2013

The proportion of high-level skills has been increasing for the decade 1991 to 2011 but still constitutes a minority in the profile of employees. Semi-skilled, unskilled and mid-level skilled employees still constitute the majority of employees in all sectors of the merSETA clusters. Although there is an increase in the high level skills, the absorption of these workers is dependent on the level of industrial development which will happen in South Africa.

Figure 29: Manufacturing contribution to provincial employment, 2012

Source: StatsSA Labour Force Survey, own calculations

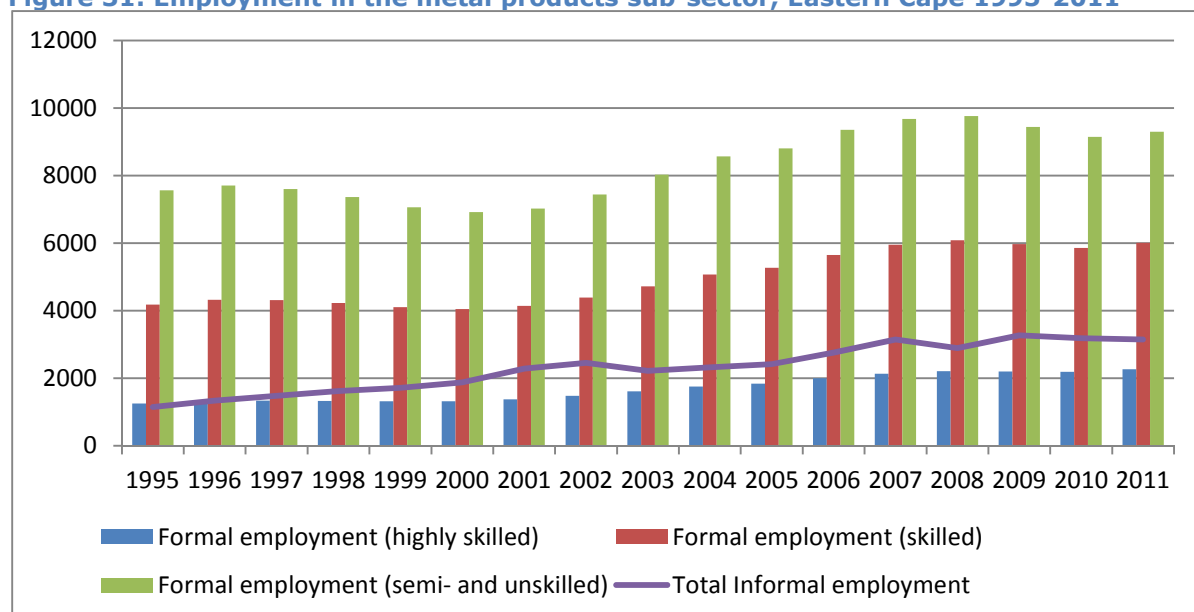
The manufacturing sector's contribution to employment has been relatively steady at approximately 5.5% of total employment over the Q1:2010 to Q2:2012 period. Eastern Cape Manufacturing employment in the Eastern Cape rose steadily until Q2:2011 and started declining from Q3:2011. The slowdown in the demand in the Euro zone area is a contributor for the decline in output by the Eastern Cape manufacturing sector over the mentioned period.

Figure 30: Employment and unemployment in South Africa, 2011

Source: Quantec 2013

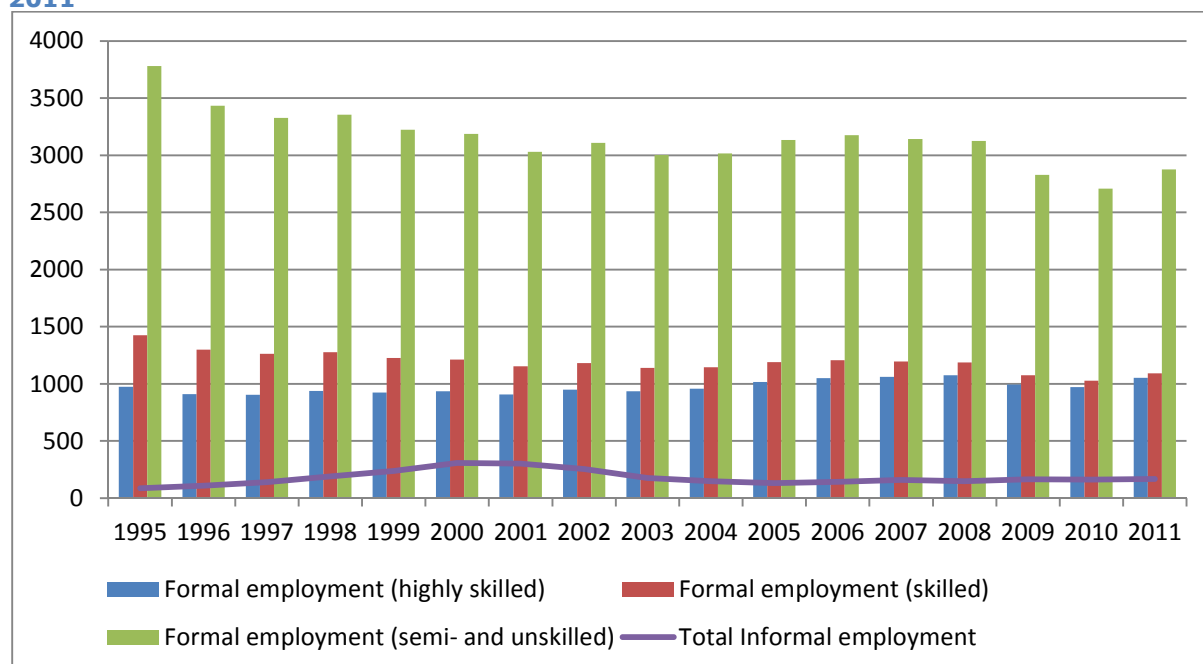
The formal employment in South Africa rose from 1995 and reached a peak in 1997. From 1997 the total employed declined until 2001. The dip from 2000 to 2001 is likely related to the rand currency crisis which led to a decline in economic activity and in turn a decline in the employment levels. The number of employed people started increasing from 2004 and reached a peak in 2008. A decline set in from 2008 and this is attributed to the global economic downturn which impacted demand for commodities, reduced manufacturing activity and in turn resulted in a lowering of the employment levels.

Figure 31: Employment in the metal products sub-sector, Eastern Cape 1995-2011



Source: Quantec 2013

High demand for semi and unskilled workers in the metal sector is attributed to the ease of obtaining people with this skills level to work in the sector. Informal employment follows a trend similar to the growth in formal employment. An increase in the manufacturing levels in the country results in a corresponding rise in the employment levels.

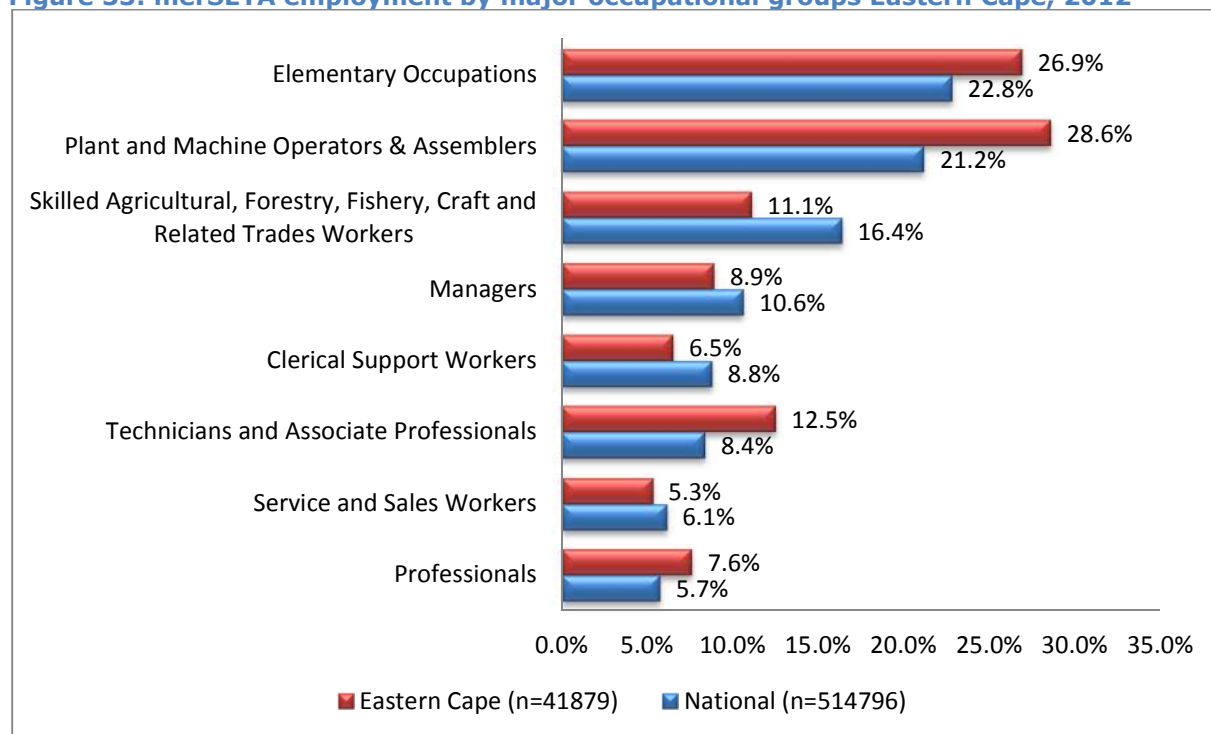
Figure 32: Employment in the machinery and equipment sub-sector in Eastern Cape, 2011

Source: Quantec, 2013

As illustrated in the figures above, almost all Eastern Cape's manufacturing sectors have been shedding jobs. However, the biggest casualties are the unskilled and semi-skilled. The skilled and highly skilled tend to maintain their jobs, even during a crisis period. This justifies the need for more concerted efforts in skilling the workforce. Implementation of the government's Industrial Policy Action Plan and National Development Plan has potential to increase the manufacturing sector's labour absorption capacity.

Figure 28 shows an analysis of the national and Eastern Cape occupational profile. The Eastern Cape's occupational profile is similar to the national profile. Elementary Occupations, and Plant & Machine Operators and Assemblers constitute the largest group at 26.9% and 28.6% respectively.

The occupational profile and the skill level profile can be used to infer to the educational profile of the merSETA cluster employees. Elementary workers (22%) generally have only entry-level qualifications. Managers (8.91%) and Professionals (7.6%) mainly have higher levels of formal education. The majority of technicians and associate professionals (12.5%) and the skilled agricultural, forestry, fishery, craft and related trade workers (11.1%) are likely to have trade-related qualifications.

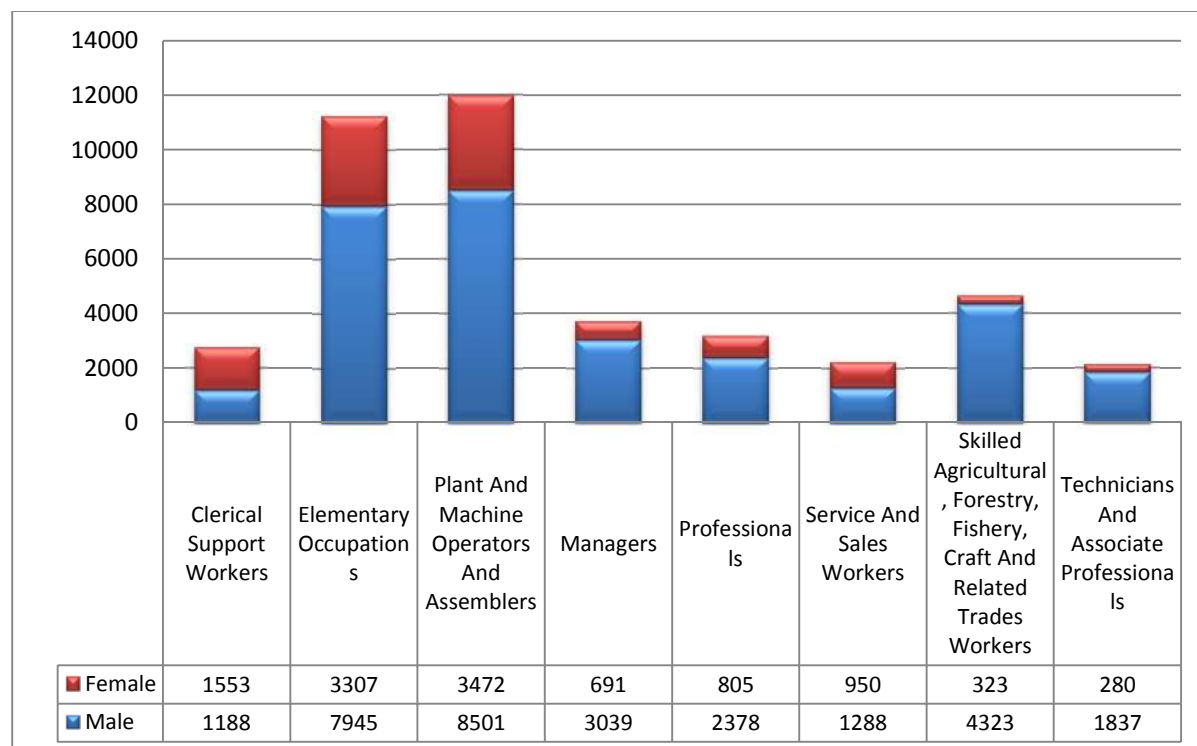
Figure 33: merSETA employment by major occupational groups Eastern Cape, 2012

Source: merSETA database, 2013

The Plastics Chamber Report (April, 2012) from its sample found that the majority (48.8%) of employees had Grade 12 (Matric) and 32% ABET 2-4 (Grade 1-9) as their highest qualifications. The findings from the New Tyre Chamber Report showed that the majority of employees categorised as artisans/craft workers have a Grade 12 or equivalent as their highest qualification. This report found very few artisans/craft employees with N4-6 (8%), or National Diplomas (7%) as their highest qualifications. Similar findings were found in the other occupational categories namely; professionals, associate professionals and even executives/senior management. The chamber report concluded that the tyre industry has relatively low-level qualifications relative to the positions they hold.

4.2. Gender and Race Distribution of Employees

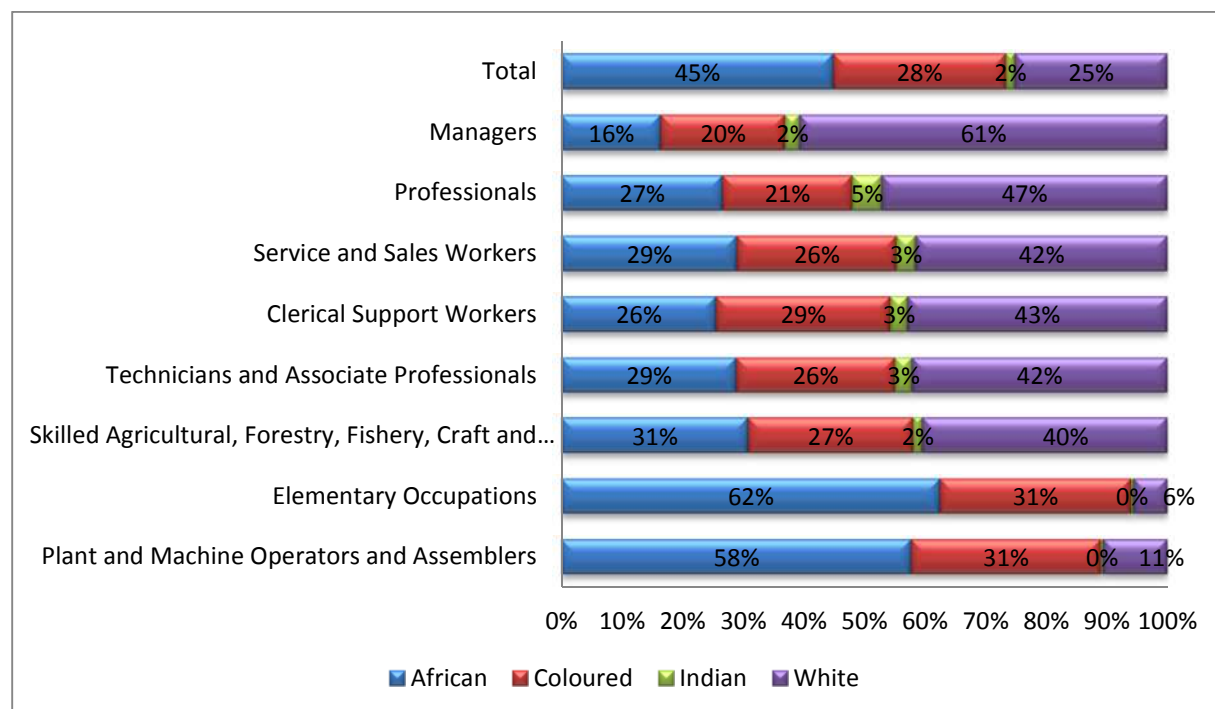
The merSETA sectors are dominated by male employees; the national database shows that 80% of employees are male and 20% are female. The Eastern Cape has a dominance of males (73%) relative to females (27%) in merSETA occupations. The only occupational group where the female proportion exceeds men in the province is in the clerical support workers category, with females constituting 57% slightly above the nation's 54%.

Figure 34: Gender distribution of employees in the sector according to occupational group Eastern Cape, 2012

Source: merSETA database (2013)

Females constitute a significant portion (45%) of the sales and service Workers category nationally and 42% in the Eastern Cape. As shown in the figure above the proportion of women is generally very low in the rest of the occupations. For the Plant & Machine Operators and Skilled Agriculture, Forestry, Fishery Craft & related trades categories the percentage of female employees is 29% and 7% respectively.

Africans constituted the largest racial group (45%) employed in the elementary occupations and the plant and machine operators & assemblers occupations. Indians constituted the smallest racial group with 2% of total employment. Nationally Africans constituted 55%, Whites 27%, Coloureds 12% and Indians 6%.

Figure 35: Racial distribution of Eastern Cape employees in the sector, 2012

Source: merSETA database (2013)

Africans and Coloureds occupied 93% of the elementary occupations, nationally this was 92% in 2012 (Africans 79% and Coloureds 13%).

Dominance of whites in the different occupations is seen by the comparison of the manager's proportion relative to other regions. In Gauteng whites make up the majority of managers (68%) and professionals (61%). In the Northern Cape whites constitute 83% of managers and 76% of professionals, Free State 85% managers and 76% professionals and in the Eastern Cape 61% of managers.

4.3. Age Distribution of Employees

According to the 2012 merSETA database 39% of employees in the Eastern Cape are younger than 35 years whilst 53.5% are between 35 and 49 years and 7% are between 49 and 64 years. People occupying management positions generally have to be highly qualified and have work experience. This is somewhat reflected by only 18% of employees less than 35 being in management occupations, while 69% of managers are between 35 and 49. The majority (52%) of skilled agricultural, forestry, fishery, craft and related trades workers are in the 35-49 age groups and a considerable portion (42%) is younger than 35 years.

A majority of Technicians and Associate Professionals (56%) and skilled agricultural, forestry, fishery, craft and related trades works (53%) are in the 35-49 age group. These employees constitute a substantial portion which might be looking at retirement in 15 to 20 years or promotion to managerial positions. During primary interviews, a number of respondents pointed out the waning interest amongst younger people in getting into the manufacturing industry.

Table 11: Age distribution of merSETA employees by major occupational category Eastern Cape, 2012

Occupational Group	Age group		
	<35	35-49	50-64
Managers	17.7%	68.7%	13.5%
Plant And Machine Operators And Assemblers	39.9%	52.9%	7.1%
Clerical Support Workers	36.8%	53.7%	9.4%
Professionals	38.0%	54.2%	7.8%
Technicians And Associate Professionals	36.7%	55.5%	7.8%
Service And Sales Workers	40.3%	51.0%	8.8%
Skilled Agricultural, Forestry, Fishery, Craft And Related Trades Workers	39.8%	52.8%	7.4%
Elementary Occupations	46.6%	49.0%	4.4%
Total	39.2%	53.5%	7.3%

Source: merSETA database (2013)

The age distribution amongst chamber employees is shown in the table below. The plastic sector has the largest portion (42%) of employees younger than 35 years. The recent Plastics Chamber report found that 62% of the employees from the companies profiled were between 18 and 39 years which indicate a relatively young workforce.

Table 12: National Age distribution of merSETA employees by chamber category, 2012

Chamber	Age group		
	<35	35-49	50-64
Metal	38%	50%	11%
Auto	36%	53%	11%
Motor	34%	55%	11%
New Tyre	37%	54%	10%
Plastics	42%	48%	9%
Unknown	43%	47%	9%
Total	40%	49%	10%

Source: merSETA database (2013)

4.4. Future Demand

To determine the future demand required for the merSETA sector in the Western Cape it is important to consider the current economic conditions as well as economic growth forecasts. Replacement demand due to mortality, emigration, and emigration of employees should also be factored in.

The previous section detailed the profiled the current merSETA workforce in the Western Cape highlighting the occupational figures and the age profile of the employees. The manufacturing sector has been characterised, on the one hand by declining employment due to the use of labour saving technology and economic challenges whilst on the other hand creating an increased demand for skilled employees who can operate increasingly sophisticated machinery. Estimates of demand are usually derived from econometric forecasting models which use historical data along with assumptions about the future to predict how output and employment patterns over time.

The researchers used the data and findings found in the merSETA SSP Update for 2012/2013 – 2016/2017. The data from that study was then disintegrated to give a regional outlook based on the current employment figures and distribution of manufacturing activity.

The economic growth rates, the associated employment growth rates, and the final employment growth rates used in the merSETA's labour demand model can be seen in Table 9 below.

Table 13: Average Gross Value Added (GVA) and employment growth figures, 2012

Subsector	Low growth		Baseline		High Growth	
	GVA growth (%)	Employment growth (%)	GVA growth (%)	Employment growth (%)	GVA growth (%)	Employment growth (%)
Rubber products	-0.2	-1.0	1.5	-0.6	3.5	0.7
Plastic products	2.0	2.6	2.5	3.2	3.0	3.8
Basic iron & steel	-3.6	-0.9	4.0	0.6	10.4	2.6
Basic non-ferrous metal	1.1	0.6	3.5	2.1	6.3	3.7
Machinery & equipment	1.5	0.9	3.2	1.9	5.1	3.0
Motor vehicles, parts & accessories	-1.1	-0.7	3.3	2.2	8.7	5.2
Sales & repair of vehicles; fuel stations	2.6	0.9	5.4	1.9	8.5	2.9
Total economy	1.9	0.8	3.8	1.7	6.2	2.6

Source: merSETA SSP Update 2012/13-2017/18

In the baseline scenario, the sales and repair of vehicles and fuel stations subsector is expected to experience the highest GVA over the forecast period of 5.4%. The plastic products sector is expected to achieve the highest employment growth of 3.2%. South Africa's manufacturing sector is expected to grow at an average of 3.8%.

Table 14: Employment growth figure used in the merSETA's labour demand projection, 2012

merSETA sectors	Low growth	Baseline	High growth
	%	%	%
Auto	0.5	2.0	3.5
Metal	0.4	1.6	3.0
Motor	0.5	2.0	3.5
New Tyre	-1.0	-0.6	0.7
Plastics	2.6	3.2	3.8
Unknown ⁵³	0.4	1.6	3.0

Source: merSETA SSP Update 2012/13-2017/18

Based on the analysis and the projections of the merSETA SSP Update 2012/2013-2017/18 the demand projections for the Eastern Cape region for the baseline, negative and positive scenarios would be as shown below.

Table 15: Demand Projections 2014 to 2018- baseline scenario, Eastern Cape

New Positions to be Created in Period					
Occupational Group	2014	2015	2016	2017	2018
Managers	131	134	136	139	142
Professionals	93	95	97	99	101
Technicians and Associate Professionals	184	188	191	195	199
Clerical Support Workers	61	62	63	64	65
Service and Sales Workers	146	148	151	154	157
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	44	45	45	46	47
Plant and Machine Operators and Assemblers	321	328	334	341	348
Elementary Occupations	268	274	279	285	290
Total	1 248	1 274	1 296	1 323	1 349
Replacement Demand					
Occupational Group	2014	2015	2016	2017	2018

⁵³ Unknown refers to data which did not fall into any of the specified categories

Managers	243	248	252	257	261
Professionals	145	148	151	153	156
Technicians and Associate Professionals	224	228	232	236	241
Clerical Support Workers	73	75	76	77	79
Service and Sales Workers	167	170	173	176	179
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	52	53	54	55	56
Plant and Machine Operators and Assemblers	378	385	392	399	406
Elementary Occupations	284	289	294	300	305
Total	1 566	1 596	1 624	1 653	1 683
Total Positions That Need to be Filled					
Occupational Group	2014	2015	2016	2017	2018
Managers	374	381	388	395	403
Professionals	239	243	247	252	256
Technicians and Associate Professionals	408	416	423	431	439
Clerical Support Workers	134	136	139	141	144
Service and Sales Workers	313	318	324	330	336
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	96	97	99	101	103
Plant and Machine Operators and Assemblers	699	712	726	740	754
Elementary Occupations	552	563	573	584	595
Total	2 815	2 866	2 919	2 974	3 030

Over the forecast period the plant and machine operators and assemblers plus elementary occupations are expected to be the main new job creators. The former occupation requires specialised training and therefore companies and training institutions need to adequately prepare to meet the future demand.

Table 16: Demand Projections 2014 to 2018- negative scenario, Eastern Cape

New Positions to be Created in Period					
Occupational Group	2014	2015	2016	2017	2018
Managers	39	40	40	41	41
Professionals	26	26	27	27	27
Technicians and Associate Professionals	55	55	56	56	57
Clerical Support Workers	17	17	17	17	17
Service and Sales Workers	38	38	39	39	39
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	12	12	12	13	13
Plant and Machine Operators and Assemblers	107	109	111	112	114
Elementary Occupations	86	87	88	89	90
Total	380	384	390	394	398
Replacement Demand					
Occupational Group	2014	2015	2016	2017	2018
Managers	234	236	237	238	240
Professionals	140	141	142	142	143
Technicians and Associate Professionals	216	217	218	220	221
Clerical Support Workers	71	71	71	72	72
Service and Sales Workers	161	161	162	163	164
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	50	50	51	51	51
Plant and Machine Operators and Assemblers	364	367	369	371	374
Elementary Occupations	274	275	277	279	280
Total	1 510	1 518	1 527	1 536	1 545
Total Positions That Need to be Filled					
Occupational Group	2014	2015	2016	2017	2018
Managers	273	276	277	279	281
Professionals	166	167	169	169	170
Technicians and Associate Professionals	271	272	274	276	278
Clerical Support Workers	88	88	88	89	89
Service and Sales Workers	199	199	201	202	203
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	62	62	63	64	64
Plant and Machine Operators and Assemblers	471	476	480	483	488
Elementary Occupations	360	362	365	368	370
Total	1 890	1 902	1 917	1 930	1 943

In the negative scenario the total number of new jobs created is forecast to be 868 less in 2014 compared to the baseline scenario. Factors which can result in such a large disparity include growth in mechanisation and shutdown or downscaling of operations in the manufacturing sector.

Table 17: Demand Projections 2014 to 2018- positive scenario, Eastern Cape

New Positions to be Created in Period					
Occupational Group	2014	2015	2016	2017	2018
Managers	241	249	257	265	274
Professionals	175	180	186	192	198
Technicians and Associate Professionals	339	350	361	373	385
Clerical Support Workers	112	116	119	123	127
Service and Sales Workers	275	283	292	302	311
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	82	84	87	90	93
Plant and Machine Operators and Assemblers	578	597	616	636	657
Elementary Occupations	487	502	519	535	553
Total	2 289	2 361	2 437	2 516	2 598
Replacement Demand					
Occupational Group	2014	2015	2016	2017	2018
Managers	253	261	270	278	287
Professionals	151	156	161	166	171
Technicians and Associate Professionals	233	241	248	256	264
Clerical Support Workers	76	79	81	84	87
Service and Sales Workers	174	179	185	191	197
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	54	56	58	59	61
Plant and Machine Operators and Assemblers	393	405	418	431	445
Elementary Occupations	295	305	314	324	335
Total	1 629	1 682	1 735	1 789	1 847
Total Positions That Need to be Filled					
Occupational Group	2014	2015	2016	2017	2018
Managers	494	510	527	543	561
Professionals	326	336	347	358	369
Technicians and Associate Professionals	572	591	609	629	649
Clerical Support Workers	188	195	200	207	214
Service and Sales Workers	449	462	477	493	508
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	136	140	145	149	154
Plant and Machine Operators and Assemblers	971	1 002	1 034	1 067	1 102
Elementary Occupations	782	807	833	859	888
Total	3 918	4 043	4 172	4 305	4 445

Growth in the number of jobs created over the forecast period is expected to assist in the government's drive to raise the employment levels in line with the National Growth

Path framework. Institutions, training providers and industry need to collaborate in order for such objectives to be achieved.

4.5. Conclusion

The demand for labour is mainly dependent on the performance of the economic sub-sectors. In periods of decreased demand for manufacturing output, a slowdown in the uptake of workers occurs and when demand increases there is a rise in the labour demand. Some occupations require lower skills due to their non-technical nature and these form the bulk of the employment in the merSETA sectors. More technical occupations and management positions require higher qualifications and skills.

In the Eastern Cape males are the dominant gender in the merSETA chambers.⁵⁴ Females were only more than the males in the clerical work occupation. This predominance can be mainly attributed to the historical social engineering whereby men did the more heavy and technical jobs. Africans and Coloureds occupied the majority of the elementary and operator occupations while whites were predominant in the management and professional occupations.

Workers below the age of 35 constituted 39% of the people employed in the merSETA chambers, 53.5% were in the 35-49 age group while the remainder were older than 50 years. The majority of management (69%) was in the 35-49 age group.

⁵⁴ The analysis was based on the 2012 merSETA WSP database which had 4,360 companies. It should be noted that the complete company database had 53,150 companies. The 4,360 analysed constituted approximately 70%+ of levy paying companies

5. LABOUR SUPPLY

5.1. Introduction

The main sources of new skills into the South African labour market are institutions such as universities, universities of technology, FET colleges and high schools. Programs such as learnerships and apprenticeships go a long way in ensuring a steady inflow of skills into the market. Supply of highly skilled individuals is usually from tertiary institutions. Although some people might not have tertiary level qualifications, their work experience enables them to have a skill set which might be higher than someone with a university degree.

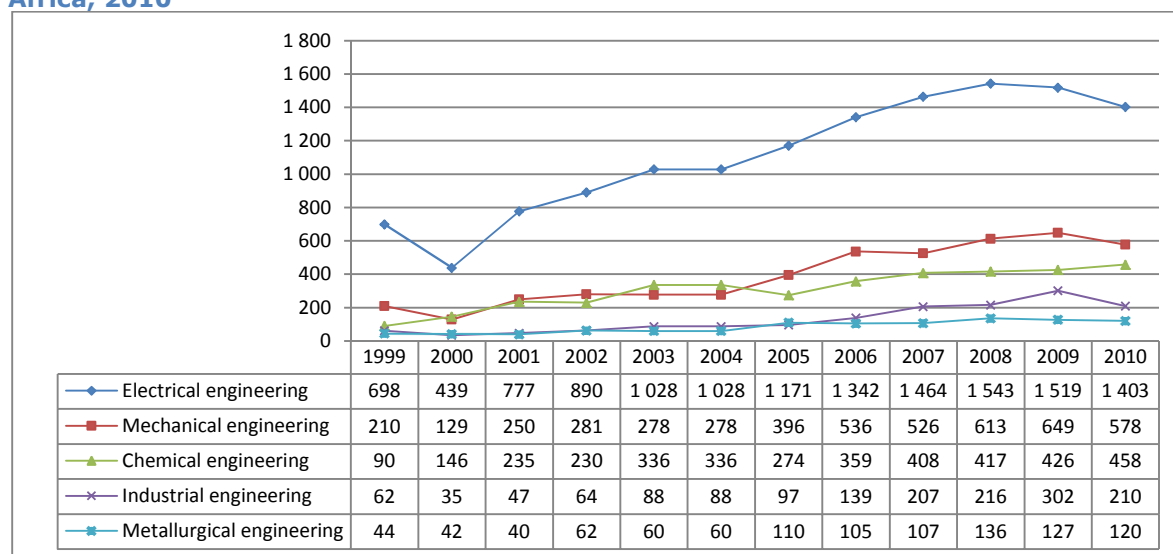
South Africa is faced with a large labour pool of unskilled people due to a lack of formal education and training of these people. Another source for skills is people who have been retrenched and those who might have been operating in sectors of the economy with transferable skills.

5.2. Supply of new skills to the sector

5.2.1. Higher education and training (HET)

A range of general qualifications from the HET sector in the areas of finance, accounting, human resources and ICT are utilised in the merSETA sector, of most relevance is the output of engineers. In particular, electrical engineers, mechanical engineers, chemical engineers, industrial engineers, and metallurgical engineers.

The graph below shows the graduations with national diplomas in selected engineering fields between 1999 and 2010. These graduates become available to the national economy as engineering technicians in the relevant engineering disciplines. Electrical engineering has the highest output (1 403 in 2010), followed by mechanical engineering (578 in 2010) and chemical engineering (458 in 2010).

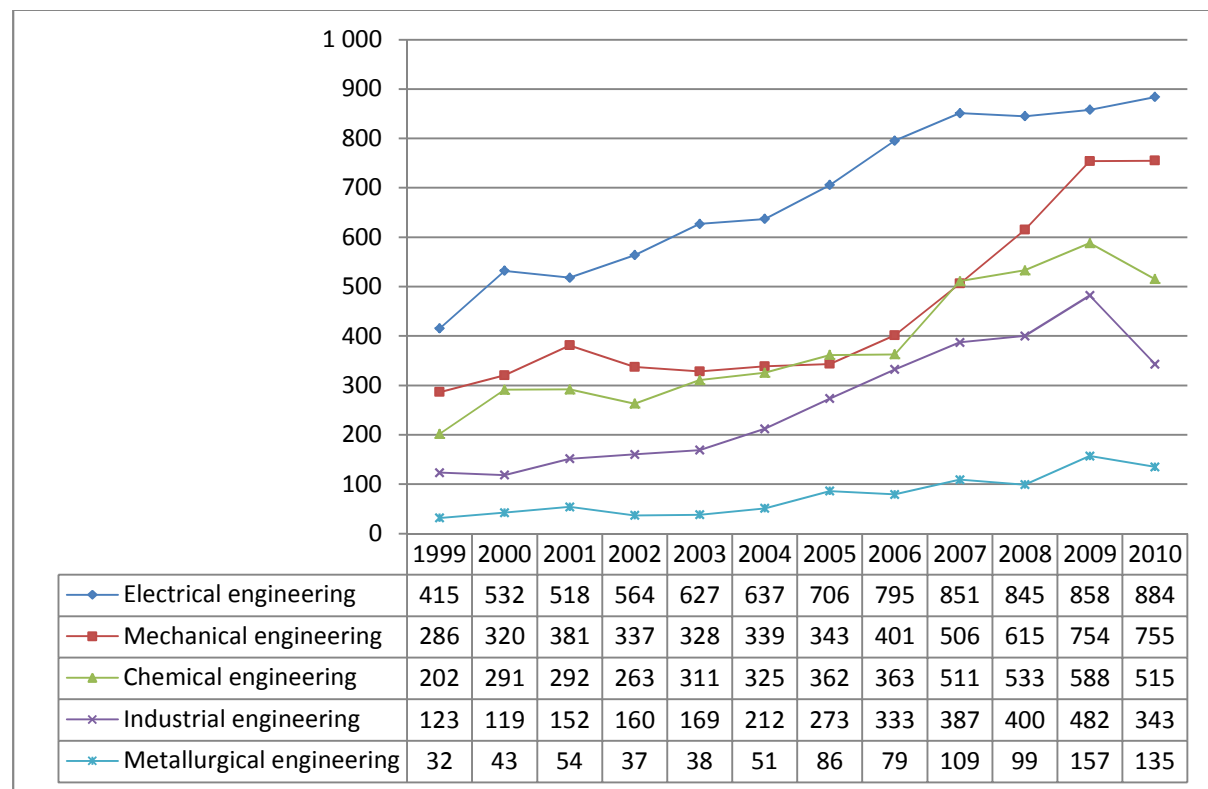
Figure 36: Number of national diplomas awarded in selected engineering fields in South Africa, 2010

Source: merSETA SSP, 2011

Output from all fields has increased substantially over the eleven-year period, although a slight drop in output was reported in all fields except chemical engineering in 2010. The average annual increase was greatest in chemical engineering (15.9%), followed by industrial engineering (11.8%), mechanical engineering (9.7%), metallurgical engineering (9.5%) and electrical engineering (6.5%).

The figure below shows the number of first degrees awarded in the same selected engineering fields. These graduates become available to the national economy as engineers or engineering technologists and can, after a minimum of three years' work experience (during which certain criteria must be met), register as professional engineers or engineering technologists in their respective fields.

In 2010 a slight drop in output (7% in total) was reported in the fields of chemical-, industrial- and metallurgical engineering. Output in 2010 was the greatest in electrical engineering (884), followed by mechanical engineering (755), and chemical engineering (515).

Figure 37: First degrees awarded in selected engineering fields in South Africa, 2010

Source: merSETA SSP, 2011

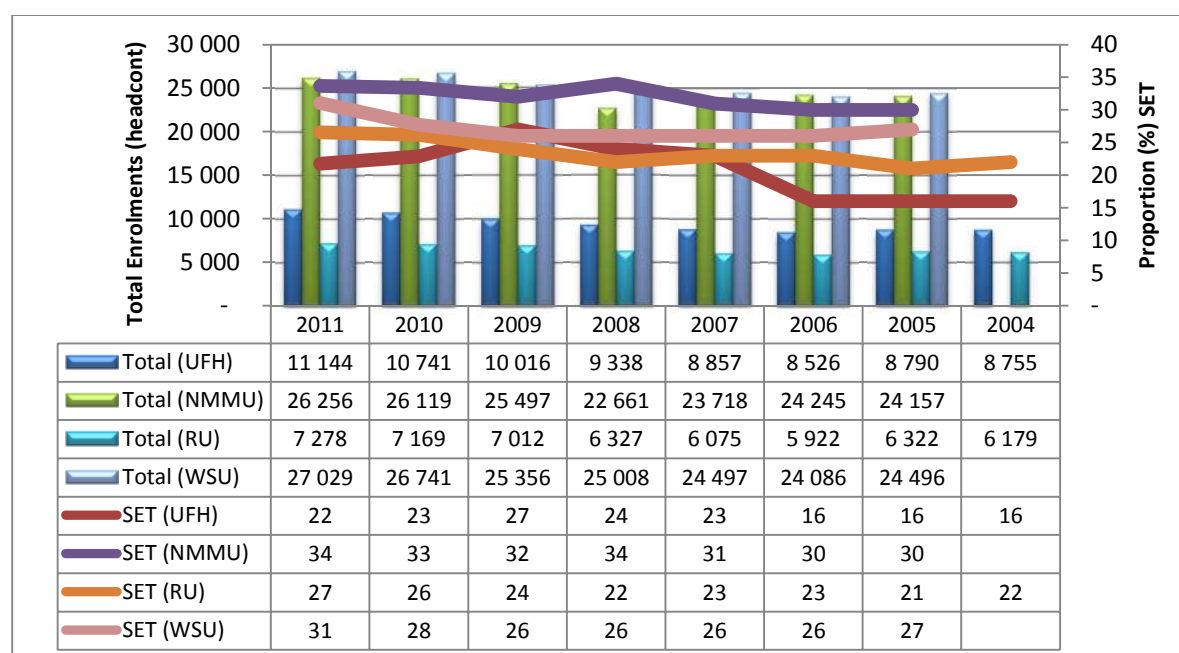
The fields that have demonstrated the highest average annual growth over the period are metallurgical engineering (14.1%) and industrial engineering (9.8%). The average annual growth noted over the period for chemical engineering was 8.9%, for mechanical engineering 9.2% and for electrical engineering 7.1%.

Eastern Cape has four universities; Walter Sisulu University (WSU), Nelson Mandela Metropolitan University (NMMU), Fort Hare University (UFH) and Rhodes University (RU). NMMU has one of the leading engineering departments in the tertiary sectors in the Eastern Cape.

NMMU has an Advanced Mechatronic Technology Center (AMTC) which is a collaborative effort with the Automotive Industry Development Center (AIDC). The AMTC is aimed at meeting the technological needs of industry through teaching, learning and research in the field of mechatronics.⁵⁵

⁵⁵ <http://amtc.nmmu.ac.za/Home>

Figure 38: University Enrolments in Eastern Cape, 2011



Source: Department of Higher Education & Training

NMMU and WSU had the highest proportions of Science, Engineering and Technology (SET) related studies enrolments in the Eastern Cape over the 2004-2011 periods. There is currently an undersupply of engineering graduates from the province's institutions.

On average the NMMU enrolls 100 students in mechanical engineering, 150 in electrical engineering and 100 in mechatronics. The throughput from these fields on average is 25% for mechanical, 33% for electrical and 30% for mechatronics. These throughput rates are indicative of the general trend within the country.⁵⁶

Table 18: Auto chamber estimated priority skills needs by engineering degree, 2011

Engineering (Degree)	2012	2013	2014	2015	2016
B. Tech, B. Eng, BSc					
Mechanical Engineering	24	29	27	17	6
Electrical / Electronic Engineering	24	23	15	11	12
Industrial Engineering	16	10	15	14	3
Mechatronic engineering	11	8	11	12	6
Civil Engineering	0	1	0	1	0
Chemical Engineering	1	2	2	2	1

Source: Auto chamber representative⁵⁷

⁵⁶ Insights from interview at NMMU, April 2013

⁵⁷ Insights from primary interview held in Port Elizabeth, April 2013

5.2.2. Learnerships and apprenticeships

Since its inception in November 2001 the merSETA has registered 6,900 apprentices on apprenticeships and more than 45,000 learners on learnership. In the same period a total of 43 000 apprentices qualified as artisans in the sector and another 24 000 learners successfully completed their learnership.

The Office of the Premier in the Eastern Cape is involved in skills development in the region through the Provincial Skills Development Forum (PSDF). The PSDF brings together stakeholders from provincial and local government, training and development institutions, labour and industry to work on skills development in the Eastern Cape.

The Eastern Cape is a major automotive development base and companies in the industry are involved in various training initiatives. Volkswagen South Africa (VWSA) is one such company which has a state of the art training facility which enables learners to obtain thorough theoretical and practical training. Location of the training center close to the production line enables learners to not only get experience in the workshop, but they also get exposure to the production line.

Table 19: Auto chamber estimated priority skills needs by apprenticeship, 2012

Apprenticeship	2012	2013	2014	2015	2016
Millwrights	72	70	25	20	12
Electrical	19	16	21	20	11
Toolmaker	1	2	2	8	1
Fitter	7	10	10	8	2
Motor Mechanic	22	24	24	23	17
Auto Electrician	0	1	1	4	0
Electronic Equipment Mechanician	2	3	3	1	2
Turner Machinist	0	1	1	1	0
Automotive Body Repair	0	0	0	0	0

Source: Auto chamber representative⁵⁸

Millwrights, motor mechanics and electricians are the main skills identified as being priority in the automotive chamber. Training institutions need to be aware of these trends in the industry and adjust their training accordingly.

⁵⁸ Insights from primary interview held in Port Elizabeth, April 2013

Table 20: Auto chamber estimated priority skills needs by learnership, 2011

Learnership	2012	2013	2014	2015	2016
Autotronics	62	62	57	55	59
Mechatronics	236	211	277	296	147
Motor Mechanic	124	148	126	20	11
Logistics	20	16	18	18	10
Fitting	9	13	13	13	9
Tool jig & Die maker	8	16	16	16	8
Electrical	14	20	20	20	14

Source: Auto chamber representative

The increasing technological advancements in the manufacturing industry have seen a growth in the demand for people with a combined knowledge of mechanical, electrical and computer engineering. These skills sets are embodied in the mechatronics qualifications and according to the auto chamber's estimates; there is an anticipated high demand for this qualification. Motor mechanics and autotronics are also estimated to be another major demand area.

5.2.3. FET colleges

The Eastern Cape has 8 government FET Colleges; Buffalo City FET College, East Cape Midlands FET College, Ikhala FET College, Ingwe FET College, King Hintsa FET College, King Sabatha Dalindyebo FET College, Lovedale FET College and Port Elizabeth FET College.

Table 21: Eastern Cape Private FET Colleges

FET	Location
African Global Skills Academy	Port Elizabeth
East London Management Institute	East London
Eastcape Training Center	Port Elizabeth
Fernwood Business College	East London
Industries Education & Training Institute	Port Elizabeth
Khanyisela Training	Port Elizabeth
MSC Education Holdings	East London

FET colleges offer National Certificate Vocational (NCV) and Report 191 programs. These are set programs whose curricula are developed by the Department of Higher Education and Training (DHET). Curricula of the colleges is determined by the DHET's

identification of scarce and priority skills on a national level, colleges then determine which programs to incorporate based on regional skills needs.

Table 22: National Certificate (Vocational) programme information

Description	Detail
Definition	NC(V) programmes are delivered under the auspices of the Department of Higher Education and Training and quality assured by Umalusi. Programme integrates theory and practice and provides students with a broad range of knowledge and practical skills within specific industry fields
Duration	3 years (1 year per level)
Qualification	Full certificates on NQF Level 2,3 and 4 NC(V) Level 4 Certificate is equivalent to National Senior Certificate (matric)
Admission requirements	Grade 9+ college requirements set per programme
Resources	Bursaries available for financially and academically qualifying students

Source: Motor Research project, 2013

The majority of the FET colleges in the Eastern Cape are in the metropolitan areas of East London and Port Elizabeth. Although there are some FETs in rural areas, the concentration of manufacturing and engineering related industries in urban areas results in the rural areas mainly focusing on administrative or agriculture related programs.

Table 23: Auto chamber estimated priority skills needs by engineering diploma, 2011

Engineering (Diploma), National Diploma	2012	2013	2014	2015	2016
Process Instrumentation	3	18	1	1	2
Chemical Engineering	2	5	2	2	0
Electrical Engineering	58	12	11	10	51
Industrial Engineering	15	31	18	18	9
Mechatronics	13	9	9	7	7
Mechanical Engineering	95	46	41	38	77

Source: Auto chamber representative⁵⁹

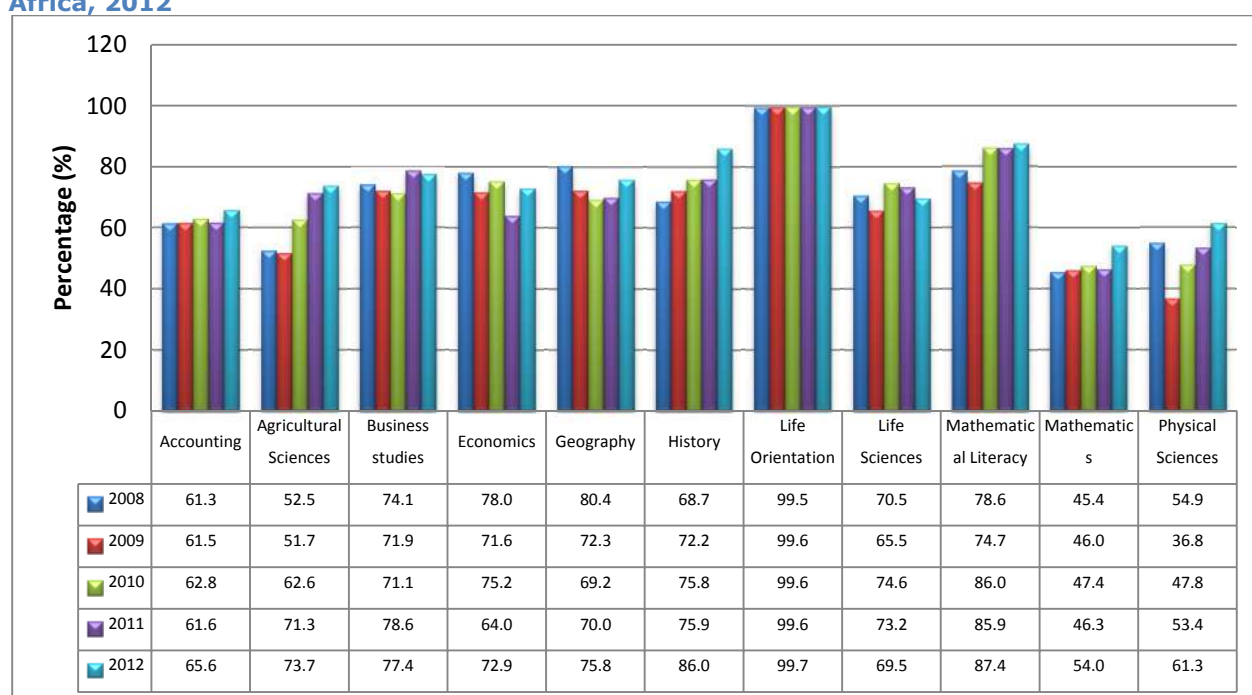
⁵⁹ Insights from primary interview held in Port Elizabeth, April 2013

Mechanical engineering and electrical engineering are dominant fields where there is high demand for the skills in the region and nationally. Although the analysis above is based on the auto chamber's estimated needs into the future, these needs are reflective of the manufacturing sector's requirements. Skills obtained in these fields are transferrable into other sectors in the manufacturing industry.

5.2.4. General education and training

The output of the general education and training (GET) sector is important to the supply of skills to merSETA sector because the number of learners graduating with maths and physical science at grades that support entry and success at higher education level in qualifications such as engineering has a direct impact on the ultimate availability of these high-level skills for the national economy and the merSETA sector.

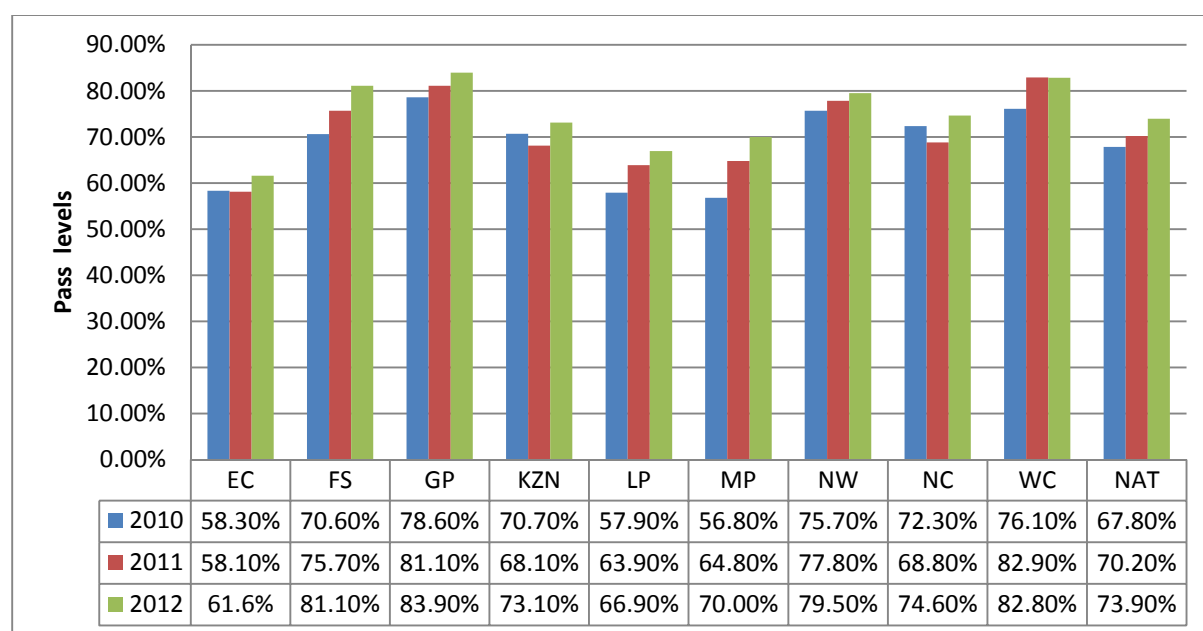
Figure 39: Candidates' performance at 30% and above in selected subjects in South Africa, 2012



Source: Department of Basic Education, 2012⁶⁰

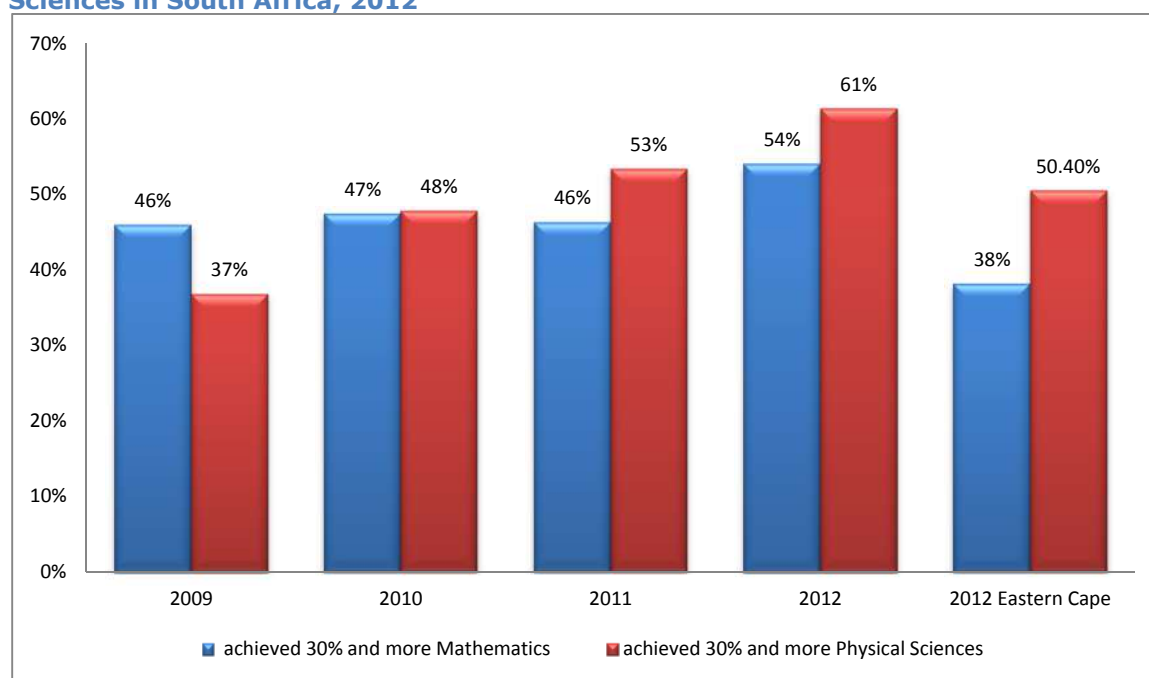
Life Orientation has consistently recorded the highest passes over the 2008-2012 periods. Mathematics and Physical Sciences have registered the lowest passes over the same period.

⁶⁰ Source: Department of Basic Education, National School Certificate 2012 results

Figure 40: Comparison of National School Certificate (NSC) passes by province, 2012

Source: Department of Basic Education, 2012

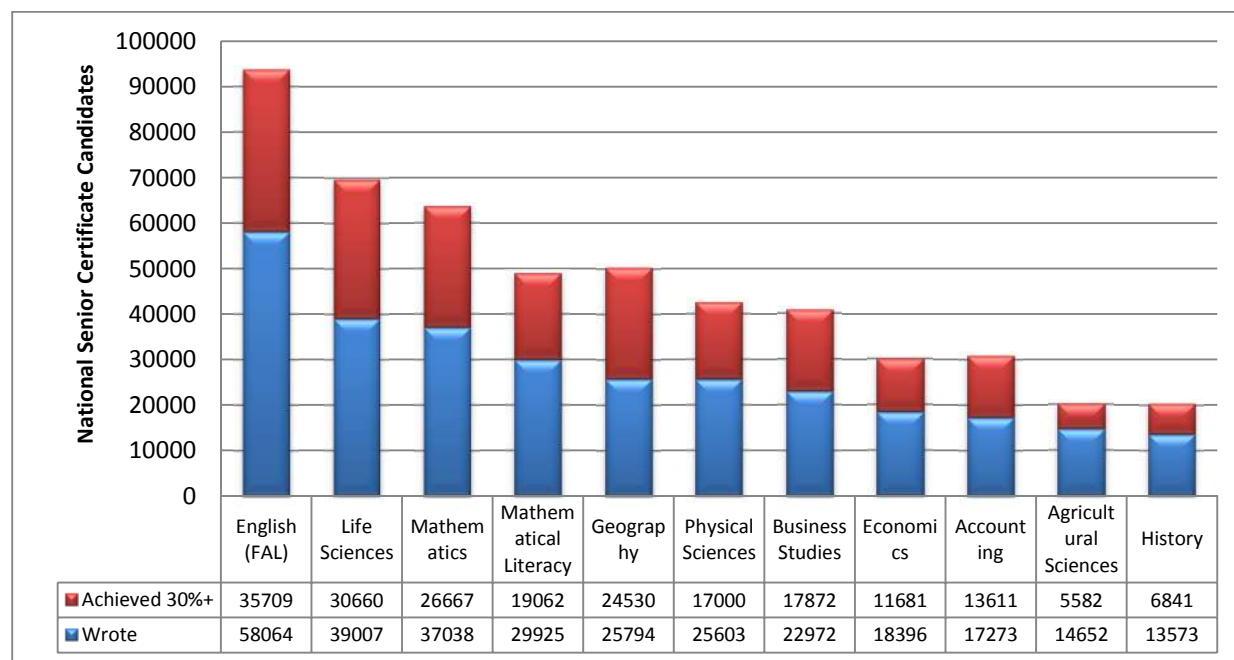
Gauteng, Western Cape and the Free State recorded the highest passes relative to other provinces in 2012. Most of the provinces have seen a gradual increase in the passes from 2010 to 2012. Eastern Cape, Northern Cape and KZN are the only provinces which experienced a marginal dip in the 2011 passes.

Figure 41: Percentage of students who achieved 30% and more in Maths and Physical Sciences in South Africa, 2012

Source: Department of Basic Education, NSCE School Subject Report

The Eastern Cape performed below the national pass rates for Mathematics and Physical Sciences. Nationally there has been a steady increase of those with passes of 30% and more.

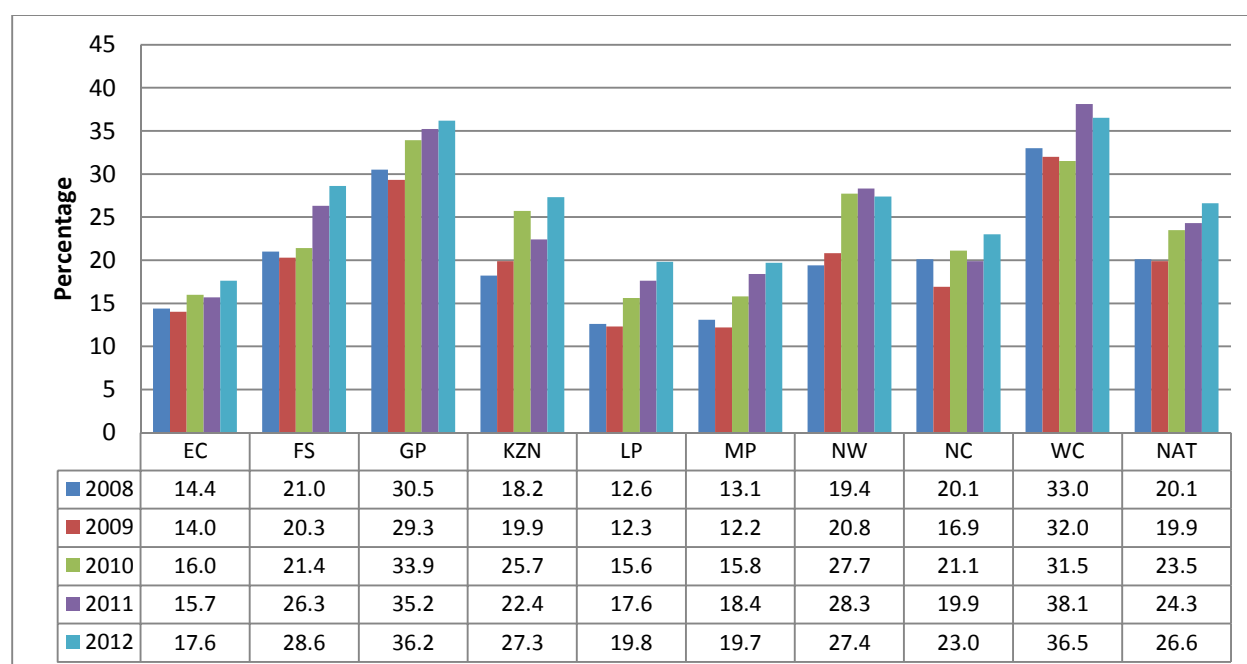
Figure 42: Students who achieved 30% and more in top 10 subjects in Eastern Cape, 2012



Source: Department of Basic Education, 2012

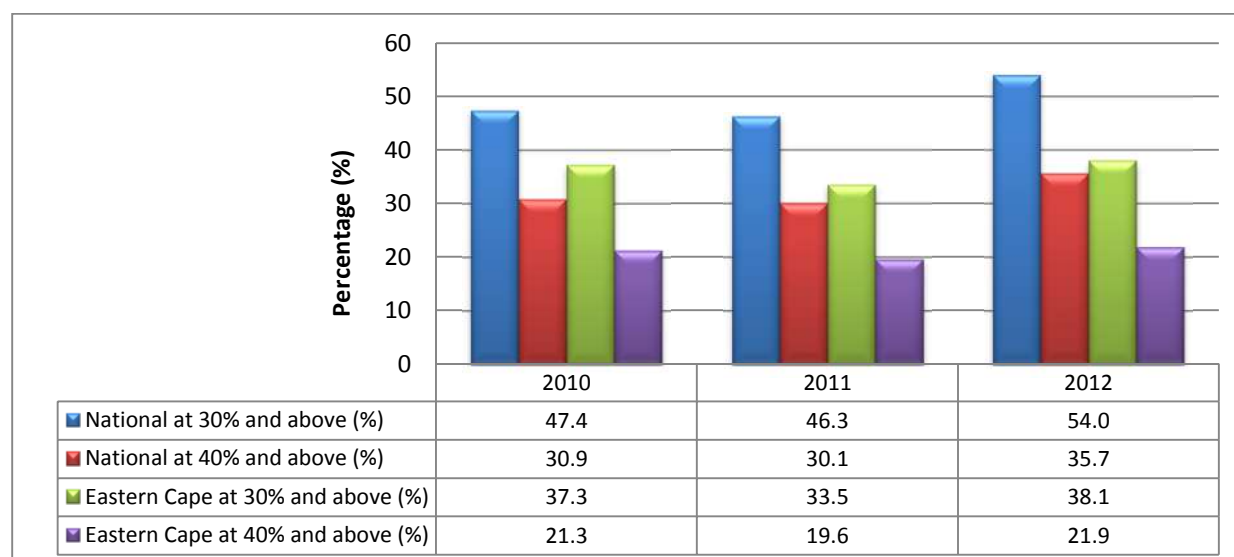
Those who attained a 30%+ mark for Mathematics and Physical Sciences stood at 38.1% and 50.4% respectively. Eastern Cape recorded the lowest pass rate for Maths and Physical Science in the country. Students performed the highest in English and Agricultural Sciences, 95.1% and 78.6% respectively.

A challenge besetting the South African education system is the low pass marks which engender a culture of mediocrity amongst the students who are leaving the high school system. Inability to achieve high marks in Maths and Physical Sciences places the country at a disadvantage as it limits the potential number of students entering into the science and engineering sector.

Figure 43: Comparison of Bachelor's passes by province, 2012

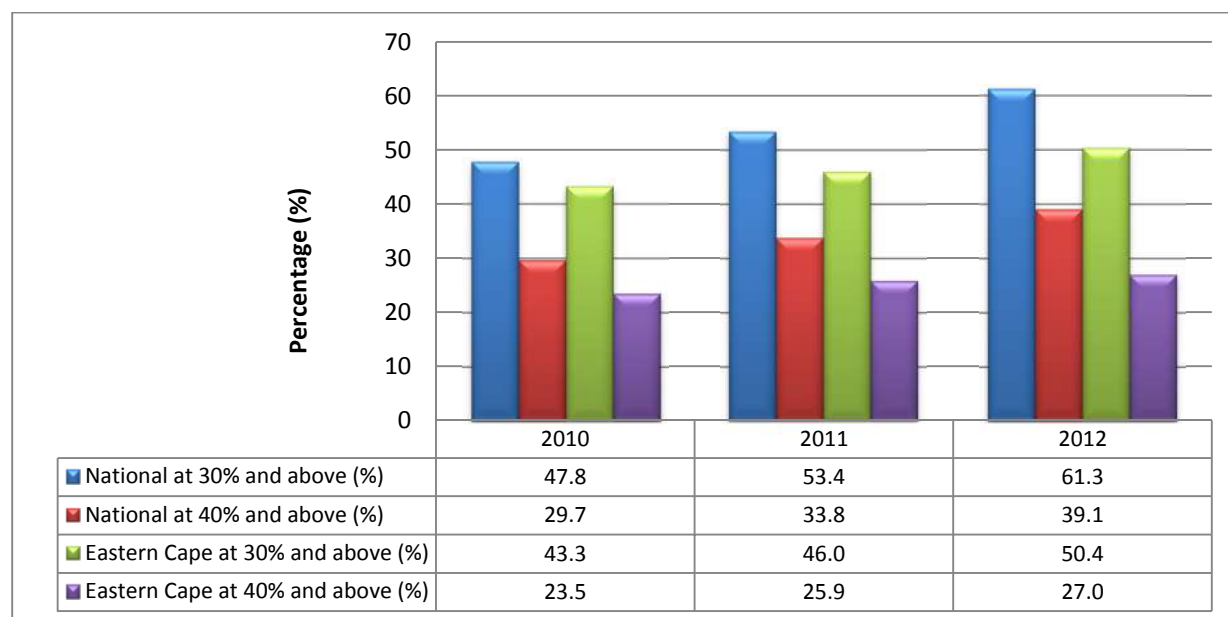
Source: Department of Basic Education, NSCE School Subject Report

The analysis of passes which were sufficient to qualify students to proceed to tertiary institutions to do a Bachelor's degree shows a significant drop from the share of those who achieved 30% and above.

Figure 44: Comparison of National and Eastern Cape Mathematics pass grades, 2012

Source: Department of Basic Education, NSCE School Subject Report

In 2012 those who attained 30% and above for all subjects stood at 73.9%, however those whose passes qualified them for a bachelor's degree stood at 26.6%. The output from high school of learners ready to be enrolled into universities is currently low.

Figure 45: Comparison of National and Eastern Cape Physical Sciences pass grades, 2012

Source: Department of Basic Education, NSCE School Subject Report

The quality of passes produced through the current matriculation system is not very high, as illustrated by the Maths and Physical sciences analysis above. An increase of 10% in the pass mark shows a large decline in the share of scholars who are managing to produce quality results.

5.3. merSETA Initiatives in the Region

The Manufacturing, Engineering and Related Services SETA is involved in a number of initiatives in the Eastern Cape. These are aimed at equipping individuals with the right skills aligned with the current and developing needs within the region.

Table 24: MerSETA initiatives in the Eastern Cape Province

Initiative	Project Description
The Nelson Mandela Metropolitan (Co-Operation Agreement)	Avail bursaries for BEng: Mechatronic programs. Placement of students in the Industry Promoting Women in Engineering
The Eastern Cape DoE, Mercedes Benz South Africa	Closely working with Public Sector Colleges in upgrading the instructors' specialist and

and Merseta private and public partnership	<p>methodological skills.</p> <p>20 apprentices to undertake training during this year.</p> <p>The training of 20 Educators and 500 learners Maths and Science – improve pipeline</p>
Government Lay-off Scheme linked to the merSETA Retrenchment assistance plan	<p>Retrenchment assistance plan (903 employees stand to benefit from merSETA companies across Eastern Cape).</p> <p>The merSETA RAP participating companies makes more than 95 % of all Eastern Cape companies participating in the government funded training lay-off scheme).</p>
Coega/merSETA (Provincial)	Coega/merSETA: through the NSF funding and merSETA employers, more than 200 unemployed learners will be trained. The spread from L2 – L4.
National Skills Fund/merSETA partnership (Provincial)	Source merSETA host companies to place NSF funded learners Buffalo City Municipality, Nelson Mandela Bay Municipality and Lukhanji local Municipality. (150 unemployed learners)
Automotive Experiential Career Development Programme (AECDP) ⁶¹	Collaboration between merSETA, NMMU and the AIDC. An educational and mentoring programme focussing on Grade 12 learners with the aim of developing, nurturing and increasing the pool of black engineers available specific to the automotive sector.
Dual System Apprenticeships	merSETA supporting PE College on the implementation of Mechatronics Dual System apprenticeships
Accelerated Artisan Training Program (AATP)	The AATP is aimed at increasing the output of artisans within the region in a short space of time. There is currently 1.4% participation through Eastern Cape employers (merSETA research team, 2012).

⁶¹ [http://amtc.nmmu.ac.za/AECDP-\(Winter-School\)](http://amtc.nmmu.ac.za/AECDP-(Winter-School))

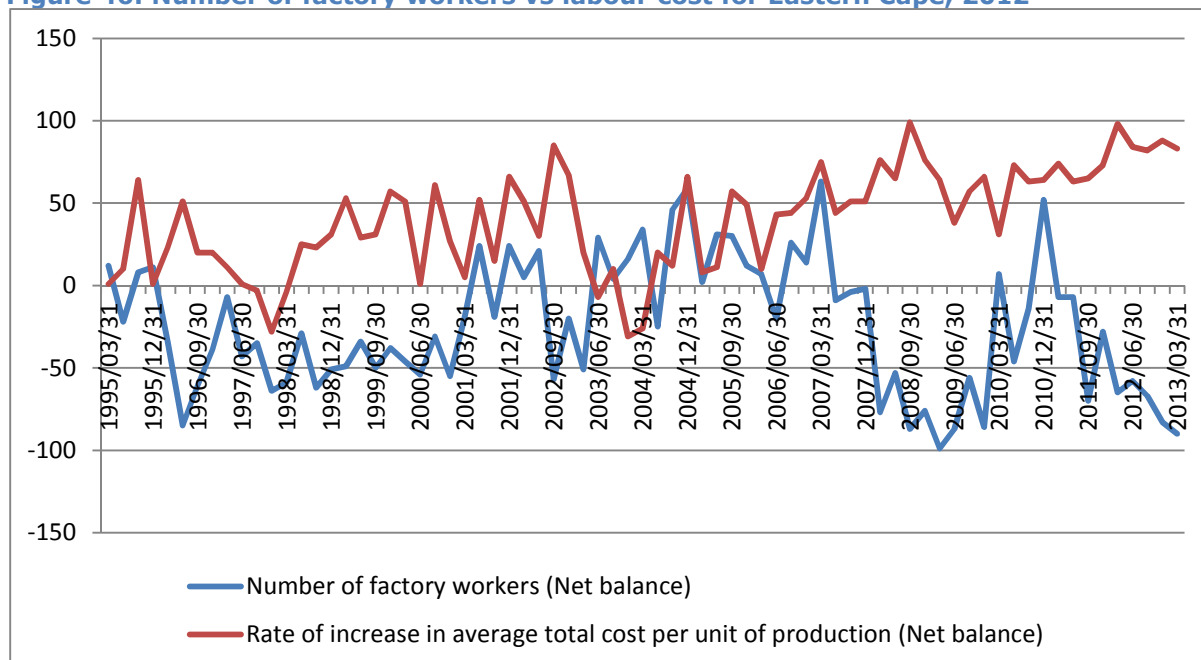
5.4. Factors that Influence Demand of Skills

Factors influencing the demand of skills mainly revolve around the cost of labour and the availability of numbers of people with the particular skills set required.

5.4.1. Cost of Labour

A major determining factor for the demand of labour is the cost of the labour. The average labour cost per unit of production has been steadily rising over the March 1995 to March 2012 period.

Figure 46: Number of factory workers vs labour cost for Eastern Cape, 2012



Source: Quantec, 2013

The Eastern Cape has seen an increase in the average cost of production since the first quarter of 2007 and this has led to a decrease in the number of factory workers employed. As the cost of labour increases more and more people lose jobs.

5.4.2. Growth prospects

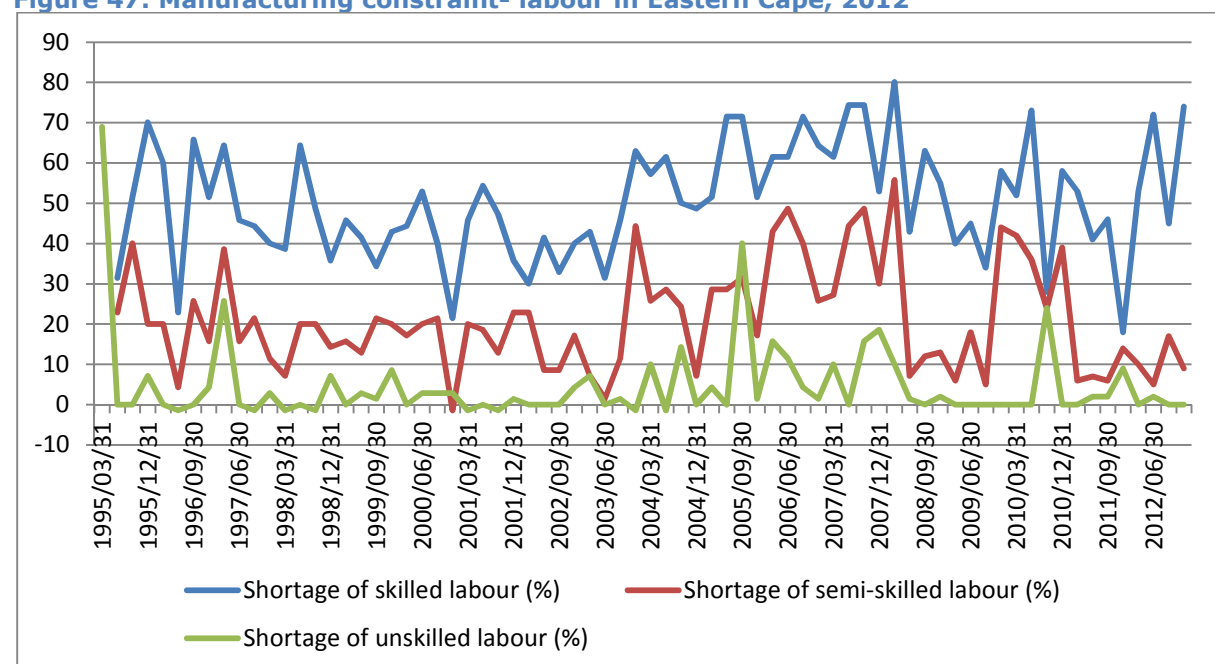
Future growth prospects in the different sectors impacts on the employment levels for the sector or demand for specific skills. Increasing automation in the manufacturing processes has resulted in a rise in demand for mechatronic skills, combination of

electrical, mechanical and computer engineering. This demand for new skills sets results in other categories becoming redundant.

5.4.3. Demand and Supply dynamics

The demand and supply of labour is influenced by the existing numbers of employed people in the labour market. Shortage of a particular skills grade in the economy determines the level of demand for people with those skills. The skilled labour force has historically recorded the highest shortages compared with the other skills categories.

Figure 47: Manufacturing constraint- labour in Eastern Cape, 2012



Source: Quantec, 2013

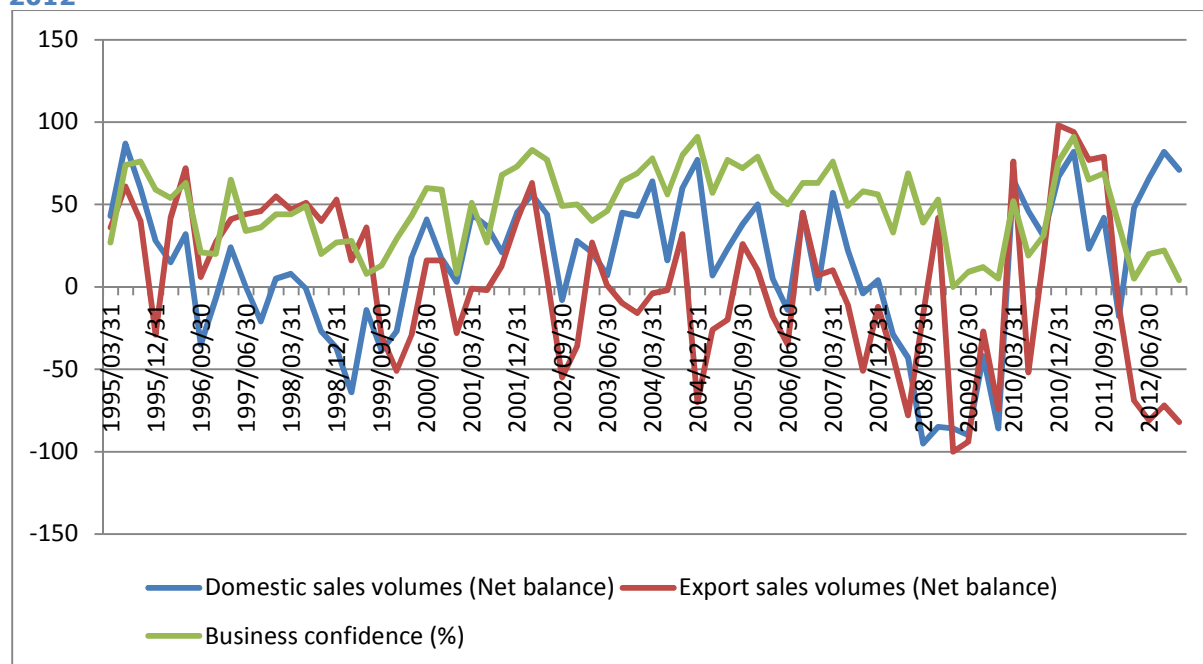
The shortage of skilled labour in the Eastern Cape has been seen as a challenge by many employers. Semi-skilled and unskilled labour is relatively easier to find. Attractiveness of the Eastern Cape Province as a place for skilled professionals is relatively lower compared to other manufacturing hubs such as GP, KZN and WC. This results in companies having to import skilled people from other regions albeit at a higher cost, since there is need to incentivise the move from the other provinces.

5.4.4. Domestic and Export Sales Volumes

Domestic sales volumes and export sales volumes are good indicators of business confidence in the country's economy. The figure above shows a positive business outlook in times of growing export and domestic sales.

As businesses experience growth in their domestic and export sales they are more likely to expand their operations, which in turn brings about an increase in their potential to employ more people. Multiplier effects which come about with increasing economic activities ultimately result in creation of new jobs across different sectors and skills grades.

Figure 48: Business confidence, export and domestic sales volumes- Eastern Cape, 2012



Source: Quantec, 2013

Business confidence in the province has been decreasing over the past 2 years from the highs recorded in 2010. A decline in business confidence indicates possible reluctance by employers to invest in new production capacity, which in turn does not bode well for skills demand.

5.4.5. Quality of the skills supplied

Demand for specific skills quality across different sectors influences the level of demand for these skills. As an example, South Africa has a number of electricians but participants from different sectors indicated there is a scarcity in high quality electricians in the country⁶². Individuals might possess the same qualification but the quality of the work which can be produced differs based on the quality of training and work experience obtained by the individuals.

⁶² Primary interviews with stakeholders in merSETA sectors

5.5. Conclusion

Labour supplied into the merSETA chambers is sourced from places such as education and training institutions at the General Education and Training (GET) level, Further Education and Training (FET) colleges and/or Higher Education and Training (HET).

The Eastern Cape national school certificate (matric) results for mathematics and physical science in 2012 were lower than the national results. Students with Bachelor's passes (which qualifies a learner for university i.e. pass 50 %+) were 26.6% of all the 2012 learners, with Eastern Cape having 17.6%.

The Bachelor passes are lower than the often trumpeted overall matric passes (which are based on passes of 30% + are for subjects written). In 2012 learners with 30%+ passes for subjects written were 73.9% of all those who sat for the final Grade 12 examinations. Such low proportions do not bode well for the national and provincial engineering skills pool. Interventions need to happen whereby schools are capacitated to ensure they can produce results of a higher standard. Interventions such as the partnerships between universities with technical high schools are expected to help in turning around the GET sector's output.

There is currently low throughput from engineering related qualifications in the Eastern Cape. The NMMU recorded the following throughput for their engineering degrees; mechanical engineering 25%, electrical engineering 33% and mechatronics 30%. These throughput rates are reflective of the prevailing national rates.

MerSETA is currently involved in a number of initiatives aimed at ensuring the skills development of workers in the merSETA chambers. Some of the programs in place include links with HET institutions to assist technical high schools, education expos in rural technical high schools and also linkages with companies in different chambers in the province.

6. SKILLS NEEDS OF THE MERSETA SECTOR

6.1. Introduction

Demand for skills in the merSETA sectors is dependent on the economic growth prospects in the country. The motor, auto, metal, plastics and tyre chambers have different skills needs but some of the occupations are common across the chambers. People with transferable skills are therefore at an advantage as they are not tied down to one particular sector.

The South African economy is moving towards being more of a knowledge based economy in line with global trends. South Africa's tertiary sector contributes more than 65% toward the country's GDP. The high level of unemployment can be attributed to (amongst other reasons) this economic structure, which is geared towards provision of 'knowledge economy jobs'.

Increasing mechanisation is one of the factors contributing to decline in employment levels. Certain jobs or activities which might have required a lot of people are being done by machines which make some roles redundant. There is an attendant need to start formulating and implementing training programs which are geared toward the development of human capital able to align with the structural changes in the country's economy.

South Africa is currently faced with a shortage of skilled labour. Different interventions aimed at increasing the provision of skills have yielded varying results. Programs such as learnerships and apprenticeships are targeted at providing opportunities for development of skills.

The Eastern Cape is one of the least developed regions in South Africa with economic activities largely geared around metropolitan areas such as East London and Port Elizabeth.

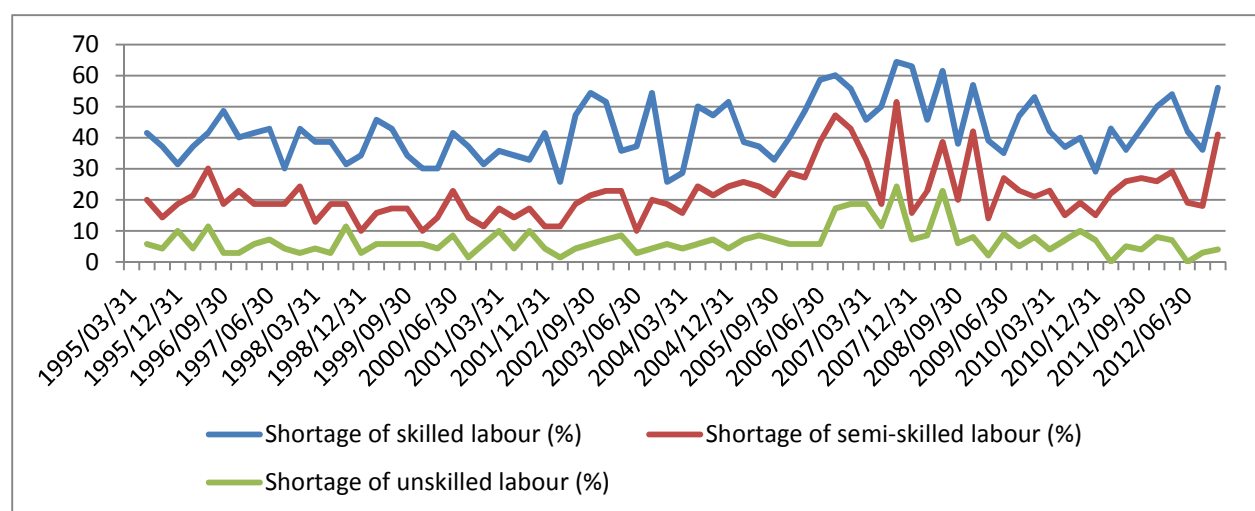
The major merSETA chambers in the Eastern Cape are motor, auto and new tyre these sectors are also the major employers within the region. Engagement with different stakeholders in the province yielded similar commentary with other provinces with regards to the major challenges faced in skills development.

The greatest challenge noted was the lack of basic fundamentals of Mathematics, English and Science by a number of learners. Absence of these fundamentals places training institutions and employers in a dilemma as they need to spend more resources (time and money) on the learners. Time lost in trying to teach someone fundamentals could have been used in equipping the person skills of the trade, and therefore employers lose out on productivity.

Another recurring theme from the different stakeholders engaged was the presence of outdated equipment and technologies at some public FET training institutions. Having Obsolete technologies results in learners not being fully equipped with practical skills which can be utilised by industry.

Companies in the province have a preference to learners coming from institutions with modernized up to date technologies. As an example, the welders produced by the Eastcape Midlands College are in demand due to the up to date technology used in training the learners. Also Port Elizabeth College has a mechatronics program which produces well rounded learners.

Figure 49: Manufacturing constraints-labour, 2012



Source: BER and Quantec (2013)

Demand for skilled, semi-skilled and unskilled labour follows the country's economic growth profile. Unskilled labour is easy to find when there is a need for such labour due to the presence of many unskilled people in the country. Skilled labour is much more difficult to obtain relative to semi-skilled labour.

In the manufacturing sector operators are mainly in the semi-skilled category. Artisans, technicians, professionals and management are in the skilled category on the skills spectrum. Industry participants have particularly pointed out a shortage in soft skills required for supervisory and management roles. Interventions are therefore required to up-skill current employees and to train up more people who can then occupy such roles.

6.2. Specific Scarce & Priority Skills

Scarce skills are defined as 'those occupations in which there is a shortage of qualified and experienced people, currently or anticipated in the future'. Priority skills are defined as 'specific key or generic and top-up skills within an occupation'. Priority skills include key or generic skills (including SAQA critical cross-field outcomes) e.g. cognitive, language, literacy and mathematical skills.⁶³

Table 25: Priority skills in the Metal chamber

Organising Framework of Occupations (OFO) Code	Occupation	Occupation Specialisation
712101	Crane, Hoist or Lift Operator (Skill Level 2)	Includes but not exclusive to Forklift Driving
399704	Metal Manufacturing Machine Setter and Minder (Skill Level 3)	
323201	Fitter (General) (Skill Level 3)	CNC (Computer Numeric Control Operator)/ Diesel Fitter/ Engineering Fitter/Fitter Machinist/ Fitter Machinist/ General Mechanical Engineering Trades Workers/ Mechanic (Diesel and Heavy Earthmoving Equipment)/ Machine Setter/ Mechanic/Maintenance Fitter/Pump Fitter

Source: Scarce & Priority Skills 2009/10

These 3 occupations comprised 77% of the skills needs in the sector in the 2009/2010 period. Other occupational categories which are on demand for the sector are engineering production system workers, welders, toolmakers and metal engineering process workers.

⁶³ Scarce & Priority Skills 2009/10

Table 26: Priority skills in the Auto sector

Organising Framework of Occupations (OFO) Code	Occupation	Qualification level	Occupation Specialisation
323502	Mechatronics Technician (Skill Level 3)	Mechatronics Learnership	Maintenance Artisan
		Mechatronic Engineering Degree	Engineering Planning
		Mechatronics Diploma	
321201	Automotive Motor Mechanic (Skill Level 3)	Motor Mechanic Learnership/ Apprenticeship	
323501	Millwright (Skill Level 3)	Millwright Apprenticeship	Maintenance Artisan

Source: Scarce & Priority Skills 2009/10

According to merSETA, the Auto Chamber's skills needs by OFO category indicates considerable demand in the Technicians and Trades Workers category, followed by Professionals and then Managers.

Table 27: Priority skills in the Motor sector

Organising Framework of Occupations (OFO) Code	Occupation	Occupation Specialisation
136201	Small Business Managers	Production Operations Manager (Small Fuel Retail Site Owner) (Skill Level 4)
		Team Manager (Shift Manager, Lower Level Site Manager or a Team Leader in the Service Station context) (Skill Level 3)
321201	Automotive Motor Mechanic (Skill Level 3)	Motor Mechanic General
324101	Panel Beater (Skill Level 3)	Panel Beater

Source: Scarce & Priority Skills 2009/10

There is dominance for demand of management skills within the Motor chamber. Sector specific technical skills include panel beaters, automotive auto mechanic and motor cycle/scooter mechanics.

Table 28: Priority skills in the New Tyre sector

Organising Framework of Occupations (OFO) Code	Occupation	Description
711506	Rubber Production Machine Operator (Skill Level 2)	Tyre Builders
		Steel & Fabric Calendering
		Rubber Moulding Machine Operators
		Extruders
		Rubber Compounding (Banbury's and 2 Roll Mills)
		Rubber Compounders
		Fabric Calendering
		Banbury Roller Die Operator
		Balanceman
		Force Operator
		Bead Creeling
		Banbury Control Room Operator

Source: Scarce & Priority Skills 2009/10

The rubber production machine operator occupation is the main category in the new tyre sector constituting over 65% of the sector occupation share. Skills which are in high demand within this occupation are tyre builders, steel & fabric calendaring and rubber moulding machine operators. Other important occupations in the sector are; fitters, electricians, product examiners, sales representatives and mechanical engineering technologists in plastics.

Table 29: Priority skills in the Plastics sector

Organising Framework of Occupations (OFO) Code	Occupation	Description
711504	Plastics Production Machine Operator (General) (Skill Level 2)	Operator
711501	Plastic Cable-making Machine Operator (Skill Level 2)	
399906	Reinforced Plastics and Composite Trades Worker (Skill Level 3)	
399705	Plastics Manufacturing Machine Setter and Minder (Skills Level 3)	Setter

Demand for operators of plastics production machinery surpasses other occupational categories.

6.3. Scarce and Priority Skills by Sub-sector

6.3.1. Motor & Auto sector

The Eastern Cape motor sector is a major contributor to the regional economic output mainly focused on the after sales and the maintenance and repair market. Some major companies in the region's motor sector (in no particular order) are McCarthy, Imperial and Barloworld.

Table 30: Eastern Cape Training Institutions providing qualifications in the motor sector

Training providers	Location
Belcomec Training (Pty) Ltd	George
Border Kei Training Center	East London
Eastcape Midlands College	Uitenhage
Eastcape Training Center	Struandale
Ford Motor Company of Southern Africa	Struandale
Grundy SA (Pty) T/A Remtec Manufacturing	Korsten
Mercedes Benz South Africa (Pty) Ltd	East London
Volkswagen of South Africa (Pty) Ltd- Technical Learning Academy	Uitenhage
Welfit Oddy (Pty) Ltd	Perserverance

Source: merSETA motor research project⁶⁴

Institutions in the Eastern Cape providing qualifications in the motor sector are mainly in metropolitan areas. East London and Port Elizabeth have the majority of these institutions.

Table 31: Eastern Cape Motor sector research findings, 2013

Focus area	Scarce skills	Priority Skills
Motor	<ul style="list-style-type: none"> -Diesel mechanics -Fitter & Turner -Automotive machinist -Boilermaker -Toolmaker, jig and dye maker -Autotronics - Components manufacturing 	<ul style="list-style-type: none"> - Diesel mechanic - Repair Shop Assistant - Diesel Pump Assistant - Motorcycle Mechanics Assistant - Body Shop Assistant - Panel beater - Spray painting

⁶⁴ Motor Research Project: Employment and Educational Skills Audit of the merSETA Chamber

	<ul style="list-style-type: none"> - Spray painting - Dual logic skills - Quality Systems Manager - Production/Operations Manager - Industrial Engineer -Industrial Engineering Technologist - Human Resource Manager - ICT Systems Analyst - Retail buyer - Purchasing officer - Mechanical Engineer - Mechanical Engineering Technician - Robotics - Motor Vehicle Examiners 	<ul style="list-style-type: none"> - Dual logic skills - Reconditioning - Body-building - Auto-electricians - Sales people with technical knowledge
<i>Auto</i>	<ul style="list-style-type: none"> -Human Resource Manager -Supply and Distribution Manager - Industrial Engineer - Mechanical Engineer - Chemical Engineer - Electrical Engineer - Accountant - Marketing Practitioner - ICT Systems Analyst - Mechanical Engineering Technician - Chemical Engineering Technician - Retail buyer - Purchasing officer -Electronic Equipment Mechanician - Mechatronic technician - Millwright - Auto-electrician - Electrician - Tool makers - Fitter and Turner - Metal Machinist - Special Class Electrician - Machinery Assembler - National Certificate Automotive Manufacturing and Assembly - Civil Engineer - Technical Trainer 	<ul style="list-style-type: none"> - Skills Development Facilitators - Motor mechanics - Spray painters

Technological advancements in the motor and auto sector have resulted in an increased need for a workforce skilled in a combination of electrical, mechanical and computer engineering. Increased emphasis in training and development people to occupy supervisory and management roles needs to be done in the Eastern Cape.

6.3.1.1. Challenges in the Motor sector

- Learners lacking the fundamentals (Mathematics, English and Science) makes the job of training institutions a lot more difficult as they need to address this lack prior to training
- There is an emphasis on producing quantity of artisans at the expense of quality i.e. going through a qualification in 1.5 years which is supposed to be completed in 3 years results in learners who are not fully competent. Focus is on certification and not necessarily on competence and experience
- Concerns have been raised of merSETA financial grants being channelled to some training institutions which do not contribute to the skills fund
- Specialization & complexity of the industry were not found to be adequately reflected in existing learning material⁶⁵
- A gap exists between NQF 3 and 7 in the following areas
 - qualifications are level and unit standard driven.
 - there is a lack of natural connect and progression between the NQF levels
 - A real split exists between levels 1 - 3 and 4 – 7 with regards to preventing needed career continuity over the long term in the enterprise.
- Some FET curricula are not geared towards providing training in the areas industry requires i.e. bodywork and spray painting are in high demand
- Non- issuance of discretionary grants has impacted ability of firms in the sector to train learners
- Use of outdated technologies in some training institutions leads to learners needing to further training upon employment, which makes FET graduates less marketable to industry

6.3.1.2. Recommendations for the sector

- In order to address the lack of fundamental basics, bridging courses for unskilled people must be implemented e.g. Adult Basic Education Training (ABET) programmes.

⁶⁵ merSETA motor chamber report, 2013

- Curricula need to include learning material on anticipated new skills which are required. In areas such as; the green agenda, technological innovation and in specialized areas such as welding, new fuel sources and supply chain and logistics.
- Reduce the amount of administration and paperwork involved for employers taking on apprentices and learners. Time is wasted on administration instead of being used on training.
- Usage of trainers who are qualified artisans helps ensure the learners don't only get a theoretical base but practical components as well prior to placement for workplace experience.
- merSETA needs to be more consistent with their funding so that training providers and employers can plan according to their needs.
- More resources should be channelled into the training of diesel mechanics. Petrol mechanics are close being oversupplied, while diesel mechanics have a shortage.
- Industry participants must be more willing to provide opportunities for learners to find placements at their organisations in order for these learners to get practical experience.

6.3.2. New Tyre

South Africa's tyre manufacturing sector is part of the automotive assembly and component manufacturing (AACM) industry. The AACM industry accounted for 6.8% of the country's 2011 GDP of R2964 billion⁶⁶. South African tyre manufacturers contributed 4% of the automotive assembly and component industry's output in 2011 with a total turnover of approximately R8.3 billion.

The tyre industry employs around 6,000 people between four multinational-owned corporations that operate six factories within South Africa: Apollo (formally Dunlop), Bridgestone, Continental and Goodyear. Eastern Cape has the highest concentration of the manufacturing facilities; Bridgestone, Continental and Goodyear have facilities in Port Elizabeth and Uitenhage. Apollo operates facilities out of Kwazulu-Natal (Durban and Ladysmith), Bridgestone also has a plant in Brits in the Northwest Province.⁶⁷

⁶⁶ South African Automotive Week Visitors' Guide, 10 – 13 October 2012

⁶⁷ *An Analysis of the South African Tyre Manufacturing Industry's skills demand profile: 2009-2020*, B&M Analysts

Table 32: New Tyre sector average age and years of experience of employees, 2012

Category	Average age	Average years' service
Executives/Senior Management	54	17
Artisans/craft	54	17
Professionals	52	16
Sales	51	15
Production workers	51	20
Admin/Clerical	49	15
Associate professionals	47	15
Apprentices/learners	26	1
Elementary / Short-term contract	22	1
Total for all categories	49	18

Source: B&M Analysts⁶⁸

The lower level elementary occupations are mainly filled by younger workers compared to the more senior occupations. There is need to increase the drive for the younger generation to begin occupying supervisory and management roles.

Table 33: Eastern Cape New Tyre sector Research Findings, 2013

Focus area	Scarce skills	Priority Skills
New Tyre: manufacturing	<ul style="list-style-type: none"> -Rubber Production Machine -Operator (Skill Level 2) -Production / Operations Manager (Manufacturing) (Skills Level 5) -Rubber Factory Worker (Skill Level 1) -Fitter (General) (Skill Level 3) -Electrician (General) (Skill Level 3) -Product Examiners (Skill Level 2) -Rubber Manufacturing -Technician (Skill Level 4) 	<ul style="list-style-type: none"> -Production / Operations Manager -Mechanical engineering technologist -Organisation and methods analyst -Sales representative /Salesman (Industrial Products) - Integrated manufacturing line technician - Fitter & Turner - Electrician - Rubber production machine operator - Plastics, composites and rubber factory worker - Product examiners

Source: merSETA SSP

⁶⁸ An Analysis of the South African Tyre Manufacturing Industry's skills demand profile: 2009-2020, B&M Analysts

In the New Tyre sector the main occupation category on demand is in the elementary occupations. There is a growing need for individuals who have practical and theoretical experience to function within the supervisory roles in the sector.

6.3.2.1. Challenges in the New Tyre sector

- Growth opportunities in the local market are reported to be limited as an outcome of modern tyre technologies that have resulted in extended life spans for many modern tyres
- The local tyre industry is highly dependent on export market opportunities i.e. as a consignment of tyres or fitted to vehicles assembled and exported from South Africa. Employment growth in the sector is therefore dependent on performance of the export market
- According to findings by B&M Analysts, "half of the more skilled employment categories (executives/senior management, professionals, associate professionals and artisans/craft) have either a Grade 12 or lower as their highest level of education"
- The tyre industry has a high average employee age which reveals deep tacit knowledge/experience, but industry cannot rely on this to meet future employment demands.
- Many employees currently have non-industry specific qualifications - future demand will require more technical qualifications
- High turnover rates among graduates, during graduate development programmes and after the completion of graduate development programmes
- Long lead times for recruitment of artisans due to lack of compatibility between base technical skills required in the tyre sector

6.3.2.2. Recommendations

- The new tyre sector should strive for a far greater focus on formal qualifications to ensure the industry has sufficient skills to sustain future operations in the sector
- A high average employee age is a cause for concern for the sector. A concerted drive to get the younger generation to participate in the sector is required. This can be through marketing & education campaigns and also provision of bursaries
- Technological advancements in the manufacturing industry have led to a greater need for people with technical knowledge. Qualifications need to be designed which are able to equip employees with skills which will enable them to work with emerging technologies

- Industry needs to proactively support the supply of technical qualifications such as BSc, BTech, N4-6 and National Diplomas focusing on electrical, chemical and mechanical engineering. Stronger partnerships with strategically located tertiary institutions must be forged⁶⁹
- The engineering skills attained by graduates make them targets from other sectors. In order to stem the turnover of graduates the tyre sector needs to provide competitive and attractive employment packages and favourable working conditions

6.3.3. merSETA Partnership with NUMSA

The merSETA Retrenchment Assistance Programme (RAP) is geared toward channeling funding for the retraining of particularly rural based retrenched merSETA workers, with additional funding obtained by NUMSA through the NSF. Rural co-operatives are trained in order to exploit locally available economic and entrepreneurial opportunities. "In general this training does not serve to benefit employers in the merSETA sector, but rather the retrenched employees themselves and the local communities in which they live."⁷⁰

6.4. Conclusion

The analysis of the scarce and priority skills in the Eastern Cape merSETA chambers is expected to assist stakeholders in formulating strategies for the region for the short, medium and long term.

Changes in the social, technological, legislative and environmental landscape have a large bearing on the skills needs and the education, training and development needs of the region. Stakeholders need therefore to be kept abreast of these changes.

⁶⁹ *An Analysis of the South African Tyre Manufacturing Industry's skills demand profile: 2009-2020*, B&M Analysts

⁷⁰ *merSETA Skills Sector Plan (SSP) 2012/2013 update*

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Deon Borchjes	Manager	VWSA Technical Learning Academy	Primary interview
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