merSETA

MANUFACTURING, ENGINEERING AND RELATED SERVICES SETA

REGIONAL SECTOR SKILLS PLAN

Western Cape Region

October, 2013

Regional Sector Skills Plan

Prepared for

Manufacturing, Engineering and Related Services SETA (merSETA)

Prepared by

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FOREWORD

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TABLE OF CONTENTS

List of Acronyms 8

EXECUTIVE SUMMARY OF THE REPORT 10

1. INTRODUCTION AND BACKGROUND 16

1.1. Introduction 16

1.2. Background 17

1.3. Research Methodology 18

1.3.1. Limitations and Areas for Further Research 19

Limitations 19

Areas of further research 20

1.4. Skills Development Legislation and Strategies 20

1.4.1. The Constitution of the Republic of South Africa 20

1.4.2. Human Resources Development Strategy for South Africa 21

1.4.3. Skills Development Act 22

1.4.4. National Skills Development Strategy (NSDS) III 22

1.5. Conclusion 23

2. REGIONAL ECONOMIC ANALYSIS OF WESTERN CAPE PROVINCE 24

2.1. Introduction 24

2.2. Economic Overview 27

2.2.1. Broad economic overview 27

2.3. Western Cape Economic Overview 29

2.3.1. Economic Sector Performance 29

2.3.2. Imports and Exports 32

2.4. Economic Outlook – Opportunities and Challenges 35

2.4.1. Opportunities 35

2.4.2. Challenges 36

2.5. Overview of the merSETA Sectors 37

2.5.1. Manufacturing Sector in South Africa 37

2.5.2. Manufacturing Sector in Western Cape 38

2.5.3. The metals sector 40

2.5.4. The automotive sector 42

2.5.5. The motor sector 43

2.5.6. The tyre manufacturing sector 44

2.5.7. The plastics sector 45

3. POLICIES AND STRATEGIES THAT IMPACT ON SKILLS DEVELOPMENT IN THE REGION 48

3.1. National Economic Growth and Development Strategies 48

3.1.1. The New Growth Path and National Development Plan 48

3.1.2. Industrial Policy Action Plan 48

3.1.3. Metals Customised Sector Plan (CSP) 49

3.1.4. Industrial Development Corporation (IDC) Jobs Scheme 49

3.1.5. National Foundry Technology Network (NFTN) 49

3.1.6. Automotive Production and Development Programme (APDP) 49
3.1.7. Industrial Development Zones and Special Economic Zones 50
3.1.8. National Infrastructure Plan and Strategic Integrated Projects 51
3.2. Regional Economic Growth and Development Strategies 53
3.2.1. Western Cape Provincial Growth and Development Strategy 53
3.2.2. Human Capital Development Strategy 53
3.2.3. Provincial Skills Development Forum 53
3.2.4. Western Cape SETA Cluster 54
3.2.5. Rural development strategies 55
3.3. Other Factors Impacting on Future Demand and Supply of Skills in the Region 56
3.3.1. Renewable energy 56
3.3.2. Wescape 57
3.4. Conclusion 57
4. THE DEMAND FOR LABOUR 58
4.1. Introduction 58
4.2. Gender and race distribution of employees 64
4.3. Age distribution of employees 66
4.4. Future Demand 68
4.5. Conclusion 73
5. LABOUR SUPPLY 74
5.1. Introduction 74
5.2. Supply of New Skills to the Sector 74
5.2.1. Higher education and training 74
5.2.2. Learnerships and apprenticeships 77
5.2.3. FET colleges 79
5.2.4. General education and training 85
5.3. merSETA Initiatives in the Region 88
5.4. Factors that Influence Demand of Skills 90
5.4.1. Cost of Labour 90
5.4.2. Growth prospects 90
5.4.3. Demand and Supply dynamics 91
5.4.4. Domestic and Export Sales Volumes 91
5.4.5. Quality of the skills supplied 92
5.5. Conclusions 92
6. SKILLS NEEDS OF THE MERSETA SECTOR IN WESTERN CAPE 94
6.1. Introduction 94
6.2. Specific Scarce and Priority Skills 95
6.3. Scarce and Priority Skills by Sub-sector 99
6.3.1. Scarce and priority skills analysis for the metals sector 99
6.3.2. Scarce and priority skills analysis for the motor and auto sector 102
6.3.3. Scarce and priority skills analysis for the plastics sector 104

6.3.4. Scarce and priority skills analysis for the boatbuilding sector 106
6.3.5. Scarce and priority skills analysis for the oil and gas sub-sector 108
6.3.6. Scarce and priority skills analysis for the renewable energy sub-sector 111
6.4. merSETA Skills Development Priorities in the Region 113
6.5. Regional Strategic Plan Linked to merSETA Priorities 114
Appendices 119
Appendix A 119
List of References 120
List of Participants in Research 123
Issues raised by stakeholders during comments stage 125

LIST OF TABLES

Table 1: Population by province, 2012 25
Table 2: Regional distribution of economy activity, 2011 29
Table 3: Sectoral Composition of the Economy GDP figures, Western Cape 2002-2011 30
Table 4: Top 5 exports from the Western Cape, 2011 33
Table 5: Opportunities and Strength by District Municipality, 2012 36
Table 6: merSETA Sector Classification 40
Table 7: DTI Funding and Employment Creation by IDZs 2002/3 - 2012/13 51
Table 8: Age distribution of merSETA employees by major occupational category Western Cape, 2012 67
Table 9: Age distribution of merSETA employees by chamber category National, 2012 67
Table 10: Average GVA and employment growth figures 68
Table 11: Employment growth figure used in the merSETA's labour demand projection 69
Table12: Demand Projections 2014 to 2018- baseline scenario, Western Cape 69
Table 13: Demand Projections 2014 to 2018: negative scenario Western Cape 70
Table14: Demand Projections 2014 to 2018- positive scenario, Western Cape 71
Table 15: FET enrolment figures by region, 2013 79
Table 16: Certification rate of FET colleges, 2012 80
Table 17: Western Cape Private FET Colleges 81
Table 18: Northlink College throughput for N1-4 and NCV Level 2-4, 2012 82
Table 19: College of Cape Town enrolments, 2012 84
Table 20: Y3K Training Institutions Enrolment and Throughput, 2013 85
Table 21: Candidates' Performance in Mathematics by province and level of achievement, 2012 86
Table 22: Number of candidates who achieved in Physical Sciences by province and level of achievement, 2012 87
Table 23: merSETA Regional Skills Development Initiatives 89
Table 24: National Scarce skills in the metals chamber, 2012 96
Table 25: National Scarce skills in the Auto sector, 2012 96
Table 26: National Scarce skills in the Motor sector, 2012 97
Table 27: National Scarce skills in the New Tyre sector, 2012 98
Table 28: National Scarce skills in the Plastics sector, 2012 99
Table 29: Western Cape Metals sector research findings, 2013 100

Table 30: Western Cape Motor & Auto sector research findings, 2013 102
Table 31: Western Cape Plastics sector research findings, 2013 104
Table 32: Western Cape Boatbuilding sector research findings, 2013 106
Table 33: Western Cape Oil & Gas sector research findings, 2013 108
Table 34: Western Cape Renewable Energy sector research findings, 2013 112

LIST OF FIGURES

Figure 1: Percentage distribution of population by province, 2011 25
Figure 2: Total Employment in South Africa, 2012 26
Figure 3: Unemployment rate by province, 2013 27
Figure 4: Provincial contribution to South African economy: 1996, 2006 and 2011 28
Figure 5: Real annual economic growth rate per region, 2011 28
Figure 6: Western Cape's Economic sectors (at basic prices), 2011 31
Figure 7: Western Cape Exports by Destination in sequence of size, 2011 32
Figure 8: Western Cape Source of Imports, 2011 33
Figure 9: Western Cape Imports of Plastics by metro and district municipality, 2011 34
Figure 10: Western Cape Imports of Rubber by metro and district municipality, 2011 35
Figure 11: Formal employment levels for the manufacturing sector, 2011 37
Figure 12: Employment figures by subsectors, 2011 38
Figure 13: Business confidence and sales in Western Cape, 2012 39
Figure 14: Manufacturing output and labour cost in Western Cape, 2011 39
Figure 15: Metal products and labour cost in Western Cape, 2011 41
Figure 16: Machinery and equipment and labour cost in Western Cape, 2011 42
Figure 17: Total car sales by region, 2012 43
Figure 18: Motor trade business confidence (index), 2012 44
Figure 19: Petroleum products output (including rubber and plastics) in Western Cape, 2011 45
Figure 20: Employment share by industry in Western Cape, 2012 (up to Q3) 46
Figure 21: Employment and unemployment in Western Cape, 2011 47
Figure 22: Employment and unemployment in South Africa, 2011 58
Figure 23: Employment and unemployment in Western Cape, 2011 59
Figure 24: Manufacturing employment in Western Cape, 2011 60
Figure 25: Manufacturing contribution to provincial employment, Q2 2012 61
Figure 26: Employment in metals sub-sector for Western Cape, 2011 61
Figure 27: Employment in machinery and equipment sector for Western Cape, 2011 62
Figure 28: Trends in high-level skills per subsector, 2011 63
Figure 29: merSETA employment by major occupational groups Western Cape, 2012 64
Figure 30: Gender distribution of employees in the sector according to occupational group, Western Cape, 2012 65
Figure 31: Racial distribution of Western Cape employees in the sector, 2012 66
Figure 32: Number of national diplomas awarded in selected engineering fields in South Africa, 2010 75
Figure 33: First degrees awarded in selected engineering fields in South Africa, 2010 76
Figure 34: University enrolments in Western Cape, 2011 77

Figure 35: Distribution of registered AATP candidates for Phase 1 to 4, 2012 78
Figure 36: Distribution of non-AATP apprenticeship by region, 2012 78
Figure 37: Comparison of National School Certificate (NSC) passes by province, 2010-2012 86
Figure 38: Comparison of Bachelor's passes by province, 2012 88
Figure 39: Number of factory workers vs labour cost for Western Cape, 2012 90
Figure 40: Manufacturing constraint of labour for Western Cape, 2012 91
Figure 41: Business confidence, export and domestic sales volumes- Western Cape, 2012 92
Figure 42: Manufacturing constraints- labour, 2012 95

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
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
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
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); Metals, 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 documentary 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. The primary research aspect

of the study involved in-depth interviews with employer representatives, labour union representatives, FET colleges, and provincial government representatives.

List of participants in the research process

Region	Number of participants
Regional Committee Meetings	25
Task Team	15
Primary Interviews	30

Interviews were conducted on a face-to-face 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 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.

3. Profile of merSETA Sector in the Region

The Western Cape province accounted for 11.3% of the South African total population of 51,770,560 in 2011. The province contributed 14.2% towards the nation's GDP in 2011. Government's increased focus on job creation and economic growth is expected to result in increased emphasis on support programs for manufacturing subsectors due to large labour absorption potential. The metals and engineering subsector is a significant contributor to the WC GDP, although employment in the sector is not as high.

4. Major Drivers in the Region

4.1. Regional Economic Growth and Development Strategies

A. Western Cape Provincial Growth and Development Strategy

The latest provincial Growth and Development Strategy (iKapa GDS) was published in November 2007, and highlights the *ikapa Elihlumayo 2014* vision of the WC as 'A Home for All'. The main aim of the iKapa GDS is 'to achieve an economic growth rate of around

6-8% over the next five years'[1]. It however noted that the lack of appropriate skills could severely constrain the efforts. It then recommends a targeted skills development as well as interventions to address current skills mismatch in the province.

B. *Strategic Infrastructure Plan (SIP)*[2]

SIPs which are likely to benefit the Western Cape economy are;

(i) SIP 5: Saldanha- Northern Cape development corridor,
(ii) SIP 6: Integrated municipal infrastructure project,
(iii) SIP 8: Green energy in support of the South African economy,
(iv) SIP 11: Agri-logistics and rural infrastructure,
(v) SIP 12: Revitalisation of public hospitals and other health facilities,
(vi) SIP 13: National school build programme
(vii) SIP 18: Water and sanitation infrastructure

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

Manufacturing - Agro-processing, fish/marine resource processing and mineral processing. Potential exists for growth in food processing, non-metallic mineral products, iron, basic steel and non ferrous metal industries

Oil and gas- the deep water port at Saldanha Bay presents an opportunity for regional growth. An offshore oil and gas supply base is being established in Saldanha and the municipality has applied for the bay to be designated as an industrial development zone

Mining- the Port of Saldanha currently serves as an export terminal for iron-ore being ferried from Sishen Iron Ore mine in the Northern Cape. Potential exists for growth in the processing of minerals in the region in line with government's plan for mineral beneficiation

Wind energy- the coastal location exposes the region to wind speeds offering opportunities for the establishment of wind farms. Currently there are two operational wind farms in the Swartland and St Helena Bay areas.

[1] Western Cape Provincial Government (2007). *ikapa Elihlumayo* Growth and Development Strategy
[2] http://www.info.gov.za/issues/national-infrastructure-plan

5. Regional Scarce and Critical Skills

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

Western Cape Scarce Skills, 2013

Motor Sector Occupations	Auto Sector Occupations	Plastic Sector Occupations	Metals Sector Occupations
Motor Mechanic General	Diesel mechanic	Pattern and mould makers in polymers	Tool making (Mould maker)
Motorcycle Mechanic	Fitter & Turner	Quality Systems Manager	Tool making (Press worker)
Panel beater	Automotive machinist	Plastic machine setters Production / Operations Manager (Manufacturing)	Tool making (Pattern maker)
Automotive Spray painter	Boilermaker	Industrial Engineer	Tool making (Designer)
Diesel Mechanic	Toolmaker, jig and dye maker	Technical Director	Electricians (High voltage)
Vehicle Body Builder	Autotronics	Mechanical Engineering Technician	Engineering Electricians (Low voltage)
Automotive Electrician	Spray painting	Manufacturing Technician	Boilermakers
Service Advisors	Dual logic skills	Spray painter	CNC Programmers & Setters
Vehicle Sales, Part Sales	Automotive Motor Mechanic	Fitter and Turner	Grinders
Automotive Machinist	Motorcycle Mechanic	Plastic Cablemaking Machine Operator	Welders
Mechanic	Panel Beater	Plastics Fabricator or Welder	Machine operators (precision tooling)
Tractor Mechanic	Vehicle Body Builder	Production Machine Operator (General)	Middle management
Diesel Mechanic	Automotive Electronics Fitter	Rotational Moulding Operator (Plastics)	Electro-mechanical Maintenance Fitter
	Vehicle Component Fitter and Repairer	Thermoforming Machine Operator	Mechanician
	Paint Shop Assistant & Color matching/mixing	Plastics Manufacturing Machine Minder	Plant Maintenance Fitter
	Polisher	Reinforced Plastics and Composite Trades Worker	Millwright

	Auto Trimmer/upholsterer	Product Assembler	Pipe Fitting
	Paint Less dent removal		
	Paint defects		
	Payroll Administrator		

6. Regional Strategic Plan

6.1. Regional Strategic Plan Linked to merSETA Priorities- Summary

The RSSP aimed on identifying 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 also input from the research team.

NSDS III Priorities	Regional Strategic Plan
Priority 1: develop a labour market intelligence system and facilitate sector specific research initiatives	i. Short to Medium Term Priorities – Address any gaps in the OFO codes and develop appropriate alternate job titles that accurately reflect work specialization – Integrate the system with the envisaged NAMB/DHET database – Link Industry grading to Trade careers. e.g. General worker to Qualified Artisans – Collate all research done in the Province via FETI, PSF,SETA,s etc Do applied industry based regional research to validate skills intelligence ii. Long Term – Do applied industry based regional research to validate skills intelligence – Work with industry to promote quality information input into the WSP's
Priority 2: promote artisan and sector-specific priority skills	i. Short to Medium Term Priorities – Ensure grant allocation according to identified scarce and priority skills. – Encourage employers to: o Take up more learners for experiential learning, o Retain trained artisans to help them get experience. o Release employees to get up-skilled with artisans standing in to reduce potential production downtime – 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) – Address the need for Continuous Professional Development (CPD) in FET colleges through partnerships with industry
Priority 3: establish and facilitate strategic partnerships	i. Short to Medium Term Priorities – Encourage partnerships and collaboration between employers and FETs so that FETs can have: o Modern training equipment 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 collaborative partnerships Eskom, Transnet, Energy SETA, Provincial Government and other stakeholders involved in the rollout of SIPs. This will help merSETA train people who are currently unemployed – Develop course articulation from FET NQF 4 to NQF 5 to further encourage

	vertical career path articulation into Universities of Technology ii. Long term – Map current and future industry growth areas on a continuous basis in collaboration with key stakeholders – Development of a close working relationship with other SETAs whose skills needs align with merSETA to ensure targeted interventions without duplication of efforts (i.e. merSETA can channel funds to the ETDPSETA to equip and train lecturers with technical expertise)
Priority 4: increase the flow of appropriately skilled new entrants into the system	i. Short to Medium Term Priorities – Develop and strengthen partnership with GET schools to increase pass rates especially in Maths, English and Science – Forging stronger partnerships with HET institutions to ensure industry receives technical qualifications such as BSc, BTech, N4-6 and National Diplomas focusing on electrical and mechanical engineering – Use of trainers and facilitators who have industry experience important i.e. use qualified artisans with experience in the skilling of learners – Refresher courses and up-skilling of trainers and facilitators required to ensure learners get up to date knowledge
Priority 5: develop the skills of the existing workforce	Short to Medium Term Priorities – 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 – In partnership with Productivity SA and organized labour deliver improved productivity programmes at shop floor level. – Constant up-skilling of employees in the usage of modern technologies is essential Long Term Priorities - Develop a new, innovative and flexible model for Recognition of Prior Learning (RPL) - Offer a cohesive RPL strategy for all sectors, in partnership with FETs and NAMB and the allocation of funding accordingly

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

Western Cape has some unique sectors which are not chambers in merSETA but are related industries. The Oil & Gas and the Boatbuilding sector are major contributors to the Western Cape provincial economy. Some of the skills development needs of these sectors are aligned with the needs of merSETA chambers. Strategic partnerships can be reached between merSETA and organisations representing these sectors to align the education, training and development strategies for the region.

`

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 development in the following five sub-sectors (or chambers); Metals, 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 metals, and metals 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 petrol retail subsector from the merSETA to the Wholesale and Retail SETA (W&RSETA)[3]. However, it is not possible at this stage to separate fuel station operations from the data for the rest of the group.

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 almost all of the merSETA's subsectors 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.

[3]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).

This Regional Sector Skills Plan (RSSP) is aimed at unpacking the regional specificity of the merSETA subsectors. To the best of our knowledge, 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 Western Cape Province 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 critical 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 where 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.

List of participants in the research process[4]

Region	Number of participants
Regional Committee Meetings	25
Task Team	15
Primary Interviews	30

Interviews were conducted on a face-to-face 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
- Implementation strategies and recommendations to address challenges faced

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 2012/13.

The database which was used for the WSP 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

[4] Some of the interviewees were part of the regional committee meetings and task team meeting

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 get glossed over or overemphasised depending on respondents interviewed. Assent for the final 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 did not give exact numbers of the people 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 sectoral 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 citizens[5]. 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 started to be implemented 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.[6]

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 communities[7].

The HRDSA is a coordinated framework intended to combine key levers of the constituent parts of the HRD System into a coherent strategy[8]. 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)[9].

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.

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[5] Republic of South Africa (RSA). (1996). Constitution of the Republic of South Africa Act 108 of 1996. Pretoria: Government Printer. 1996:14.
[6] Republic of South Africa (RSA). (2001). *Human Resource Development Strategy of South Africa*. Pretoria: Government Printer.
[7] Revised HRDSA, 2009:30. Online. Available: http://www.info.gov.za/view/DownloadFileAction?id=117580 (Accessed: 11 January 2013)
[8] Republic of South Africa (RSA). (2009:31-32). *Revised Human Resource Development Strategy of South Africa 2010 - 2030*. Pretoria: Government Printer.
[9] Republic of South Africa (RSA). (2009:31-32). *Revised Human Resource Development Strategy of South Africa 2010 - 2030*. Pretoria: Government Printer.

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 developing the skills of the South African workforce. The two Acts, together with the other regulations published in terms of them (and the amendments thereof[10]), 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

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.[11]

[10] Skills Development Amendment Act, No. 37 of 2008.
[11] DHET (2011) *National Skills Development Strategy III*

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. REGIONAL ECONOMIC ANALYSIS OF WESTERN CAPE PROVINCE

2.1. Introduction

The Western Cape's (WC's) land area is 129,462 square kilometres, which is 10.6% of the country's land area. In 2011 the province was home to approximately 11.3 percent of the nation's population. The main economic activities in the province are agriculture, finance and services, petroleum and gas, printing and publishing, information and communications technology and manufacturing.[12] Major languages spoken in the Western Cape are Afrikaans 49.7 percent, isiXhosa 24.7 percent and English 20.2 percent.

Major exports from the Western Cape are mainly from the agricultural, forestry and fishing and the food and beverage sectors. In 2011 this sector contributed 22.6 percent of the national output. The two main export products are raw, dried and processed fruit as well as wine.[13]

Western Cape's manufacturing sector contributed 14.6 percent of the 2011 national manufacturing output.[14] The Western Cape manufacturing sector is the third-largest contributor to the national manufacturing sector, after Gauteng and KwaZulu-Natal. "Despite recent slowdowns for the clothing and textile industry, it remains the most significant industrial source of employment in the province. Cape Town remains the economic hub of the province, encompassing industrial areas such as Epping, Montagu Gardens, Parow and Retreat."[15]

In 2011 the secondary sector in the province contributed 30.6 percent of Western Cape's GDP.[16] Manufacturing constitutes approximately 80.0 percent of the secondary sector output, construction 15.0 percent and electricity & water 6.5 percent.[17] The Western Cape's distance from the country's major markets resulted in the dominance of light/precision manufacturing in the region. Regions such as Gauteng and KwaZulu-Natal have a dominance of heavy manufacturing due to proximity to raw materials and also to markets.[18]

[12] South African Business Publication *Western Cape Province* p234
[13] A Macroeconomic Assessment of Western Cape Sectoral Economic Prospects 2010-2015
[14] http://www.southafrica.info/about/geography/western-cape.htm#ixzz2HYcdEsAw
[15] A Macroeconomic Assessment of Western Cape Sectoral Economic Prospects 2010-2015
[16] StatsSA- P0441 (own calculations)
[17] StatsSA- P0441 (own calculations)
[18] Insights from interview with Metals company representative, April 2013

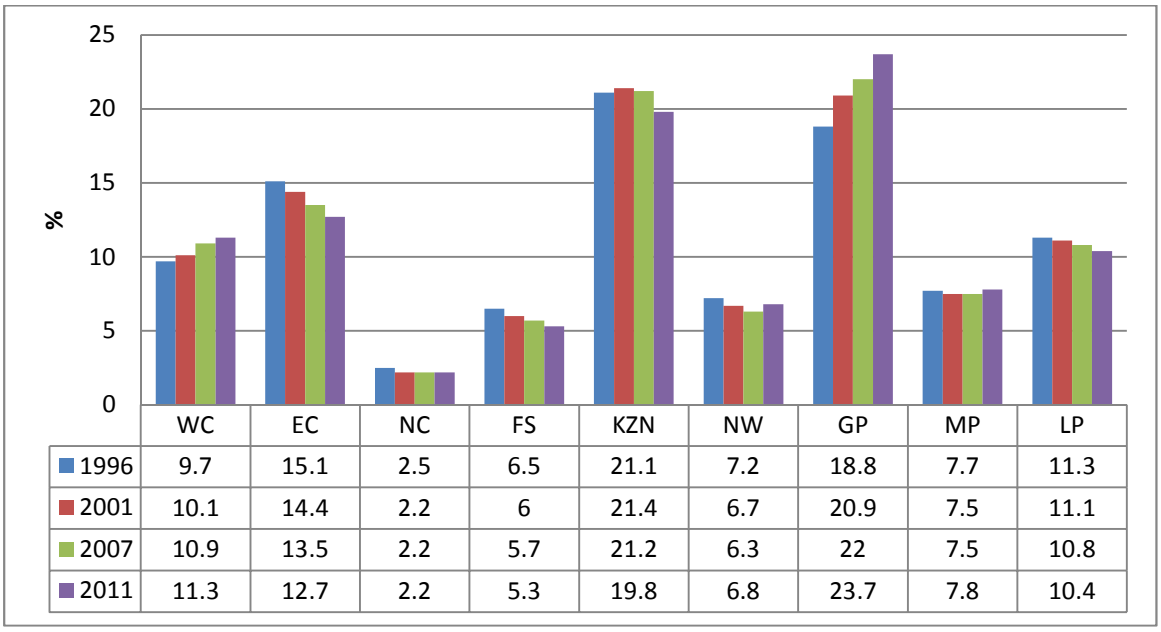
Table 1: Population by province, 2012

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, 2012

WC has around 5.8 million people, which is around 11.3% of the SA population. The province recorded an increase in population of 10.3% from 2007 to 2011. It is one of the four provinces which had a positive net migration, together with North West, Mpumalanga and Gauteng[19].

Figure 1: Percentage distribution of population by province, 2011



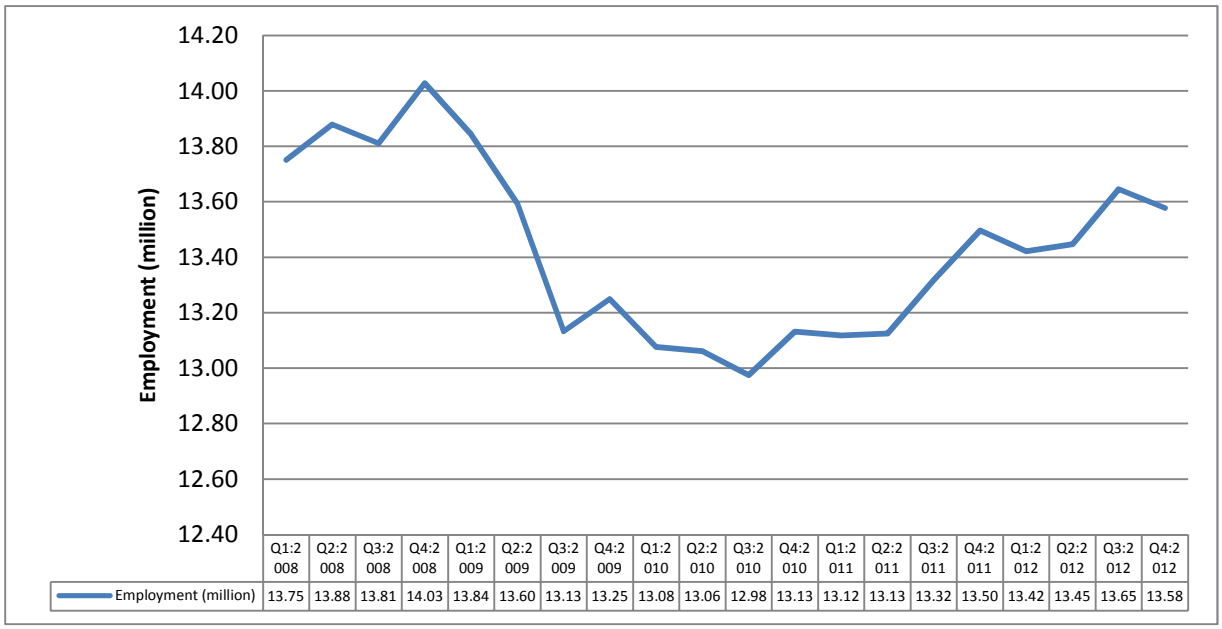
	WC	EC	NC	FS	KZN	NW	GP	MP	LP
1996	9.7	15.1	2.5	6.5	21.1	7.2	18.8	7.7	11.3
2001	10.1	14.4	2.2	6	21.4	6.7	20.9	7.5	11.1
2007	10.9	13.5	2.2	5.7	21.2	6.3	22	7.5	10.8
2011	11.3	12.7	2.2	5.3	19.8	6.8	23.7	7.8	10.4

Source: Stats SA, 2012

WC's unemployment rate was 21.8% in 2011. This was lower than the national average of 25.7%. According to the Stats SA Labour Force Survey (2012), WC unemployment increased from 22.8% in first quarter of 2012 to 23.2% in the second quarter.

[19] Stats SA, 2011 Census

Figure 2: Total Employment in South Africa, 2012



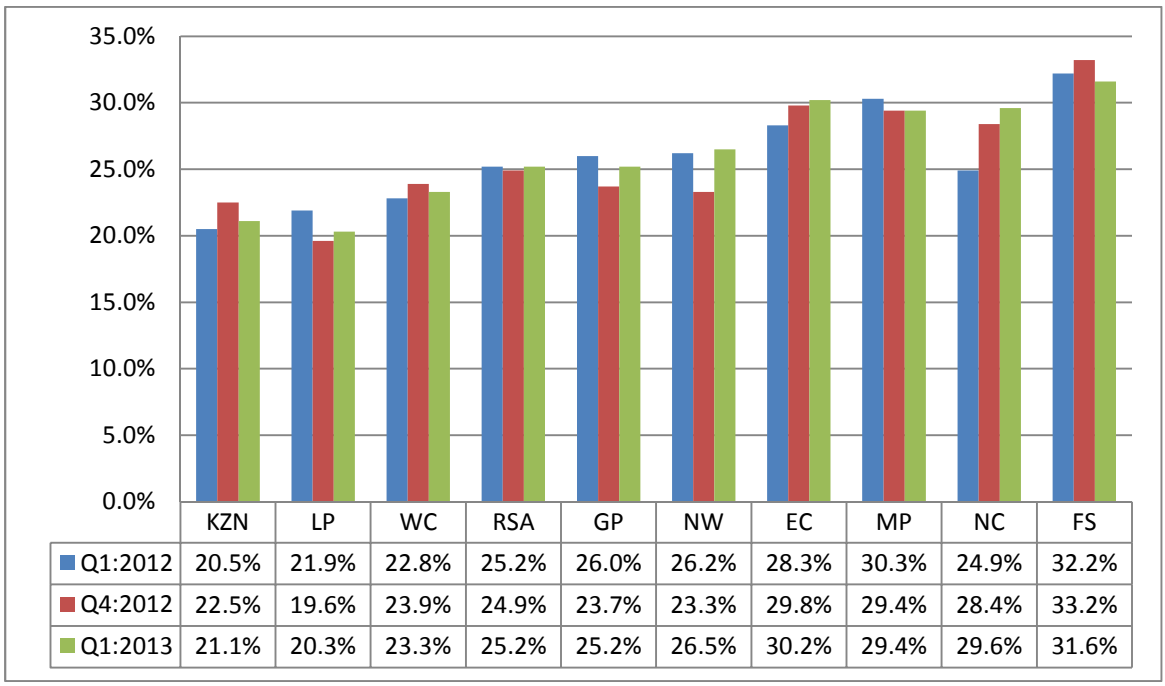
Source: Stats SA Statistical Release P0211[20]

Employment in South Africa 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.

[20] StatsSA Quarterly Labour Force Survey, Q4 2012

Figure 3: Unemployment rate by province, 2013



	KZN	LP	WC	RSA	GP	NW	EC	MP	NC	FS
Q1:2012	20.5%	21.9%	22.8%	25.2%	26.0%	26.2%	28.3%	30.3%	24.9%	32.2%
Q4:2012	22.5%	19.6%	23.9%	24.9%	23.7%	23.3%	29.8%	29.4%	28.4%	33.2%
Q1:2013	21.1%	20.3%	23.3%	25.2%	25.2%	26.5%	30.2%	29.4%	29.6%	31.6%

Stats SA: Quarterly Labour Force Survey 2013

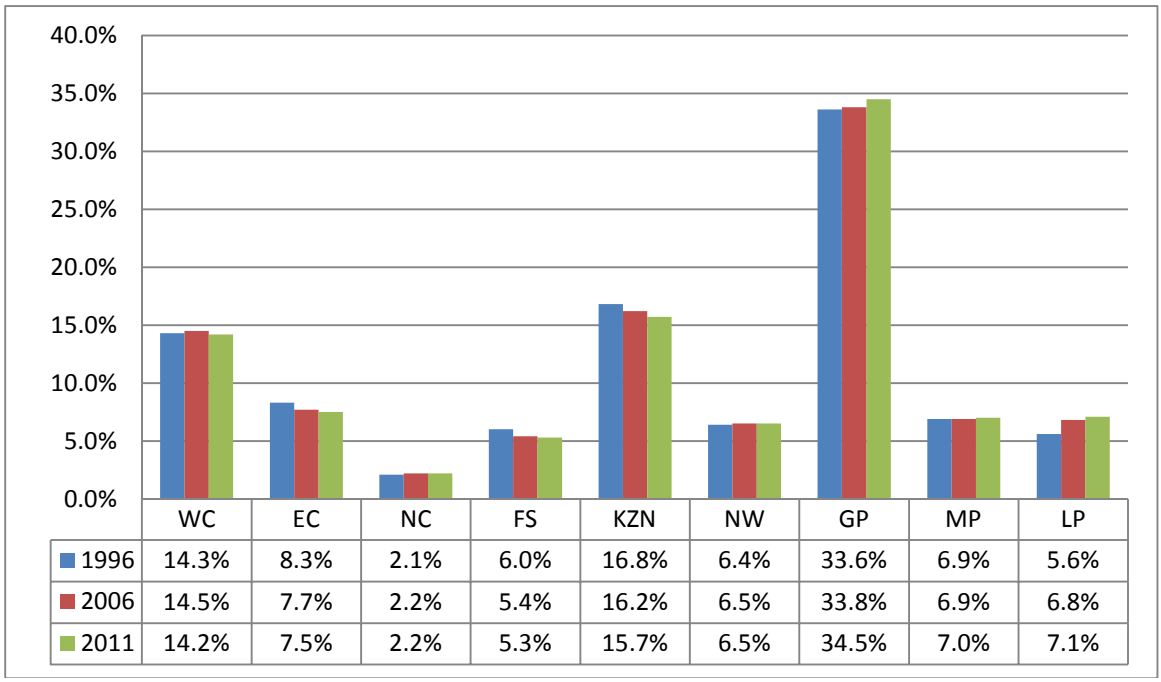
Compared to other provinces, WC's unemployment is only higher than KZN and Limpopo and is below national average. Just like Free State, unemployment rates have been increasing in WC from 21.8% in the second quarter of 2011 to 23.2% in 2012.

2.2. Economic Overview

2.2.1. Broad economic overview

WC's economy is the third contributor to the national economy, after Gauteng and KZN. Its contribution has slightly decreased from 14.3% in 1996 to 14.2% in 2011. As shown below KZN, Eastern Cape and Free State's contribution to the national economies are decreasing while that for Gauteng and Limpopo is increasing.

Figure 4: Provincial contribution to South African economy: 1996, 2006 and 2011

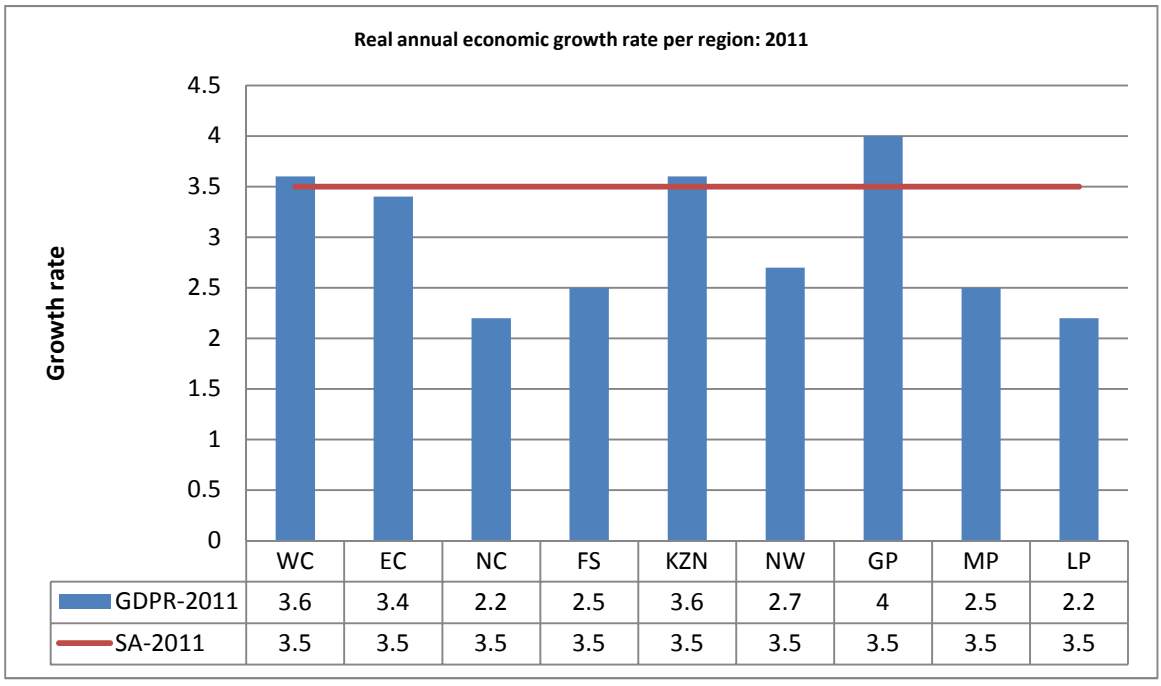


	WC	EC	NC	FS	KZN	NW	GP	MP	LP
1996	14.3%	8.3%	2.1%	6.0%	16.8%	6.4%	33.6%	6.9%	5.6%
2006	14.5%	7.7%	2.2%	5.4%	16.2%	6.5%	33.8%	6.9%	6.8%
2011	14.2%	7.5%	2.2%	5.3%	15.7%	6.5%	34.5%	7.0%	7.1%

Source: Stats SA, 2012

The WC's real annual economic growth rate for the year 2011 was 3.6%. This was higher than the national average of 3.5%, but lower than Gauteng of 4%.

Figure 5: Real annual economic growth rate per region, 2011



	WC	EC	NC	FS	KZN	NW	GP	MP	LP
GDPR-2011	3.6	3.4	2.2	2.5	3.6	2.7	4	2.5	2.2
SA-2011	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

Source: Stats SA, 2012

In terms of sector contribution to the national economy, the table below shows that WC's economy is dominated by agriculture, forestry and fishing which contributes 22.6% to the national sector output; finance (19.7%); construction (17.9%); wholesale and retail (17.4%); transport (15.4%) and manufacturing (14.6%).

Table 2: 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	0.4	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	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	***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

Source: Stats SA, 2012

The manufacturing sector in WC is the third largest in the country after Gauteng (40.5%) and KZN (21.6%). Northern Cape has the smallest manufacturing sector; contributing only 0.4% to the country's total manufacturing output.

2.3. Western Cape Economic Overview

2.3.1. Economic Sector Performance

Western Cape is dominated by tertiary industries which contributed 68.0% of the regional GDP. Primary and secondary sectors contributed 3.8% and 18.2% respectively, in 2011. A historical analysis of the Western Cape economy from 2002-2011 is presented in the table below. This sector analysis also identifies the sub-sectors that are growing and those that are shrinking in terms of their economic contribution.

Table 3: Sectoral Composition of the Economy GDP figures, Western Cape 2002-2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Primary industries	**6,1**	**4,9**	**4,5**	**4,1**	**4,3**	**4,6**	**4,4**	**4,4**	**3,9**	**3,8**
Agriculture, forestry and fishing	5,8	4,6	4,3	3,9	4,1	4,4	4,1	4,1	3,6	3,5
Mining and quarrying	0,2	0,2	0,2	0,2	0,2	0,2	0,3	0,3	0,2	0,3
Secondary industries	**22,7**	**22,7**	**21,6**	**21,8**	**20,5**	**20,3**	**21,1**	**20,7**	**19,4**	**18,2**
Manufacturing	18,2	18,1	17,3	16,9	15,6	15,3	15,6	14,2	13,2	11,8
Electricity, gas and water	1,5	1,7	1,5	1,5	1,5	1,5	1,6	2,0	1,8	2,0
Construction	3,1	2,9	2,8	3,4	3,5	3,6	3,9	4,5	4,3	4,3
Tertiary industries	**62,2**	**63,3**	**63,6**	**63,5**	**64,2**	**63,9**	**64,1**	**65,5**	**67,3**	**68,0**
Wholesale ,retail and motor trade; catering and accommodation	14,1	14,4	15,0	14,1	14,9	14,5	14,4	15,3	16,4	17,0
Transport storage and communication	9,2	9,2	8,8	9,1	9,0	8,3	8,9	8,8	8,9	9,1
Finance, real estate and business services	24,8	25,5	26,2	26,4	26,8	28,0	27,3	26,7	27,1	26,6
Personal services	4,8	4,9	4,8	4,9	4,8	4,7	4,6	4,9	4,7	5,1
General government services	9,3	9,3	8,9	9,1	8,7	8,4	8,9	9,8	10,1	10,2
All industries at basic prices	**91,0**	**90,8**	**89,8**	**89,3**	**89,0**	**88,8**	**89,7**	**90,5**	**90,5**	**90,0**
Taxes less subsidies on products	9,0	9,2	10,2	10,7	11,0	11,2	10,3	9,5	9,5	10,0
GDPR at market prices	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**

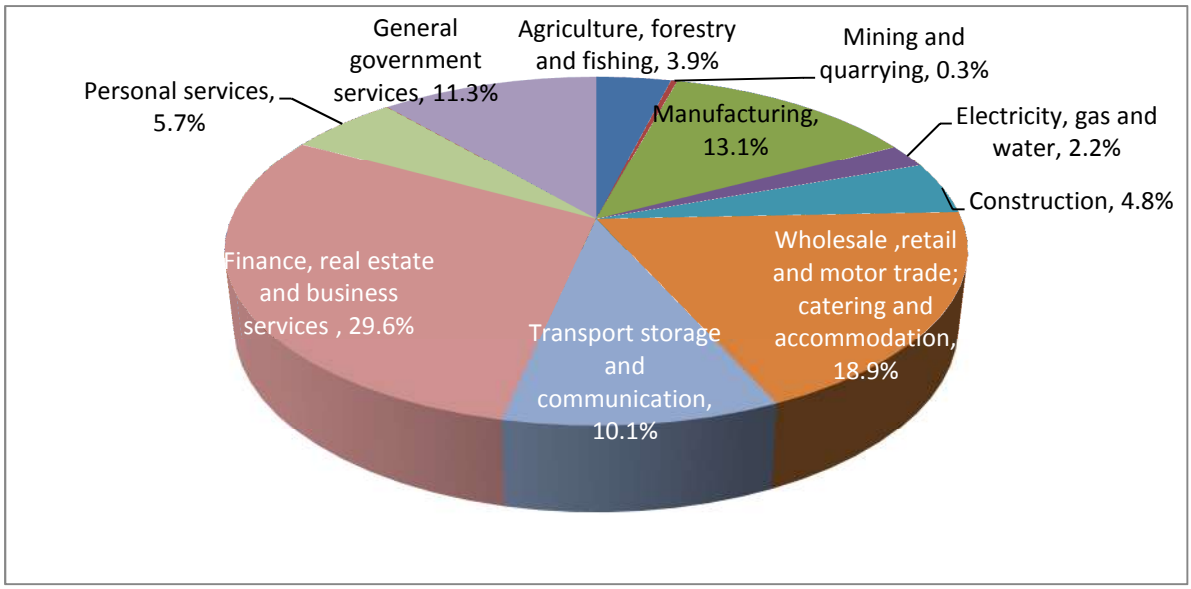
Source: Stats SA, 2012

Primary industry contribution in the WC declined from 6.1 to 3.8% from 2002 to 2011. This decline is largely attributed to the reduced contribution of the agriculture, forestry and fishing sector. In 2002 the manufacturing sector contributed 18.2% and decreased to 11.8% in 2011. Following 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 62.2% to 68% over the same period.

The region's relatively higher exposure to export performance as a source of growth compared to the rest of South Africa makes the WC more vulnerable to global economic developments over the short term. In 2011, approximately 40 per cent of WC exports went to Europe in comparison with only 25 per cent from the rest of South Africa.[21] Access to the export market enables manufacturers in the province to operate at high standards which give them a competitive advantage over manufacturers in other regions.

[21] Western Cape Provincial Economic Review & Outlook 2012
http://www.westerncape.gov.za/text/2012/9/pero-2012.pdf

Figure 6: Western Cape's Economic sectors (at basic prices), 2011



Source: Stats SA and own calculations

Manufacturing constituted 13.1% of the 2011 regional GDP. The metals and engineering subsector is a significant contributor to the WC GDP, although employment in the sector is not as high. "Tool making and foundries comprise key industries in the WC metals and engineering sector, while the development of the metals & structural steel downstream industry around Saldanha has become a priority."[22] Saldanha Bay situated north of Cape Town is South Africa's only natural harbour and is a major harbour used for the export of iron.[23]

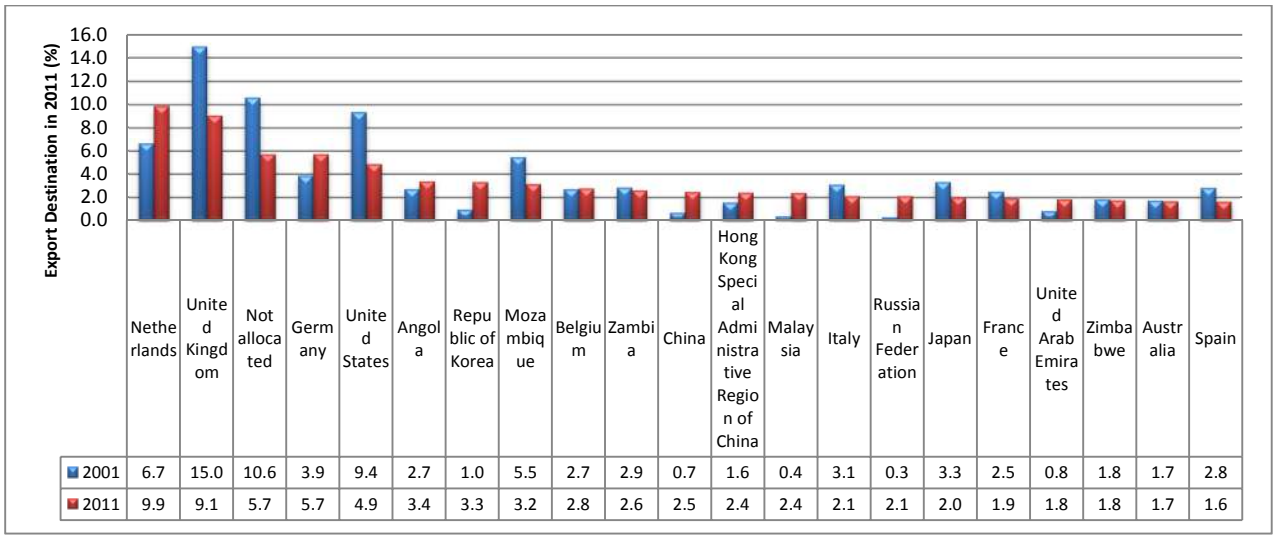
"The WC's exports of base metals and articles of base metal were valued at R3.4bn in 2011 compared to R3.9bn in 2010, decreasing by 13%, while imports of base metals and articles of base metal were valued at R2.9bn in 2011 compared to R2.4bn in 2010, increasing by 21%. Copper, copper alloy, waste or scrap was the Western Cape's largest export of base metals and articles of base metal in 2011, valued at R857m. Flat-rolled iron/steel and ferrous waste or scrap, ingots or iron or steel were ranked second and third valued R667m and R215m respectively." [24]

"Flat-rolled iron/steel was the WC's largest import of base metals and articles of base metal in 2011, valued at R216m. Rolled stainless steel sheets (R162m) and table, kitchen, household items of iron or steel (R136m) were ranked second and third respectively."[25]

[22] Western Cape Provincial Economic Review & Outlook 2012 http://www.westerncape.gov.za/text/2012/9/pero-2012.pdf
[23] South African Business Publication *Western Cape Province* p234
[24] WESGRO Metals Sector Fact Sheet, 2012
[25] WESGRO Metals Sector Fact Sheet, 2012

2.3.2. Imports and Exports

Figure 7: Western Cape Exports by Destination in sequence of size, 2011



	Netherlands	United Kingdom	Not allocated	Germany	United States	Angola	Republic of Korea	Mozambique	Belgium	Zambia	China	Hong Kong Special Administrative Region of China	Malaysia	Italy	Russian Federation	Japan	France	United Arab Emirates	Zimbabwe	Australia	Spain
2001	6.7	15.0	10.6	3.9	9.4	2.7	1.0	5.5	2.7	2.9	0.7	1.6	0.4	3.1	0.3	3.3	2.5	0.8	1.8	1.7	2.8
2011	9.9	9.1	5.7	5.7	4.9	3.4	3.3	3.2	2.8	2.6	2.5	2.4	2.4	2.1	2.1	2.0	1.9	1.8	1.8	1.7	1.6

Source: Quantec, 2013

Major export destinations for the WC in 2011 were Netherlands, United Kingdom, Germany and the United States. A marked decline from 2001 was experienced in the exports from the province up to 2011.

The most dominant trading partner for the WC is the European Union (EU), which accounted for 37.4 per cent of the 2011 Western Cape's goods exports. The EU market is the major importer of the WC's agricultural exports; edible fruits & nuts are leading export products to major EU markets such as the Netherlands and the UK.[26]

Southern African Development Community (SADC) countries constituted 14.0% of the 2011 exports. Angola, Mozambique, Zambia and Zimbabwe are the main African destinations of exports from the Western Cape. "The SADC market absorbs a substantial share of industry exports from the Western Cape. Sixty one per cent of exports to SADC comprise manufacturing of goods (excluding food & beverages), and one third are agricultural, food, beverage & tobacco exports."[27]

[26] Western Cape Provincial Economic Review & Outlook- 2012
[27] Western Cape Provincial Economic Review & Outlook- 2012

Table 4: Top 5 exports from the Western Cape, 2011

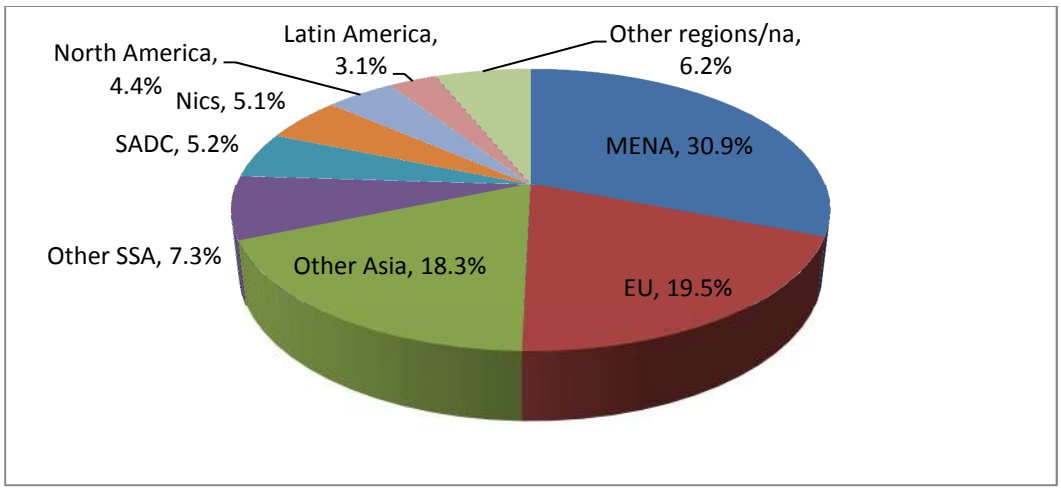
	Products	2011 Percentage (%)
HS 08	Edible fruit, nuts, peel of citrus fruit, melons	22.4
HS 22	Beverages, spirits and vinegar	11.7
HS 27	Mineral fuels, oils, distillation products, etc.	11.5
HS 84	Nuclear reactors, boilers, machinery, etc.	7.5

Source: Trade Map, 2012

The top 5 exported products listed in Table 5 constituted 53.1% of total exports from the WC Province in 2011. Fruit production is a major activity within the province, especially in the Ceres valley. Other products exported from the region include fish, vegetables along with iron and steel.

In 2011, 30.9% of imports (close to one third) were sourced from the MENA countries; Saudi Arabia, Iran and the UAE supply 85% per cent of imports from MENA, with oil being the major import from MENA. The EU supplies close to one fifth of Western Cape goods imports. From the EU, leading suppliers are Germany (with machinery & equipment being a key import product), the UK (beverages), Italy, the Netherlands (mineral fuels) and Belgium (Wesgro, 2010: 5 and 2012:7).

Figure 8: Western Cape Source of Imports, 2011

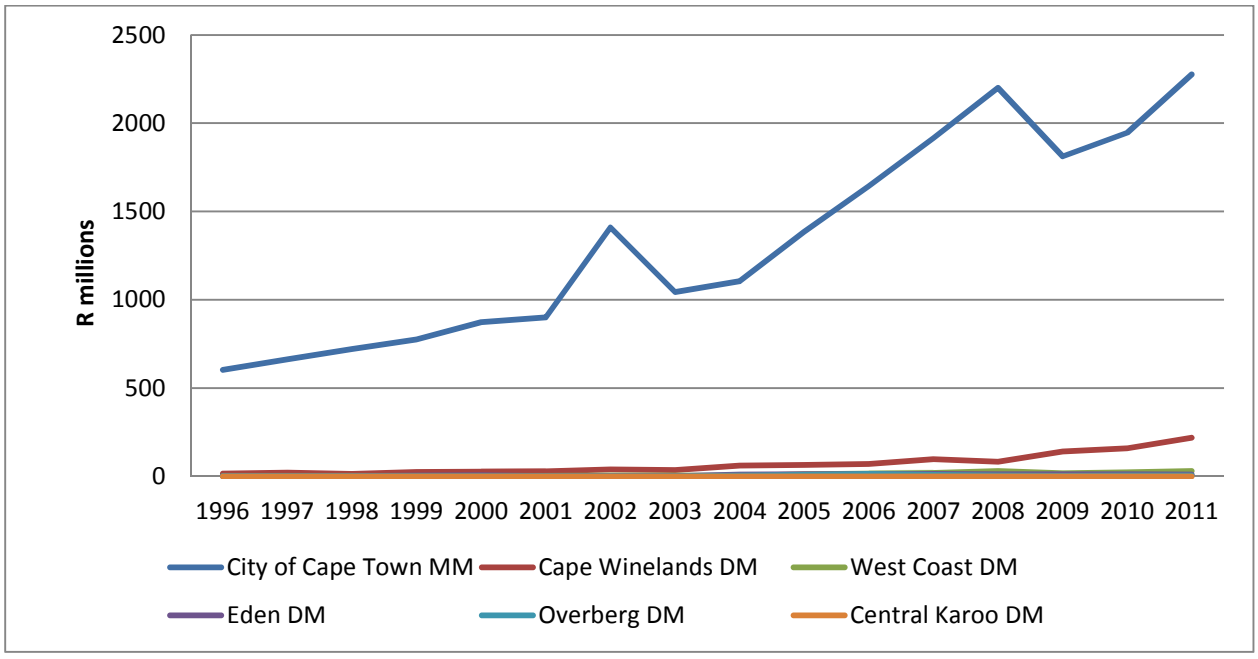


Source: Quantec Research, own calculations MENA- Middle East & North Africa Nics- Newly industrialised countries (Hong Kong, Singapore, Taiwan and Korea) SSA- Sub-Saharan Africa

The 'Other Asia' regional grouping (dominated by China and India) supplied 18.3% of imports into the WC. In 2011 China was the top source of WC imports and accounts for two-thirds of the province's imports from 'other Asian' countries with India accounting for 31 per cent.[28]

The importance of the MENA region as a source of (mainly oil) imports has declined from more than half of total WC goods imports in 2001 to 31% in 2011. Oil used in the province is increasingly being sourced from African countries such as Nigeria and Angola. Growth in the importance of the SADC and 'other SSA' regions as sources of imports is mainly premised on oil imports. "Non-oil imports from other SADC countries such as Mozambique, Mauritius, Tanzania and Madagascar have also witnessed healthy growth, which is a sign of improving bilateral trading relations with the WC."[29]

Figure 9: Western Cape Imports of Plastics by metro and district municipality, 2011

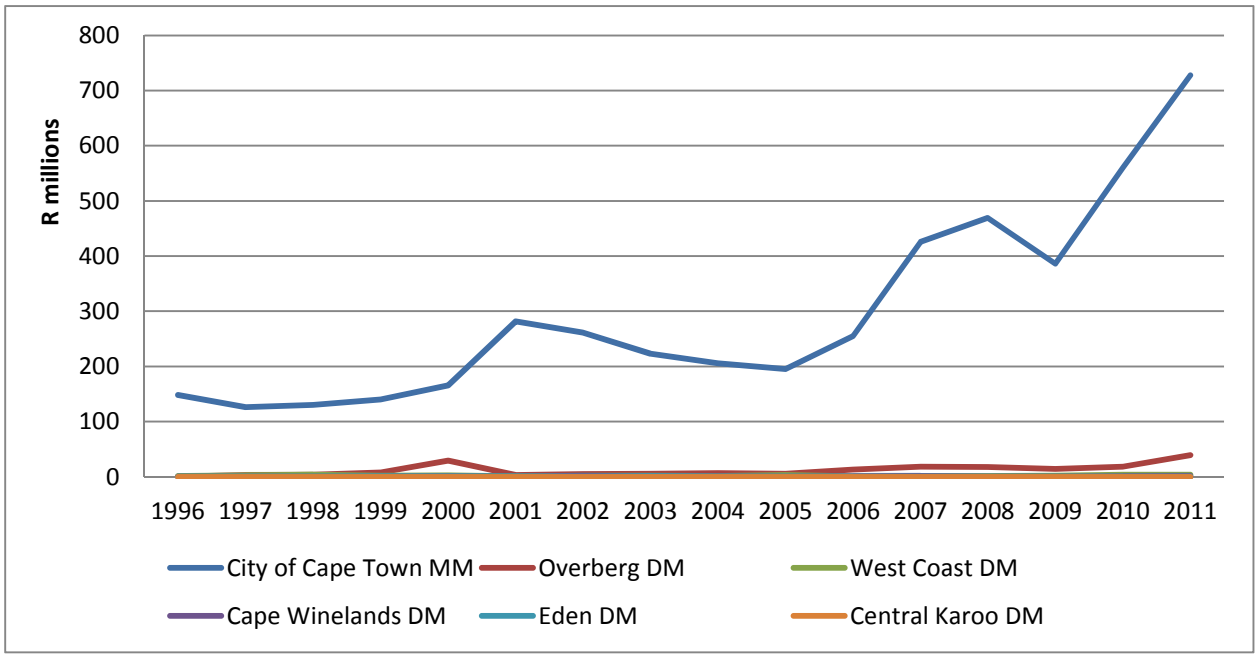


Source: Quantec, 2013

The City of Cape Town Metropolitan Municipality (MM) is the largest importer of plastic and rubber (see below) into the WC Province. Manufacturing of plastic products used in different industries such as packaging is concentrated in the city's industrial areas such as Epping Industria. Central Karoo is a dry area in the province where no manufacturing activities take place. Demand for plastic in the Cape Winelands is mainly for the packaging of agricultural produce such as grapes and wines.

[28] Western Cape Provincial Economic Review & Outlook- 2012
[29] Western Cape Provincial Economic Review & Outlook- 2012

Figure 10: Western Cape Imports of Rubber by metro and district municipality, 2011



Source: Quantec, 2013

The exports have recorded a continued rise over the analysis period. Growing usage of plastic replacing traditional materials used for applications such as packaging, composites and construction is expected to continue adding growth impetus for plastic demand.

2.4. Economic Outlook – Opportunities and Challenges

According to the Western Cape Provincial Government (2012) [30], the province is expected to experience a growth trajectory similar to the growth of the national economy. Sectors which are expected to record high growth over a 6-year period (2012-2017) in the province are the transport, storage and communication sector 5.1%, construction sector 4.8% and the finance, real estate and business services sector 4.8%.

2.4.1. Opportunities

The Western Cape has a number of factors which are expected to stimulate investment into the region. The presence of well-developed infrastructure such as Ports of Cape Town, Saldanha and Mossel Bay acts as a major pull-factor into the region. Other major infrastructure in the province include the Cape Town International Airport, George Airport, Koeberg nuclear power station and the N1, N2 and N7 highways.

[30] Western Cape Provincial Economic Review & Outlook- 2012

Other advantages found in the Western Province include:

- Well established finance and business services sector,
- Climatic conditions suitable for fruit and vegetable production,
- Coastal locations accessible for harnessing wind and wave energy,
- Modern information and communication technology infrastructure, and
- Efficient freight and logistics operations.

Table 5: Opportunities and Strength by District Municipality, 2012

District	Opportunities
West Coast	• Manufacturing- contributes 37% of the region's output. Includes agro-processing, fish/marine resource processing and mineral processing. Potential exists for growth in food processing, non-metallic mineral products, iron, basic steel and non-ferrous metal industries • Oil and gas- the deep water port at Saldanha Bay presents an opportunity for regional growth. An offshore oil and gas supply base is being established in Saldanha and the municipality has applied for the bay to be designated as an industrial development zone • Mining- the Port of Saldanha currently serves as an export terminal for iron-ore being ferried from Sishen Iron Ore mine in the Northern Cape. Potential exists for growth in the processing of minerals in the region in line with government's plan for mineral beneficiation • Wind energy- the coastal location exposes the region to wind speeds offering opportunities for the establishment of wind farms. Currently there are two operational wind farms in the Swartland and St Helena Bay areas
Eden District Municipality	• Trade and manufacturing opportunities in the George region • Harbour and petrochemical activities in Mossel Bay • Agri-service industry in Oudtshoorn • Tourism and retirement focused towns of Knysna and Bitou
City of Cape Town Metropolitan	• Financial and business services industry • Tourism is a major activity in the Cape Metropole • Retail is expected to offer growth opportunities for the district • Construction and property sector

Source: A Regional Overview of the Western Cape Province- South African Business 2011/2012 Edition

2.4.2. Challenges

Exposure to export performance as a source of growth makes the Western Cape more vulnerable to global economic developments over the short term. In 2011, approximately 40 per cent of Western Cape exports went to Europe in comparison with only 25 per cent from the rest of South Africa. Contraction in demand from the EU is therefore expected to have a more significant impact on the performance of the region's economy.

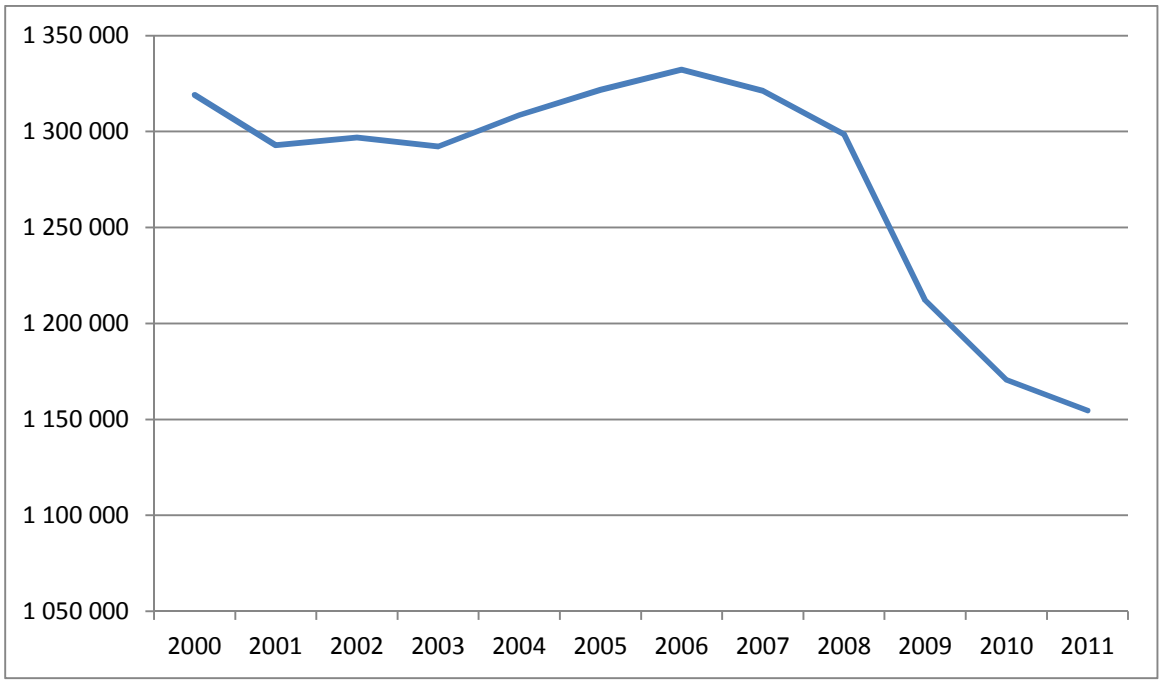
As with other regional GDPs, the Western Cape provincial economic growth is affected by fluctuation in commodity prices. The diversification of economic activities in the region is expected to act as a buffer to ensure growth is not highly affected.

2.5. Overview of the merSETA Sectors

2.5.1. Manufacturing Sector in 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.[31]. As shown below, formal employment in the sector has been following the same trend.

Figure 11: Formal employment levels for the manufacturing sector, 2011



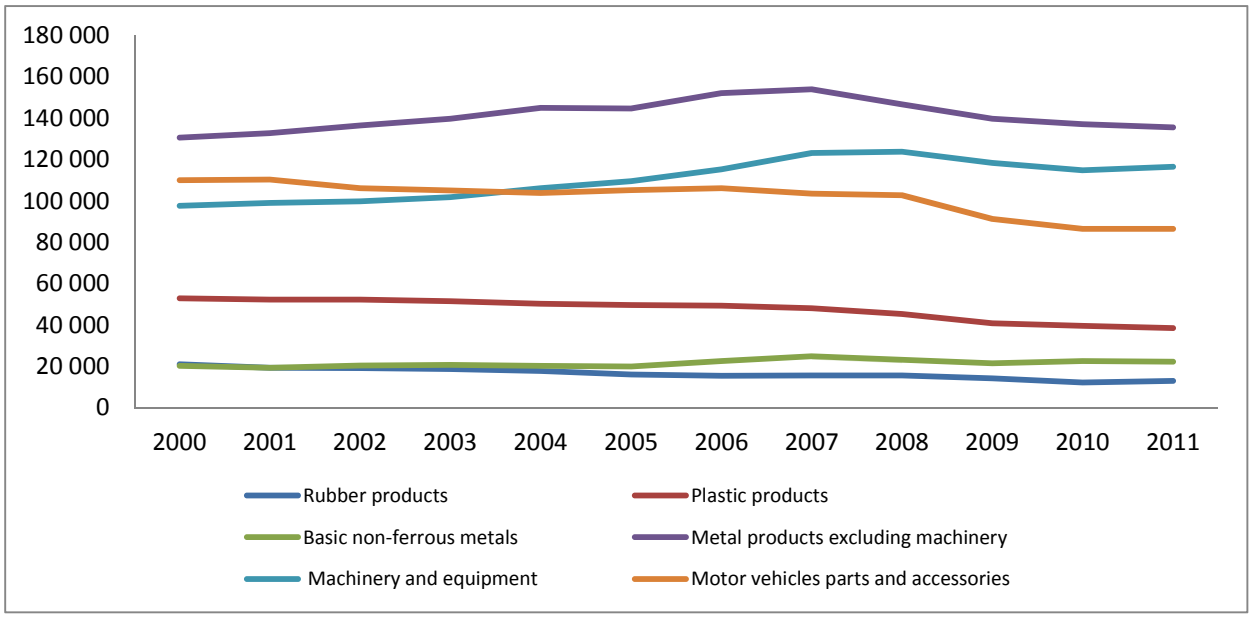
Source: Quantec, 2013

Employment in the manufacturing sector started declining in 2006 and an accelerated decline started 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.

[31] Source: Calculated from Stats SA, First Quarter 2012, P0441.

Figure 12: Employment figures by subsectors, 2011



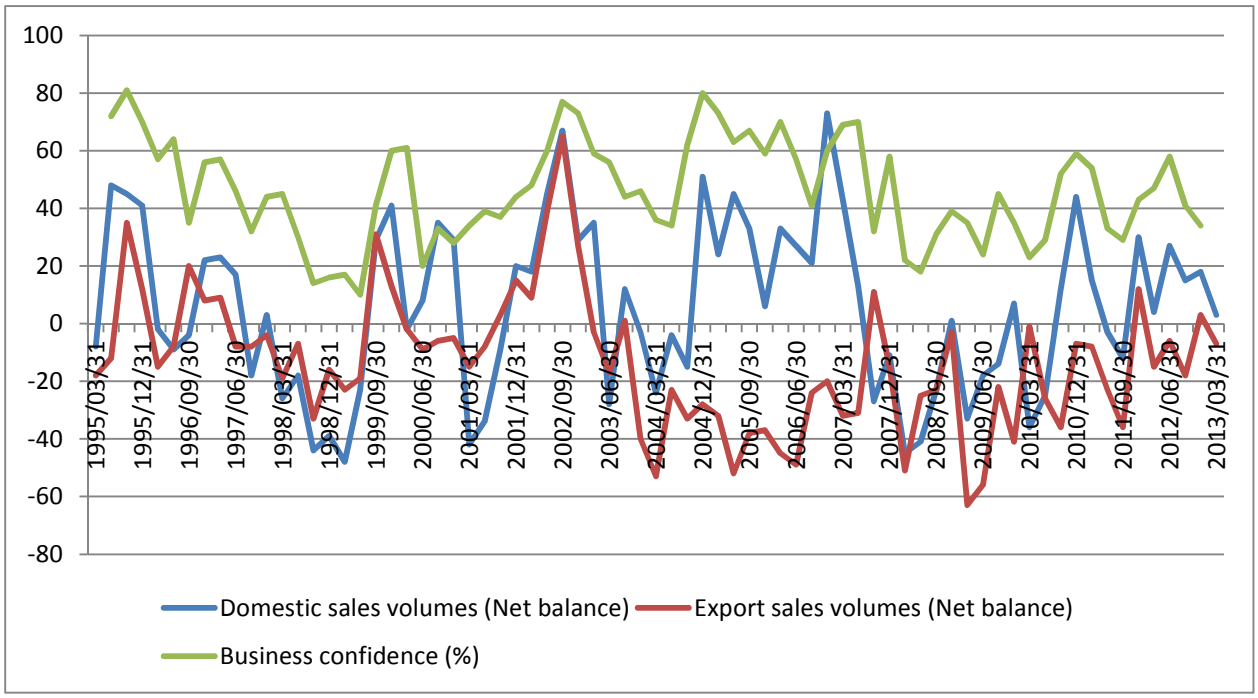
Source: Quantec, 2013

The figure above shows that all merSETA subsectors have been shedding jobs since the global financial crises in 2008.

2.5.2. Manufacturing Sector in Western Cape

Business confidence reached low levels in the face of the global economic slowdown. Domestic and export sales correspondingly also experienced declines. Domestic sales only fully recovered after mid-2010.

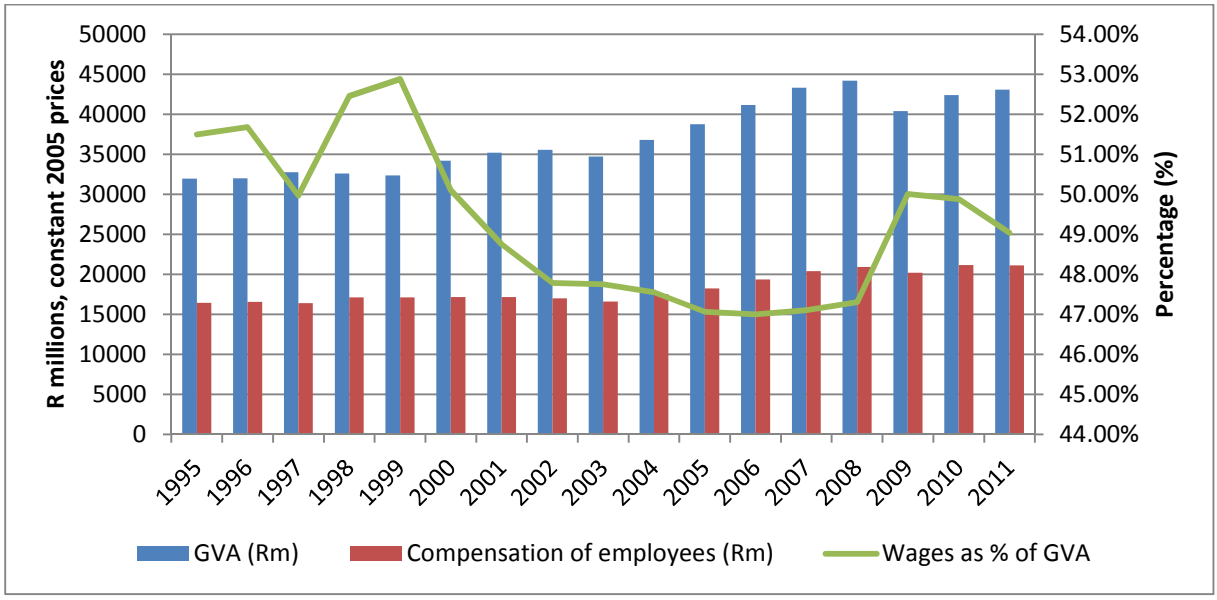
Figure 13: Business confidence and sales in Western Cape, 2012



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.

Figure 14: Manufacturing output and labour cost in Western Cape, 2011



Source: Quantec, 2013

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.

Table 6: merSETA Sector Classification

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

Colour Key	merSETA Chambers
	Metals Chamber
	Plastics Chamber
	Auto Chamber
	New Tyre Chamber
	Motor Chamber

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

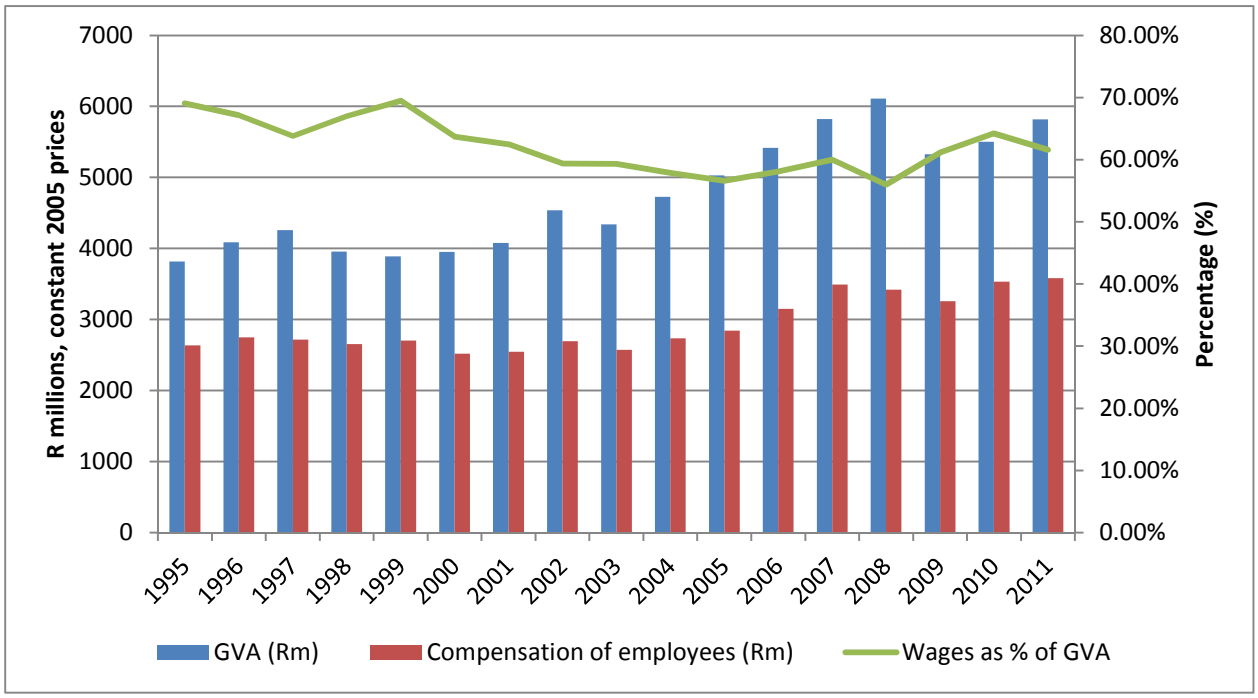
2.5.3. The metals sector

The Metals Chamber comprises firms involved in the manufacturing and servicing of capital equipment including transport equipment. The metals 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 entire economy: infrastructure programmes, construction, general engineering, mining, automotive production, furniture manufacture, transport, home appliance manufacture, defence and packaging[32].

[32] MerSETA SSP 2010/2011-2015/2016

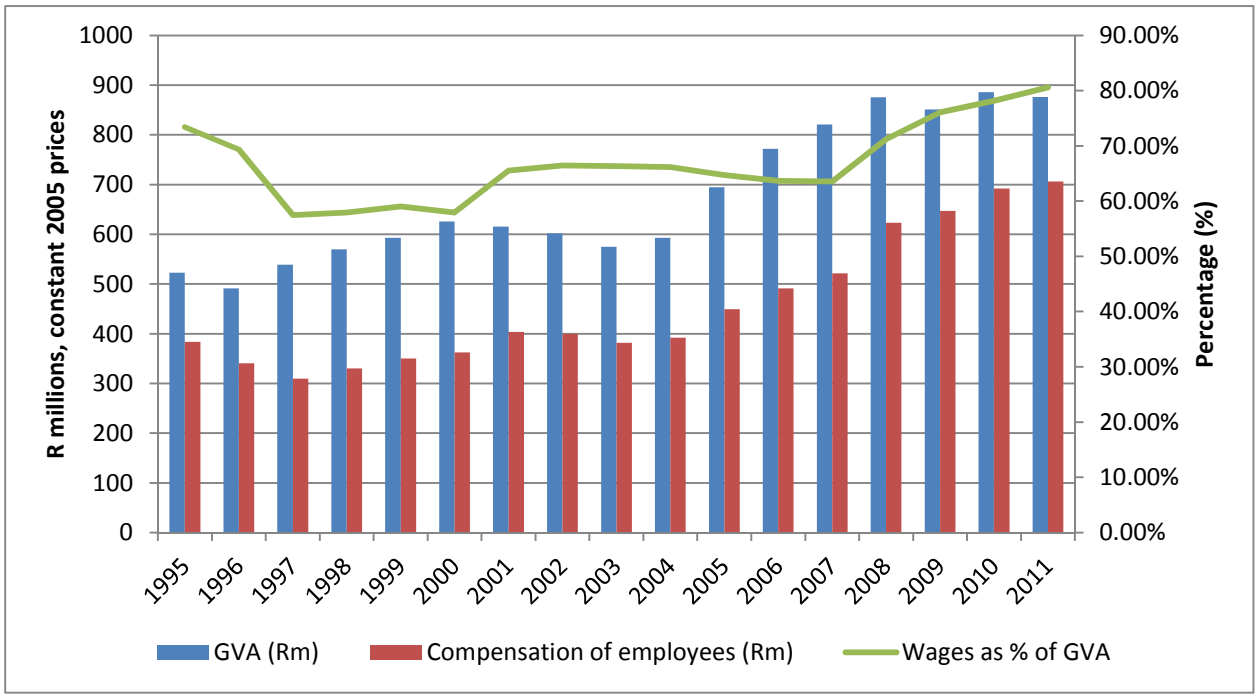
Figure 15: Metal products and labour cost in Western Cape, 2011



Source: Quantec, 2013

The gross value added (GVA) in the metals sector has been steadily rising over the period (1995-2011). In 2008 the GVA was at its highest level since 1995, the setting in of the global economic downturn resulted in a decline in 2009. Compensation of employees in the South African metals sector is a major cost for manufacturers. Lack of cost competitiveness has dire implications for companies operating in the sector. Steps must be taken in order to ensure the industry operates cost competitively.

Figure 16: Machinery and equipment and labour cost in Western Cape, 2011



Source: Quantec (2013)

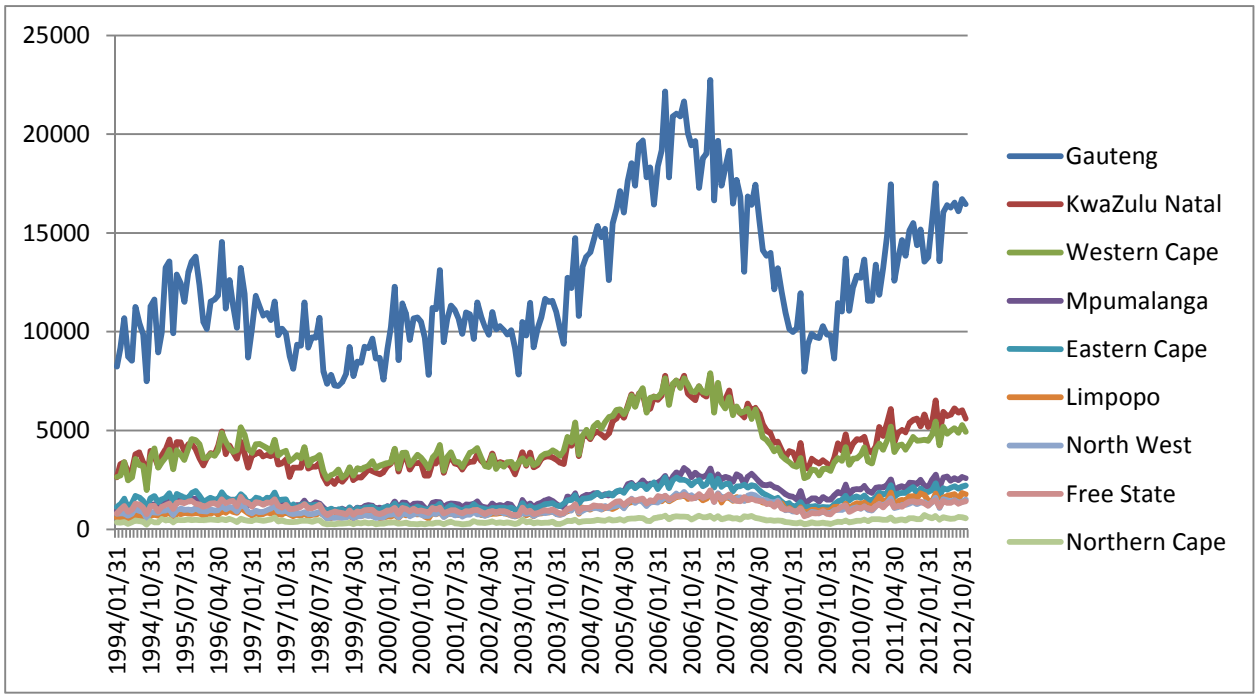
The proportion of compensation of employees in the manufacturing of machinery and equipment reached a peak of 80% in 2011. The sector's gross value added was below the R1 billion level in 2011, while the gross value added in the metals sector was above R 5 billion.

2.5.4. The automotive 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 17: Total car sales by region, 2012



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

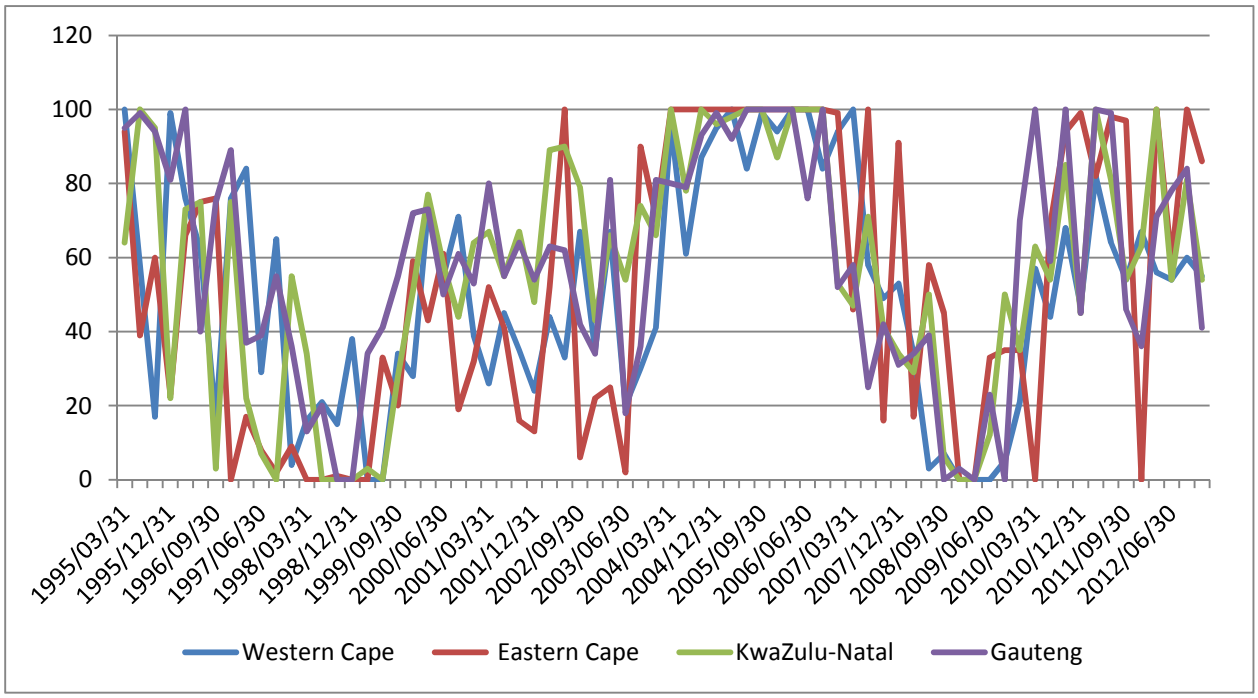
The trends for demand of vehicles in the different South African provinces follow the same trajectory. Gauteng, KZN and the Western Cape are the major markets for vehicle sales. Although the automotive industry is concentrated in the Eastern Cape province, sales in this province are number four of the national sales. Northern Cape recorded the lowest sales over the period of analysis.

2.5.5. 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.

Figure 18: Motor trade business confidence (index), 2012



Source: Bureau of Economic Research, 2013

Vehicle sales are a leading indicator of the business confidence for the motor sector. The Eastern Cape (which is the automotive hub) recorded the highest confidence for the sector's prospects. All the provinces have a similar profile over the period of analysis, with the business confidence aligning with the country's economic cycle.

2.5.6. The 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 four companies[33], operating six factories, all of which are controlled by international groups. Many other companies also import other international brands of tyres into South Africa.

The industry manufactures new pneumatic tyres of rubber of a kind used on passenger, commercial, agricultural, mining, construction and industrial vehicles and implements. The total SA market for tyres is approximately 12 million units per year. The SA tyre manufacturing capability equates to just over 1% of world tyre manufacturing capacity albeit at a very high technical level.

[33] The four tyre manufacturing companies in SA are Bridgestone South Africa, Continental Tyre South Africa, Dunlop Tyres International and Goodyear Tyre & Rubber Holdings. The South African Tyre Manufacturers Conference (SATMC) is the united face of the four SA tyre manufacturers to government, the motor industry and the public.

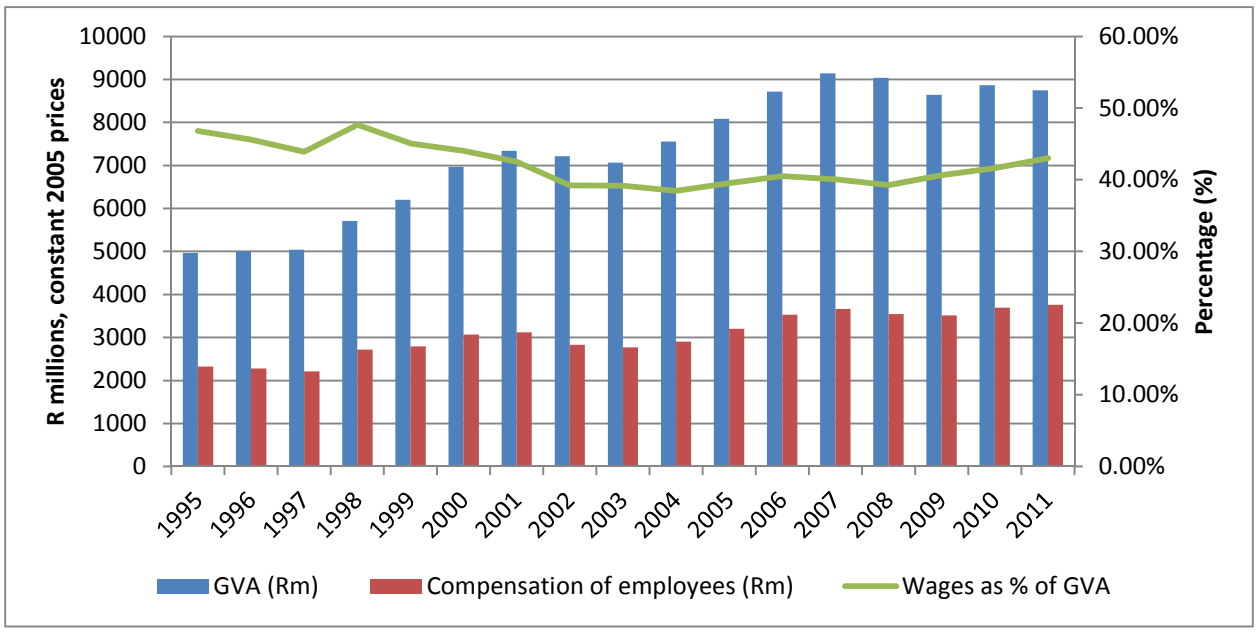
The sector directly employs about 6,000 people. Five of the factories are situated in areas with higher than average unemployment levels, namely Port Elizabeth, Uitenhage, Ladysmith and Brits[34].

2.5.7. 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 the sector is characterised by the following:

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

Figure 19: Petroleum products output (including rubber and plastics) in Western Cape, 2011



Source: Quantec (2013)

Total output has been increasing peaking at slightly above R9 billion in 2007 before starting to decrease; possibly owing to the global economic crisis. On the other hand compensation for employees has been increasing steadily though the percentage of wages to total output has been declining.

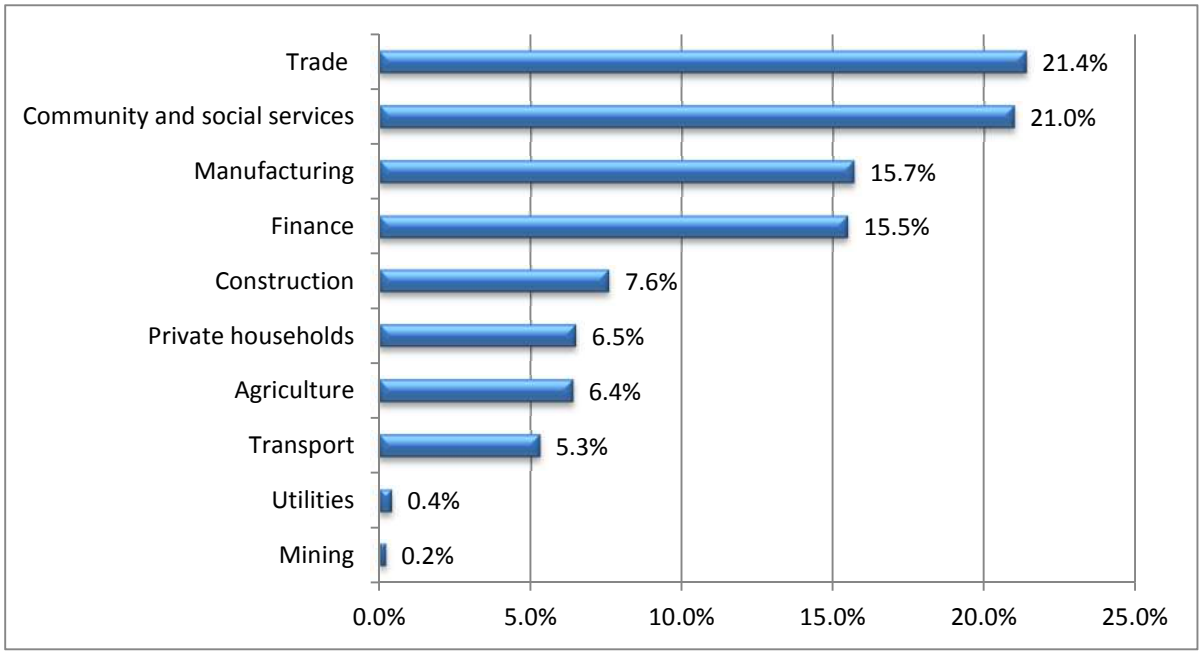
[34] http://www.rubbersa.com/facts.html

2.6. Employment Trends in the Sector

Forecast employment growth for the automotive sector over the 2010-2015 period is expected to be 3.1 percent per annum in the Western Cape. Growth for the metals and engineering sector is expected to be 1.0 percent.

The Western Cape has the third largest employment share (13%), Gauteng and KwaZulu-Natal being first and second, with 31% and 18% shares respectively. Western Cape's economy is primarily driven by agriculture and the employment trends reflect this, especially with agriculture being a labour absorbing sector.

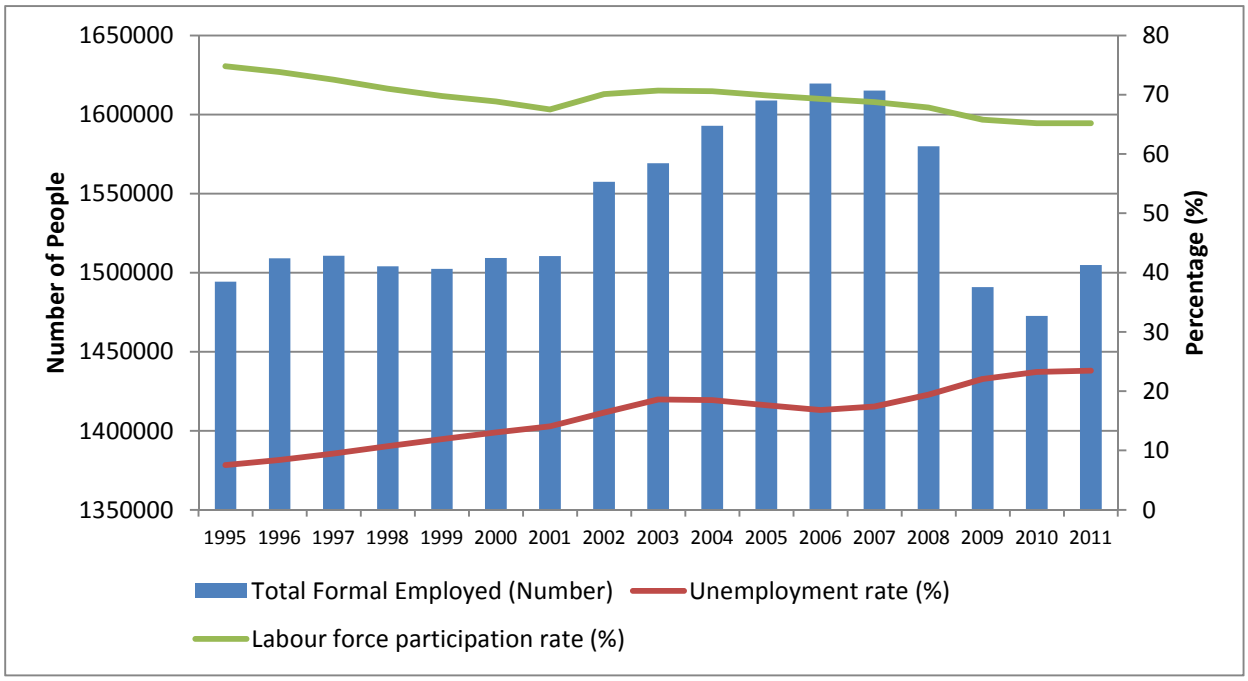
Figure 20: Employment share by industry in Western Cape, 2012 (up to Q3)



Source: Stats SA, 2012 and Own calculations

According to StatsSA, the number of people employed in the Western Cape as of September 2012 stood at 5.467 million. This represented 13.5% of the total national employment over the same period. Manufacturing was the third largest employer in the province with a 15.7% contribution to the region's employment.

Figure 21: Employment and unemployment in Western Cape, 2011



Source: Quantec, 2013

Employment in the Western Cape has been on an upward trajectory from 1995 until 2006. Slowdown in the global economy resulted in a significant number of jobs being lost along with a lack of new job creation. In 2006 just over 1.6 million people were formally employed in the Western Cape, with the figure falling to approximately 1.48 million in 2011.

The employment profile shows the high dependence which exists between employment in the Western Cape and the performance of the global economy. Western Cape supplies a number of products into the export market, which accounts for the interrelationship between performance of the global economy and provincial employment levels.

2.7. Conclusion

The tertiary sector is dominant in the Western Cape's provincial economy. Manufacturing in the province is the country's third largest after Gauteng and KwaZulu-Natal. The European Union is the major trading partner for the Western Cape. Main destinations of exports are Netherlands, United Kingdom, Germany and the United States of America. Middle East and North Africa are the main import source regions for the province. Opportunities for growth have been identified in the West Coast region of the province. Developments in this area have potential to stimulate economic growth and job creation.

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 strategies[35].

3.1.3. Metals Customised Sector Plan (CSP)

The CSP for the priority sector metals was published by the dti in 2005. The strategic vision of the plan is that "by 2014, SA will have a globally competitive metals 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 metals beneficiation, maximising local content through backward linkages, and upgrading production capabilities in downstream industries.[36]

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.

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

[35]DTI (2011*). Industrial Policy Action Plan (IPAP 2011/12-2013-/14).* Department of Trade and Industry. Pretoria, South Africa.
[36]dti (2006) Metals Sector Development Strategy: Trade and Investment South Africa – Customised Sector Programme – Metals.

to a local manufacturing incentive, regardless of whether the motor vehicles are sold locally or abroad. 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 manufacturers 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 in technology, research and development.

3.1.7. Industrial Development Zones and 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"[37]. 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 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 functional namely, Coega, East London and Richards Bay[38]. Plans are underway for the Saldanha Bay IDZ (in Western Cape Province) to obtain designation by the end of 2013.

37 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

38 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).

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 SEZs[39]. 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.

Saldanha Bay is set to be the first SEZ to be established under the new bill. The merSETA has a Memorandum of Understanding with the dti which includes skills planning for the Saldanha SEZ. Saldanha Bay SEZ is planned to be an offshore oil and gas and marine supply cluster (an engineering and logistics services complex) serving the needs of the upstream exploration and production service companies operating in oil and gas fields in sub-Saharan Africa.[40] According to Barry Standish (UCT Graduate School of Business (GSB) economist), "Saldanha Bay IDZ will have created 2 600 direct jobs by the end of its first year, and 14 702 total (direct and indirect) jobs will be created within 18 years of business."

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 7: 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, have 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

[39] 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)
[40] http://www.shopwestcoast.co.za/idz-west-coast-opportunity-in-saldanha-bay/

strengthening the delivery of basic services in South Africa. The plan also supports the integration of African economies. The costs of the 18 strategic projects identified are estimated at about R4-trillion over the next 15 years[41]. The government pledged to invest R827 billion in building new and upgrading existing infrastructure over the three years from 2013/14 financial year[42]. 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 guarantees[43]. 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), 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 programmes[44]. 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 be 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 has resulted in the creation of 145 000 jobs[45].

SIPs which are likely to benefit the Western Cape economy are[46];

(i) SIP 5: Saldanha- Northern Cape development corridor,

(ii) SIP 6: Integrated municipal infrastructure project,

(iii) SIP 8: Green energy in support of the South African economy,

[41] 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)
[42] National Treasury (2013) *2013 Budget Speech* by Minister of Finance.
[43] National Treasury (2013) *2013 Budget Speech* by Minister of Finance.
[44] Presidential Infrastructure Coordinating Commission (PICC) (2012) *A Summary of the South African National Infrastructure Plan.* Pretoria, South Africa.
[45] Department of Economic Development (2013) *Draft Infrastructure Development Bill (2013)*
[46] http://www.info.gov.za/issues/national-infrastructure-plan/

(iv) SIP 11: Agri-logistics and rural infrastructure,
(v) SIP 12: Revitalisation of public hospitals and other health facilities,
(vi) SIP 13: National school build programme), and
(vii) SIP 18: Water and sanitation infrastructure

The different projects hold potential for stimulation of economic growth and job creation within the region. Companies in the merSETA sectors are set to benefit from the growth emanating from the roll out of the SIPs in Western Cape.

3.2. Regional Economic Growth and Development Strategies

3.2.1. Western Cape Provincial Growth and Development Strategy

The latest provincial Growth and Development Strategy (iKapa GDS) was published in November 2007, and highlights the *ikapa Elihlumayo 2014* vision of the WC as 'A Home for All'. The main aim of the iKapa GDS is 'to achieve an economic growth rate of around 6-8% over the next five years'[47]. It however noted that the lack of appropriate skills could severely constrain the efforts. It then recommends a targeted skills development as well as interventions to address current skills mismatch in the province.

3.2.2. Human Capital Development Strategy

This strategy emphasises retaining scarce skills and promoting quality education to expand the skills base and increase job creation. It promotes early childhood development, adult basic education and further education and training. The strategy strongly advocates that any skills development and training programme in the province must be based on a solid intellectual foundation. It further emphasises the importance of FET and SETA partnerships and the province's preparedness to deliver on learnership targets.

3.2.3. Provincial Skills Development Forum

The premier of the WC, Helen Zille launched the Provincial Skills Development Forum (PSDF), which forms part of the provincial government's comprehensive plan to address the skills shortage and future skills demand in the Western Cape[48]. The PSDF is focused on economic and employment growth which would be achieved by equipping the population with the appropriate skills that would be "relevant to, the needs of a growing economy".[49] It also notes that 'the

[47] Western Cape Provincial Government (2007). *ikapa Elihlumayo* Growth and Development Strategy
[48] http://www.skillsportal.co.za/page/skills-development/668318-Premier-launches-skills-development-forum#.UPP2xm_0McA (Accessed: 14 January 2013)
[49] Same as 13

working population is increasing faster than the number of jobs being created leading to a mismatch between the supply and demands of skills (quality vs. quantity).[50]

The PSDF consist of the following three structures[51]: a technical working group (consist of government officials and representatives from the business sector, organised labour and higher education); the Premier's Council on Skills (comprised of representatives from government, higher education, organised labour and business, that is responsible for providing leadership and direction); and the Secretariat (which consist of provincial government officials who provide technical, professional and administrative support within the PSDF).

3.2.4. Western Cape SETA Cluster

The WC was the first province in SA to form a SETA cluster[52], which is a partnership between WC based Further Education Training (FET) colleges and SETAs, aimed at expanding the impact of skills development on employability. The objectives of the WC SETA cluster are:

- To improve individual SETA functioning in the region;
- To continuously improve and sustain inter-SETA relationships in the region;
- To adopt a collaborative approach to engaging with relevant stakeholders in the region;
- To establish linkages with other provincial initiatives with a specific focus on skills development and training in the region.

Furthermore, the cluster identified the following as some of its strategic priorities for the duration of the NSDS III[53]:

- Importance of Sector Skills Plans (SSPs) for skills planning and delivery,
- Collaboration between SETAs and public FET colleges,
- Artisan development,
- Employer involvement in skills development,
- Rural Development, and
- Vocational and Career guidance.

[50] Same as 13
[51] http://www.westerncape.gov.za/news/launch-provincial-skills-development-forum (Accessed: 14 January 2013)
[52] Higher Education and Training Minister Blade Nzimande (2010). *Nice day for a shotgun marriage.* As quoted in an online news article. http://www.skillsportal.co.za/page/skills-development/708996-Nice-day-for-a-shotgun-marriage#.UPQVU2_0McA (Accessed 14 January 2013).
[53] http://www.learningcape.org/seta.html (Accessed 14 January 2013).

3.2.5. Rural development strategies

The Provincial Government of the Western Cape's (PGWC) key priority for rural development is "to create an enabling environment that facilitates private sector investment and socio-economic development in rural areas."[54] Rural Development is structured into two sub-programmes:-

3.2.5.1. Rural Nodal Development (RDN)

- Aims to create an environment for business in rural areas, and the development of selected rural nodes to facilitate their socio-economic growth towards a sustainable future
- The RDN focuses on;
    - establishment of economic and infrastructure projects to facilitate economic growth in the 15 rural nodes
    - providing skills development and social training for unemployed people in the rural nodes
    - creating sustainable employment for unemployed people in the rural nodes.
    - providing improvement in food security through interventions at household level in the 15 rural nodes.

3.2.5.2. Farm Worker Development (FWD)

- The programme's aim is to improve the image and the socio-economic conditions of farm workers by providing them with life skills to improve their quality of life.
- Geographically, the Western Cape's farm activities are very large and diverse and therefore it is important to uplift and help farm workers on all levels. Some farm workers live in remote areas and don't have regular access to life skills training.
- FWD aims to improve the quality of life of farm workers by facilitating the provision of social awareness campaigns, creating skills training opportunities for farm workers and farm worker communities and also to coordinate the involvement of different government departments in farm worker development.[55]

[54] http://www.westerncape.gov.za/eng/your_gov/233998
[55] http://www.westerncape.gov.za/eng/your_gov/233998

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

3.3.1. Renewable energy

Wind farms are being set up in different parts of the country in areas such as Cookhouse, and Adelaide in the Eastern Cape and also Bredarsdorp and Vredendal in the Western Cape. 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.

3.3.1.1. Sere wind farm

The 100MW Sere wind is funded by the World Bank; the African Development Bank; French development agency, Agence Française de Développement; and the Clean Technology Fund (CTF). Construction is now underway, with the facility expected to go into commercial operation in October 2013. The farm is being built on a 7 400 hectare site in Vredendal in the Western Cape.[56]

3.3.1.2. West Coast One

Investec and Kagiso Tiso Holdings finalised plans for the establishment of a €160-million (around R2.2-billion), 94 MW wind project in the Western Cape. The project which is located 130 km north of Cape Town is expected to reach commercial operation in mid-2015.

GDF Suez holds a 43% equity interest in the project, Investec, 34.5%, and Kagiso Tiso Holdings, 20%, with the remaining 2.5% to be allocated to a community trust. In addition to investing equity in the project, Investec, jointly with Nedbank have underwritten approximately R1.5-billion of debt required for the development of the wind farm.

The West Coast One facility will comprise 47 V90-2.0 MW turbines to be supplied by Vestas Wind Systems. Vestas Southern Africa has been chosen as the engineering, procurement and construction (EPC) contractor as well as to provide operations and maintenance services at the facility.[57]

[56] http://www.eskom.co.za/content/Sere%20Wind.pdf
[57] http://www.engineeringnews.co.za/article/94-mw-western-cape-wind-project-reaches-financial-close-2013-06-11

3.3.2. Wescape

The City of Cape Town's *Medium to Long-Term Growth Options Study* indicates that there are only two directions in which the city can grow; up the West Coast towards Saldanha (Western Growth Corridor) and northwards towards Fisantekraal (Northern Growth Corridor).

Wescape is a R140 billion project in the Western Growth Corridor (to be located north of the R304 and west of the N7- north-east of Melkbosstrand). The primary industries that will be created in Wescape are construction, local manufacturing and enterprise, green services, financial services, public and civic services and commercial and retail.

Construction of Wescape is planned to begin in 2015 and to end in 2035. Through the life cycle of the project, Wescape is expected to create around 300 000 jobs both directly and indirectly. Local manufacturing and enterprise is set to create 57,500 jobs.[58]

3.4. Conclusion

Major economic policies guiding the development of the Western Cape include the Provincial Growth and Development Strategy, the Human Resource Development Strategy and the Rural Nodal Development strategy. All these 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).

The Western Cape is characterised mainly by light manufacturing. Establishment of an industrial development zone in the West Coast region of the province is expected to result in the Western Cape becoming a leader in servicing the offshore oil and gas industry.

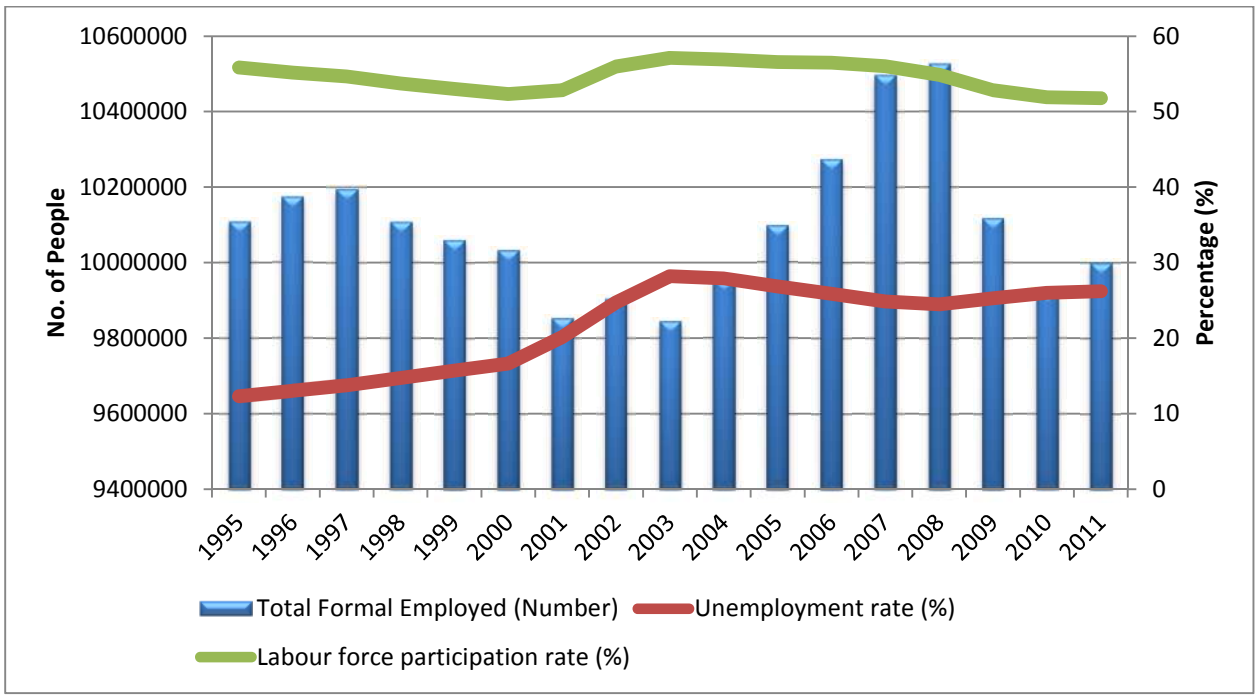
[58] www.wescapelife.co.za

4. THE DEMAND FOR LABOUR

4.1. Introduction

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.

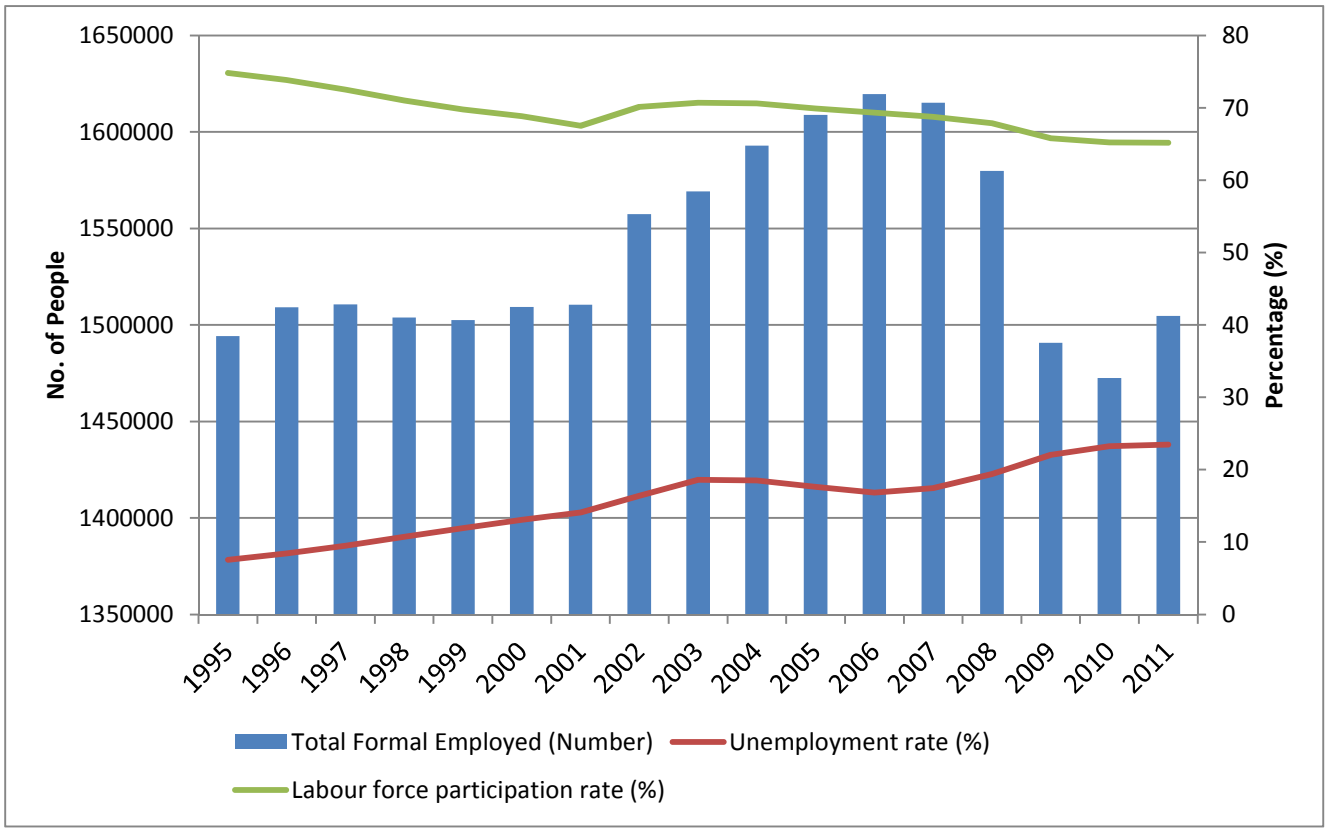
Figure 22: Employment and unemployment in South Africa, 2011



Source: Quantec, 2013

Formal employment in WC follows almost the same trend with the national one, though the WC seems to lead the direction. For example, formal employment in WC started to increase from 2002 peaking in 2006. The SA employment only started to increase in 2004 and picked up in 2008.

Figure 23: Employment and unemployment in Western Cape, 2011

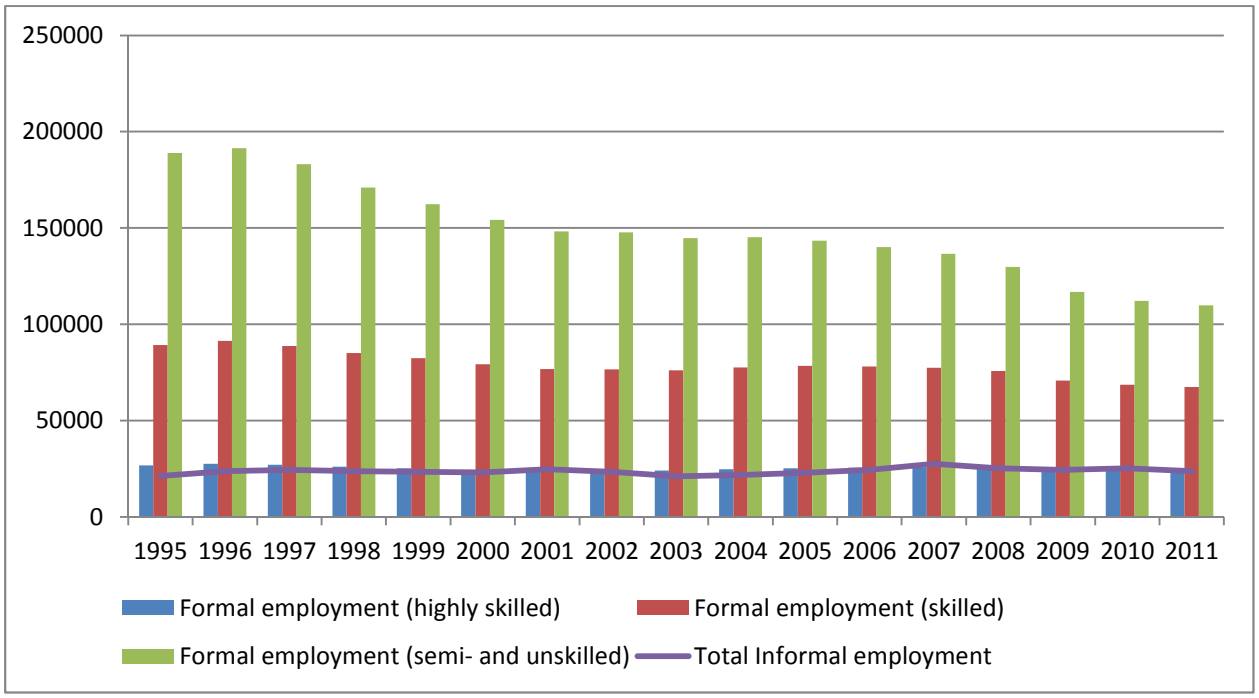


Source: Quantec, 2013

The labour force participation rate in WC has been decreasing from peak of almost 80% in 1995 to less than 70% in 2011. At the same time, owing to a decrease in employment, unemployment rate increased from around 5% in 1995 to more than 20% in 2011.

According to Quantec Research data, the manufacturing sector in WC used to employ around 334 thousand workers at its peak in 1996. The number had been falling over the years to around 225 thousand by 2011, a 33% fall in 15 years.

Figure 24: Manufacturing employment in Western Cape, 2011

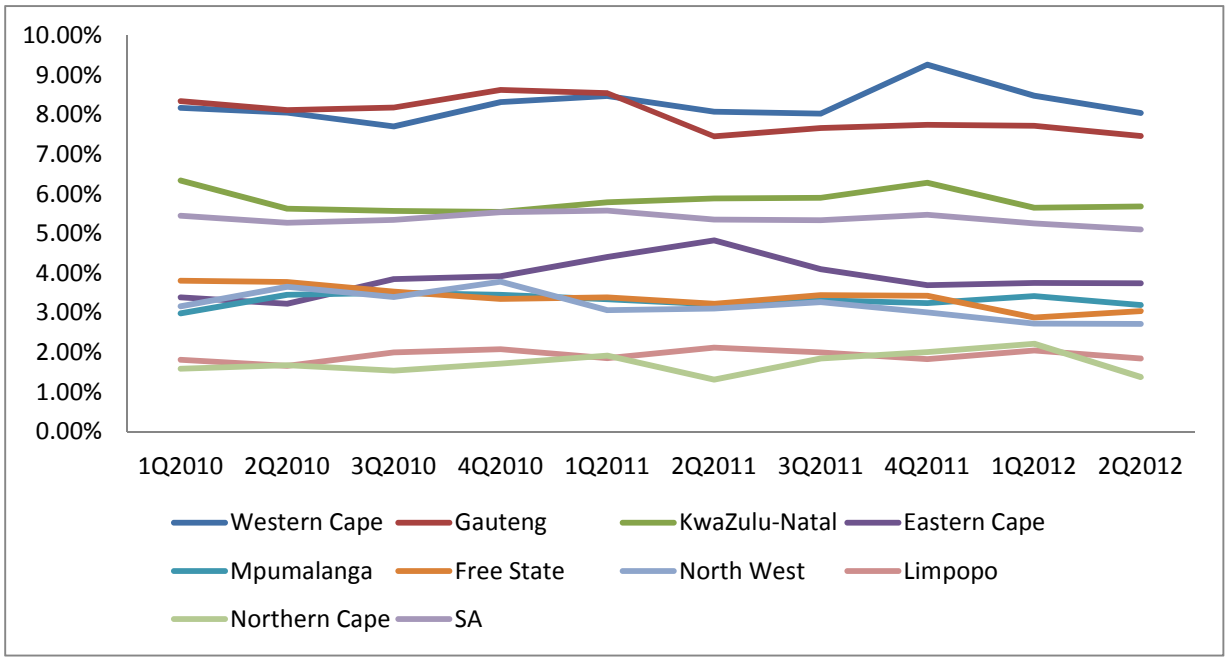


Source: Quantec, 2013

An analysis of employment by skill (see the figure above) shows that the greatest loss of jobs has been formal employees who are unskilled, semi-skilled and skilled. The skilled and informal employees maintained their jobs.

As shown in our discussions on national manufacturing overview, 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 subsectors. The portion of high-level skills has been increasing for the decade 1991 to 2011 but still constitute a minority in the profile of employees. Semi-skilled, unskilled and mid-level skilled employees still constitute the majority of employees in all subsectors of the merSETA clusters.

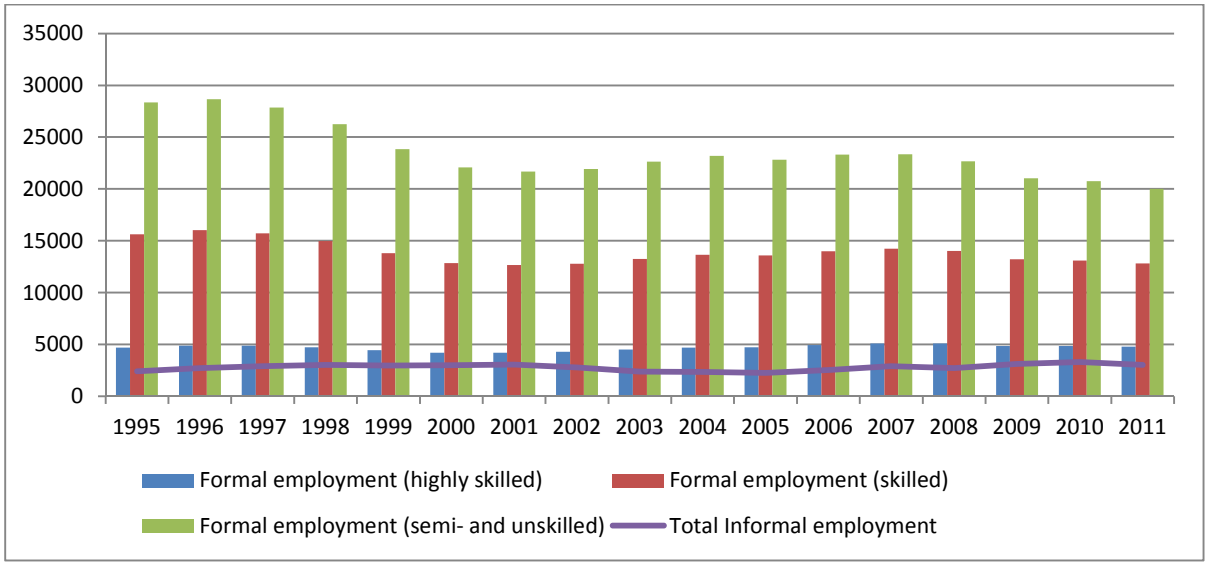
Figure 25: Manufacturing contribution to provincial employment, Q2 2012



Source: Stats SA Quarterly Labour Force Survey (QLFS) and own calculations, 2012

WC manufacturing employment contributes around 8% to the province's total employment. At a national level manufacturing contributes around 5% to total employment. The other provinces whose manufacturing employment contribution is higher than the national average are KZN and Gauteng. This shows that demand for labour from the manufacturing sector is important for the creation of employment in WC.

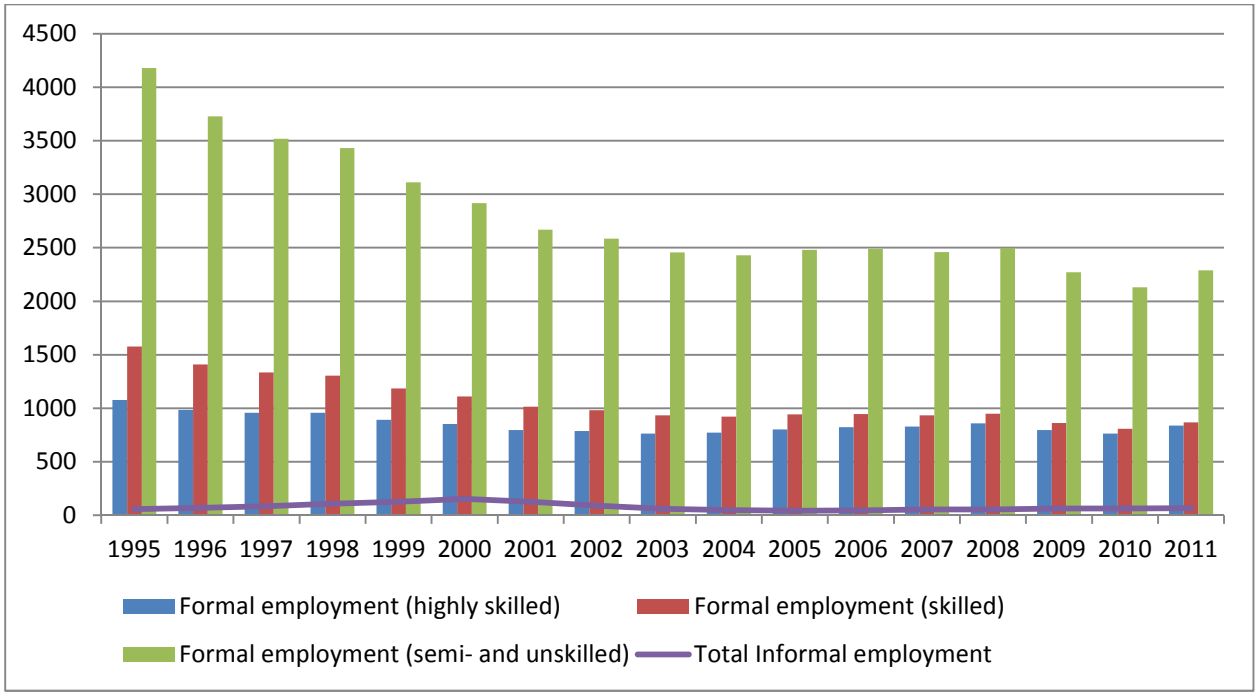
Figure 26: Employment in metals sub-sector for Western Cape, 2011



Source: Quantec, 2013

Employment in the metals sub-sector is dominated by semi and unskilled workers. The employment of skilled workers in formal employment has fluctuated between 10,000 and 15,000 workers over the period 1995 to 2011. Highly skilled workers have remained fairly stable below the 5,000 level over the period.

Figure 27: Employment in machinery and equipment sector for Western Cape, 2011

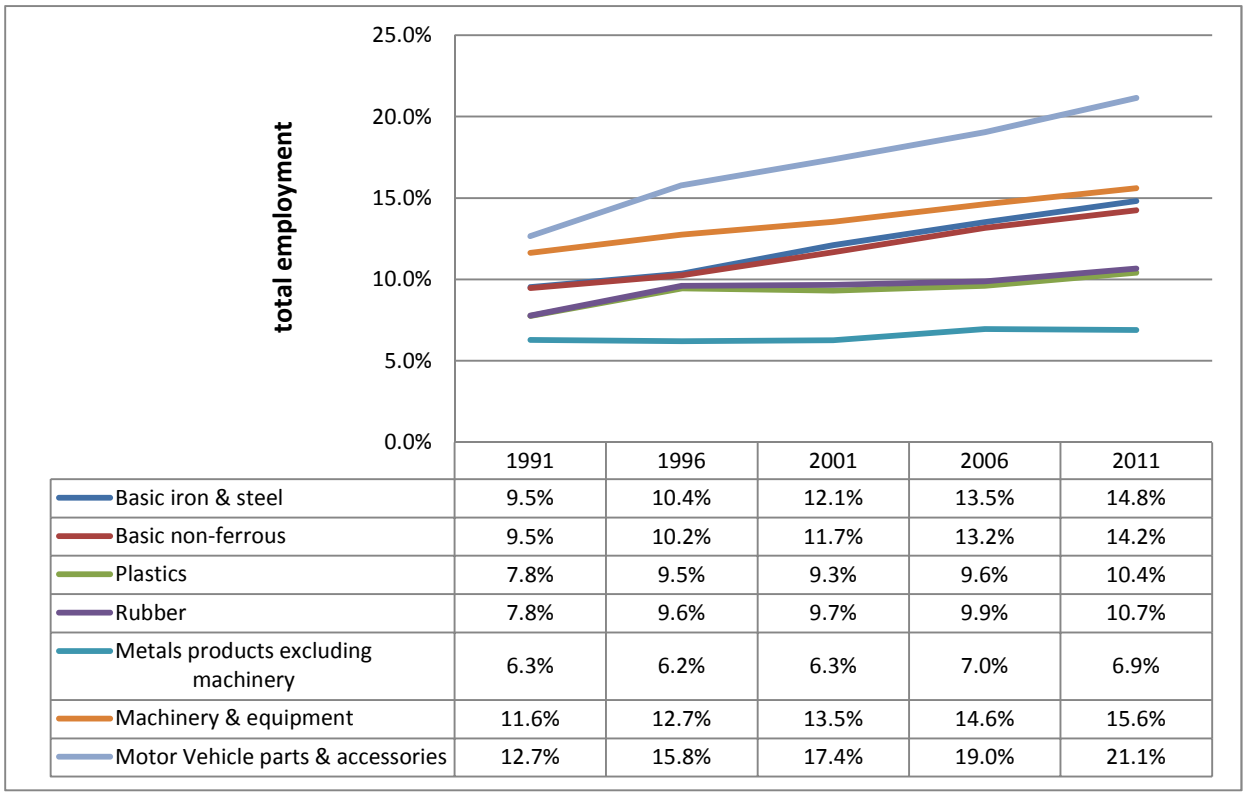


Source: Quantec, 2013

As illustrated in the diagrams above, almost all the WC's manufacturing subsectors 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.

Semi and unskilled workers employed in the machinery and equipment sector have fallen by almost half from a high of slightly above 4,000 in 1995 to approximately 2,250 in 2011. This can be attributed to the increased mechanisation of the sector resulting in a decline in demand for individuals to carry out certain activities which have become automated. Skilled labour and highly skilled labour have converged to similar levels over the past decade.

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



	1991	1996	2001	2006	2011
Basic iron & steel	9.5%	10.4%	12.1%	13.5%	14.8%
Basic non-ferrous	9.5%	10.2%	11.7%	13.2%	14.2%
Plastics	7.8%	9.5%	9.3%	9.6%	10.4%
Rubber	7.8%	9.6%	9.7%	9.9%	10.7%
Metals products excluding machinery	6.3%	6.2%	6.3%	7.0%	6.9%
Machinery & equipment	11.6%	12.7%	13.5%	14.6%	15.6%
Motor Vehicle parts & accessories	12.7%	15.8%	17.4%	19.0%	21.1%

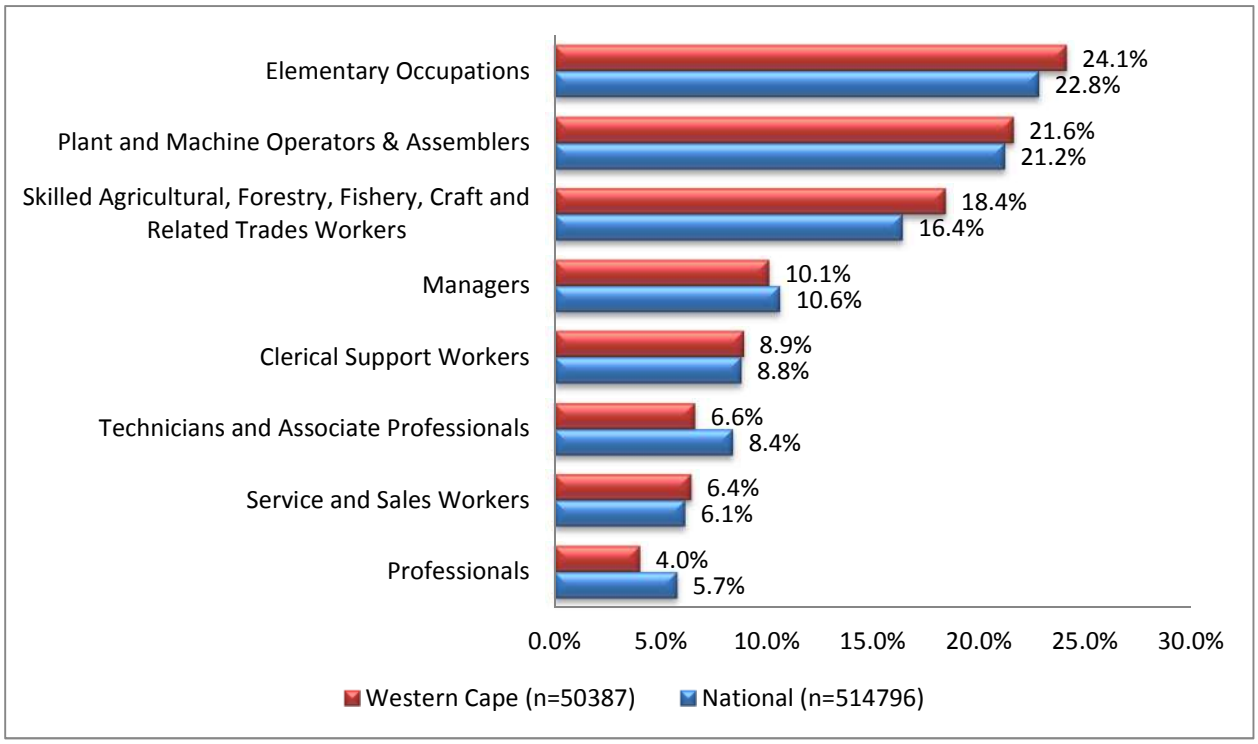
Source: Quantec, 2013

The portion of high-level skills has been increasing for the decade 1991 to 2011 but still constitute a minority in the profile of employees. Semi-skilled, unskilled and mid-level skilled employees still constitute the majority of employees in all subsectors of the merSETA clusters.

Figure 29 shows an analysis of the national and Western Cape occupational profile. Western Cape has an occupational profile similar to the national profile. Elementary Occupations, and Plant & Machine Operators and Assemblers constitute the largest group at 24.1% and 21.6% respectively.

The occupational profile and the skill level profile can be used to infer the educational profile of the merSETA cluster employees. Elementary workers (22%) generally have only entry-level qualifications. Managers (10.1%) and Professionals (4.0%) mainly have higher levels of formal education. The majority of technicians and associate professionals (6.6%) and the skilled agricultural, forestry, fishery, craft and related trade workers (18.4%) are likely to have trade-related qualifications.

Figure 29: merSETA employment by major occupational groups Western Cape, 2012



Source: merSETA database, 2013

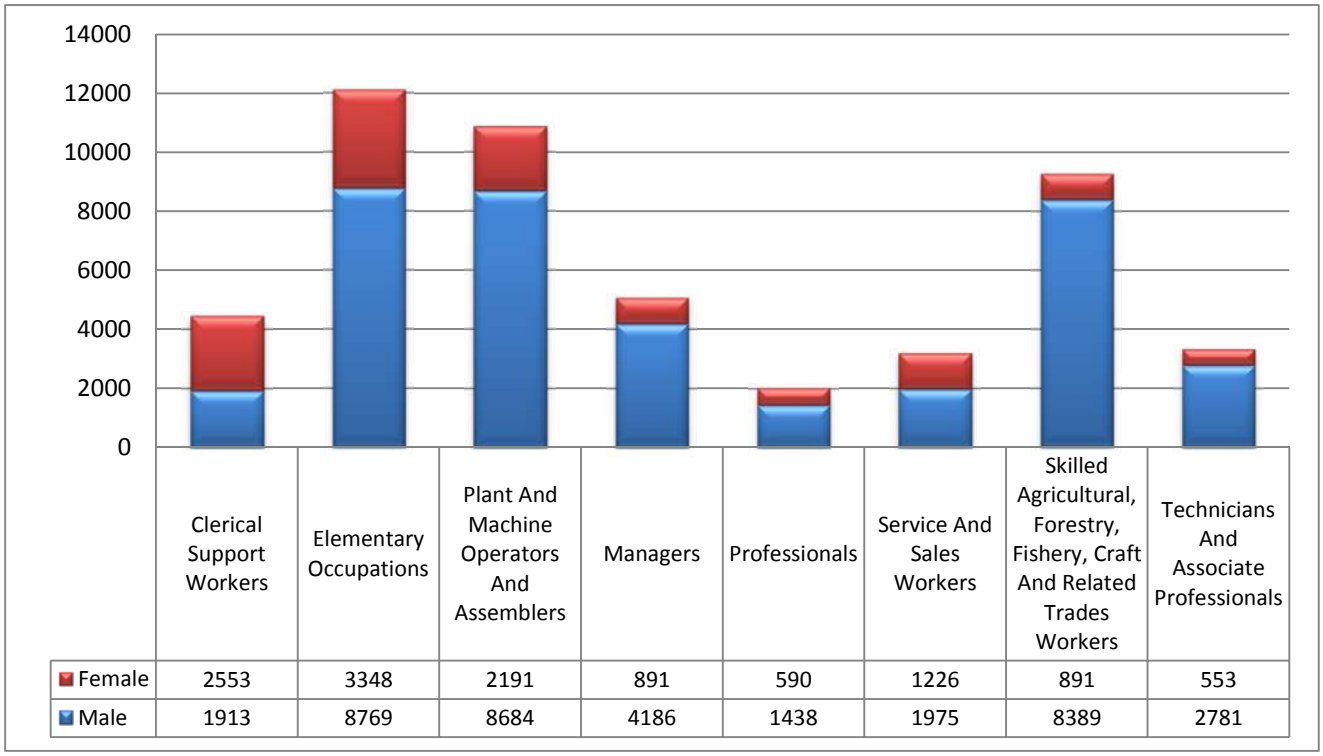
The Plastics Chamber Report (April, 2012) from its sample found that the majority (48.8%) of employees had Grade 12 (Matric) and 32% ABET 2-4 (Grade 1-9) as their highest qualifications. The findings from the New Tyre Chamber Report showed that the majority of employees categorised as artisans/craft 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 sector is dominated by male employees; the national database shows that 80% of employees are male and 20% are female. Western Cape has a dominance of males (76%) relative to females (24%) 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%, nationally this stands at 54%.

Figure 30: Gender distribution of employees in the sector according to occupational group, Western Cape, 2012



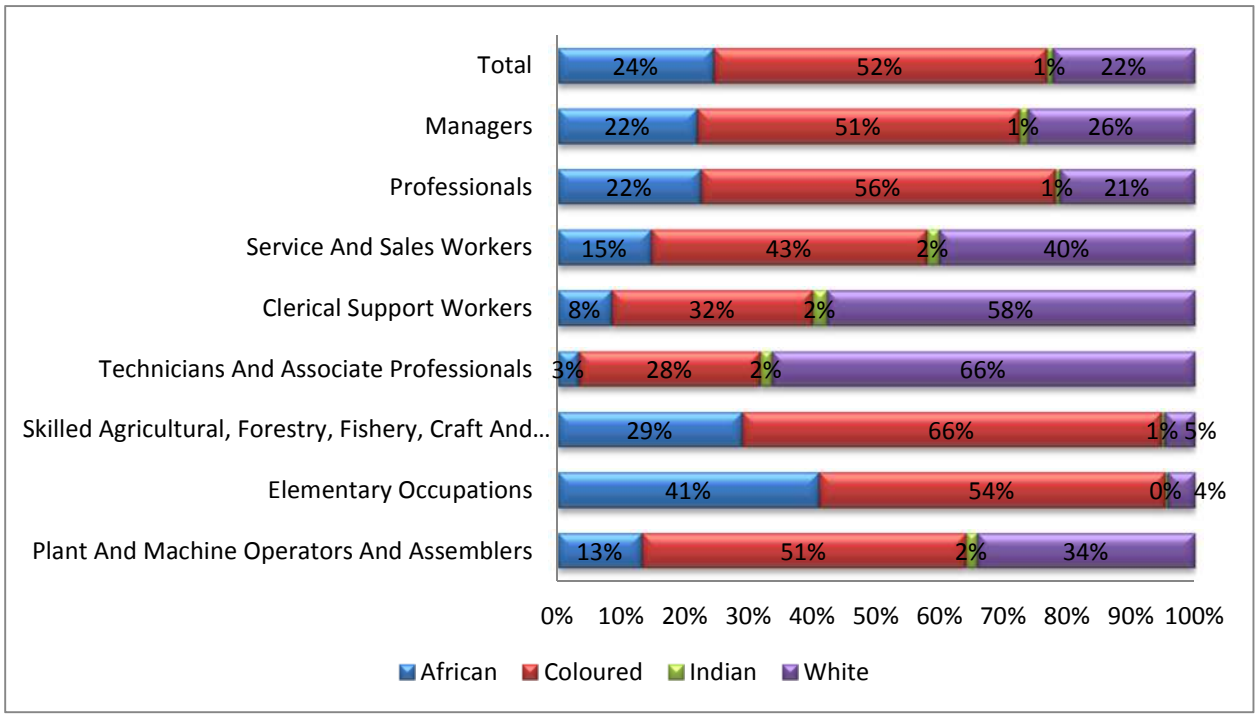
	Clerical Support Workers	Elementary Occupations	Plant And Machine Operators And Assemblers	Managers	Professionals	Service And Sales Workers	Skilled Agricultural, Forestry, Fishery, Craft And Related Trades Workers	Technicians And Associate Professionals
Female	2553	3348	2191	891	590	1226	891	553
Male	1913	8769	8684	4186	1438	1975	8389	2781

Source: merSETA database, 2013

Females constitute a significant portion (45%) of the sales and service Workers category nationally and 38% in the Western Cape. As shown in the graph below 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 8% respectively.

Coloureds constituted the largest racial group (52%) employed in the merSETA related occupations with Indians being the smallest racial group at 1% of total employment. Nationally Africans constituted 55%, Whites 27%, Coloureds 12% and Indians 6%.

Figure 31: Racial distribution of Western Cape employees in the sector, 2012



Source: merSETA database, 2013

Coloureds constituted the highest proportions for most of the region's occupations except for Clerical support work and for technicians and associate professionals which were dominated by whites. Africans and Coloureds occupied 95% of the elementary occupations, nationally this was 92% in 2012 (Africans 79% and Coloureds 13%).

The Western Cape has a unique occupational profile relative to other provinces in South Africa. As a comparison, 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 43% of employees in the Western Cape are younger than 35 years whilst 49% are between 35 and 49 years and 8% 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 17% of employees less than 35 being in manager occupations, while 67% 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 (51%) and skilled agricultural, forestry, fishery, craft and related trades works (52%) 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 8: Age distribution of merSETA employees by major occupational category Western Cape, 2012

Occupational Group	Age group		
	<35	35-49	50-64
Managers	17.1%	66.8%	16.1%
Plant And Machine Operators And Assemblers	45.6%	47.0%	7.4%
Clerical Support Workers	43.7%	48.4%	7.9%
Professionals	43.8%	46.9%	9.3%
Technicians And Associate Professionals	41.6%	50.7%	7.7%
Service And Sales Workers	36.9%	53.7%	9.4%
Skilled Agricultural, Forestry, Fishery, Craft And Related Trades Workers	42.4%	51.5%	6.0%
Elementary Occupations	53.3%	41.9%	4.8%
Total	**42.9%**	**49.4%**	**7.7%**

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 9: Age distribution of merSETA employees by chamber category National, 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, immigration, and emigration of employees should also be factored in.

The previous section detailed the profiled 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 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 the table below.

Table 10: Average GVA and employment growth figures

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 metals	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

Table 11: Employment growth figure used in the merSETA's labour demand projection

merSETA sectors	Low growth %	Baseline %	High growth %
Auto	0.5	2.0	3.5
Metals	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	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 Western Cape region for the baseline, negative and positive scenarios would be as shown below.

Table12: Demand Projections 2014 to 2018- baseline scenario, Western Cape

New Positions to be Created in Period					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**
Managers	223	228	231	236	241
Professionals	158	162	165	168	172
Technicians and Associate Professionals	313	320	325	332	338
Clerical Support Workers	104	105	107	109	111
Service and Sales Workers	248	252	257	262	267
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	75	77	77	78	80
Plant and Machine Operators and Assemblers	546	558	568	580	592
Elementary Occupations	456	466	474	485	493
Total	**2 122**	**2 166**	**2 203**	**2 249**	**2 293**
Replacement Demand					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**
Managers	413	422	428	437	444
Professionals	247	252	257	260	265
Technicians and Associate Professionals	381	388	394	401	410
Clerical Support Workers	124	128	129	131	134
Service and Sales Workers	284	289	294	299	304
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	88	90	92	94	95
Plant and Machine Operators and Assemblers	643	655	666	678	690
Elementary Occupations	483	491	500	510	519
Total	**2 662**	**2 713**	**2 761**	**2 810**	**2 861**
Total Positions That Need to be Filled					

Occupational Group	2014	2015	2016	2017	2018
Managers	636	648	660	672	685
Professionals	406	413	420	428	435
Technicians and Associate Professionals	694	707	719	733	746
Clerical Support Workers	228	231	236	240	245
Service and Sales Workers	532	541	551	561	571
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	163	165	168	172	175
Plant and Machine Operators and Assemblers	1 188	1 210	1 234	1 258	1 282
Elementary Occupations	938	957	974	993	1 012
Total	**4 786**	**4 872**	**4 962**	**5 056**	**5 151**

According to demand projections for the baseline scenario shown in the above table, Western Cape would require 4 786 people to fill new positions and 2662 people to meet replacement demand needs in 2014. This results in a total demand of 7,448 new skilled people in 2014.

Analysing the figures for the baseline scenario; the majority of demand will be for plant and machine operators and assemblers occupation, followed by the elementary workers category. Managers constitute a lower proportion which points to a considerable need to up-skill the current workforce and an increased supply of professional qualifications from universities and universities of technology.

Table 13: Demand Projections 2014 to 2018: negative scenario Western Cape

New Positions to be Created in Period					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**
Managers	66	68	68	70	70
Professionals	44	44	46	46	46
Technicians and Associate Professionals	94	94	95	95	97
Clerical Support Workers	29	29	29	29	29
Service and Sales Workers	65	65	66	66	66
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	20	20	20	22	22
Plant and Machine Operators and Assemblers	182	185	189	190	194
Elementary Occupations	146	148	150	151	153
Total	**646**	**653**	**663**	**670**	**677**
Replacement Demand					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**
Managers	398	401	403	405	408
Professionals	238	240	241	241	243
Technicians and Associate Professionals	367	369	371	374	376
Clerical Support Workers	121	121	121	122	122

Service and Sales Workers	274	274	275	277	279
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	85	85	87	87	87
Plant and Machine Operators and Assemblers	619	624	627	631	636
Elementary Occupations	466	468	471	474	476
Total	**2 567**	**2 581**	**2 596**	**2 611**	2 627
Total Positions That Need to be Filled					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**
Managers	464	469	471	474	478
Professionals	282	284	287	287	289
Technicians and Associate Professionals	461	462	466	469	473
Clerical Support Workers	150	150	150	151	151
Service and Sales Workers	338	338	342	343	345
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	105	105	107	109	109
Plant and Machine Operators and Assemblers	801	809	816	821	830
Elementary Occupations	612	615	621	626	629
Total	**3 213**	**3 233**	**3 259**	**3 281**	**3 303**

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

According to the demand projections for the negative scenario, the Western Cape region will need 3213 new skills to fill new positions and 2567 for replacement demand positions in 2014. The total demand for the four year period is 29,271 (Replacement 12,982 + New 16,289) and most of these would be from new positions and not replacement demand.

Table14: Demand Projections 2014 to 2018- positive scenario, Western Cape

New Positions to be Created in Period					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**
Managers	410	423	437	451	466
Professionals	298	306	316	326	337
Technicians and Associate Professionals	576	595	614	634	655
Clerical Support Workers	190	197	202	209	216
Service and Sales Workers	468	481	496	513	529
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	139	143	148	153	158
Plant and Machine Operators and Assemblers	983	1 015	1 047	1 081	1 117
Elementary Occupations	828	853	882	910	940
Total	**3 891**	**4 014**	**4 143**	**4 277**	**4 417**
Replacement Demand					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**

Managers	430	444	459	473	488
Professionals	257	265	274	282	291
Technicians and Associate Professionals	396	410	422	435	449
Clerical Support Workers	129	134	138	143	148
Service and Sales Workers	296	304	315	325	335
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	92	95	99	100	104
Plant and Machine Operators and Assemblers	668	689	711	733	757
Elementary Occupations	502	519	534	551	570
Total	**2 769**	**2 859**	**2 950**	**3 041**	**3 140**
Total Positions That Need to be Filled					
Occupational Group	**2014**	**2015**	**2016**	**2017**	**2018**
Managers	840	867	896	923	954
Professionals	554	571	590	609	627
Technicians and Associate Professionals	972	1 005	1 035	1 069	1 103
Clerical Support Workers	320	332	340	352	364
Service and Sales Workers	763	785	811	838	864
Skilled Agricultural, Forestry, Fishery, Craft and related Trades Workers	231	238	247	253	262
Plant and Machine Operators and Assemblers	1 651	1 703	1 758	1 814	1 873
Elementary Occupations	1 329	1 372	1 416	1 460	1 510
Total	**6 661**	**6 873**	**7 092**	**7 319**	**7 557**

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

According to the demand projections for the positive scenario Western Cape would need 6,661 new people for newly created positions and 2769 new skills for replacement demand. In the positive scenario the demand from newly created positions outweighs those from replacement demand.

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.

Males are the dominant gender in Western Cape merSETA chambers, which mirrors the other provinces.[59] 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 53.3% of the people employed in Elementary Occupations, 41.9% were in the 35-49 age groups with the remainder older than 50 years. The majority of management (66.8%) was in the 35-49 age cohort.

[59] 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 skills 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 of 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

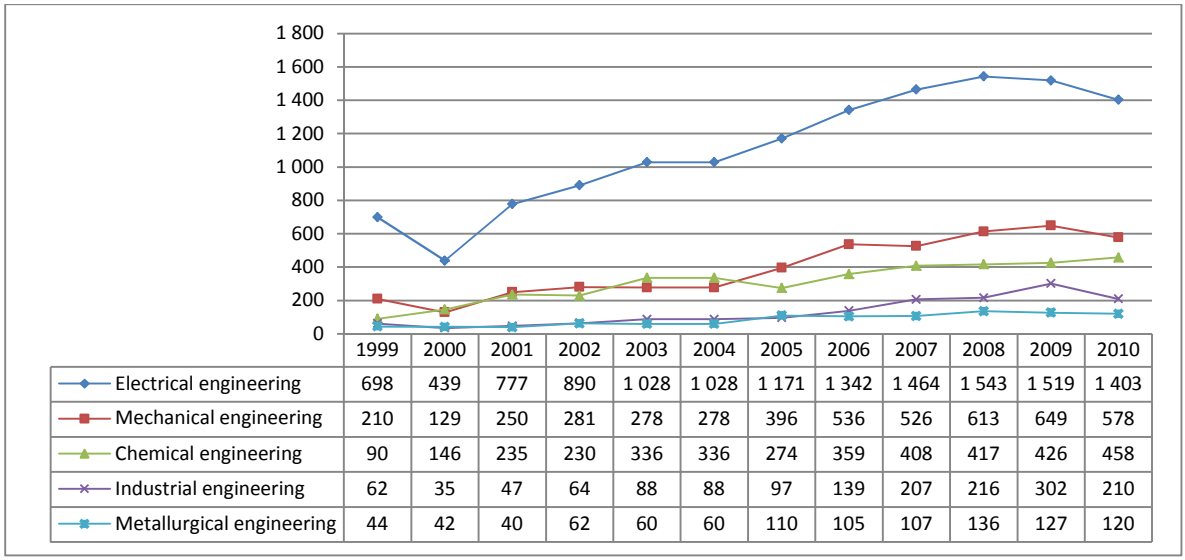
5.2.1. Higher education and training

While a range of general qualifications from the HET sector in the areas of finance, accounting, human resources and ICT is utilised in the merSETA sector, of most relevance is the output of engineers and, 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).

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%).

Figure 32: Number of national diplomas awarded in selected engineering fields in South Africa, 2010



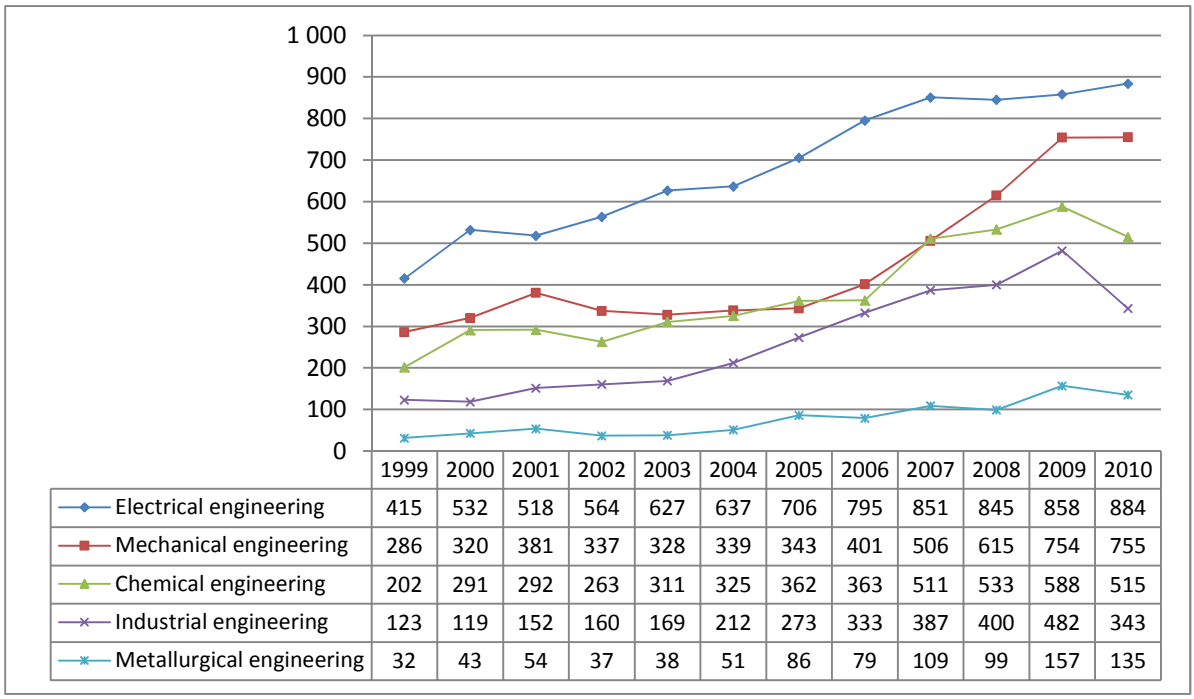
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Electrical engineering	698	439	777	890	1 028	1 028	1 171	1 342	1 464	1 543	1 519	1 403
Mechanical engineering	210	129	250	281	278	278	396	536	526	613	649	578
Chemical engineering	90	146	235	230	336	336	274	359	408	417	426	458
Industrial engineering	62	35	47	64	88	88	97	139	207	216	302	210
Metallurgical engineering	44	42	40	62	60	60	110	105	107	136	127	120

Source: merSETA SSP, 2012

The graph 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). 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%.

Figure 33: First degrees awarded in selected engineering fields in South Africa, 2010



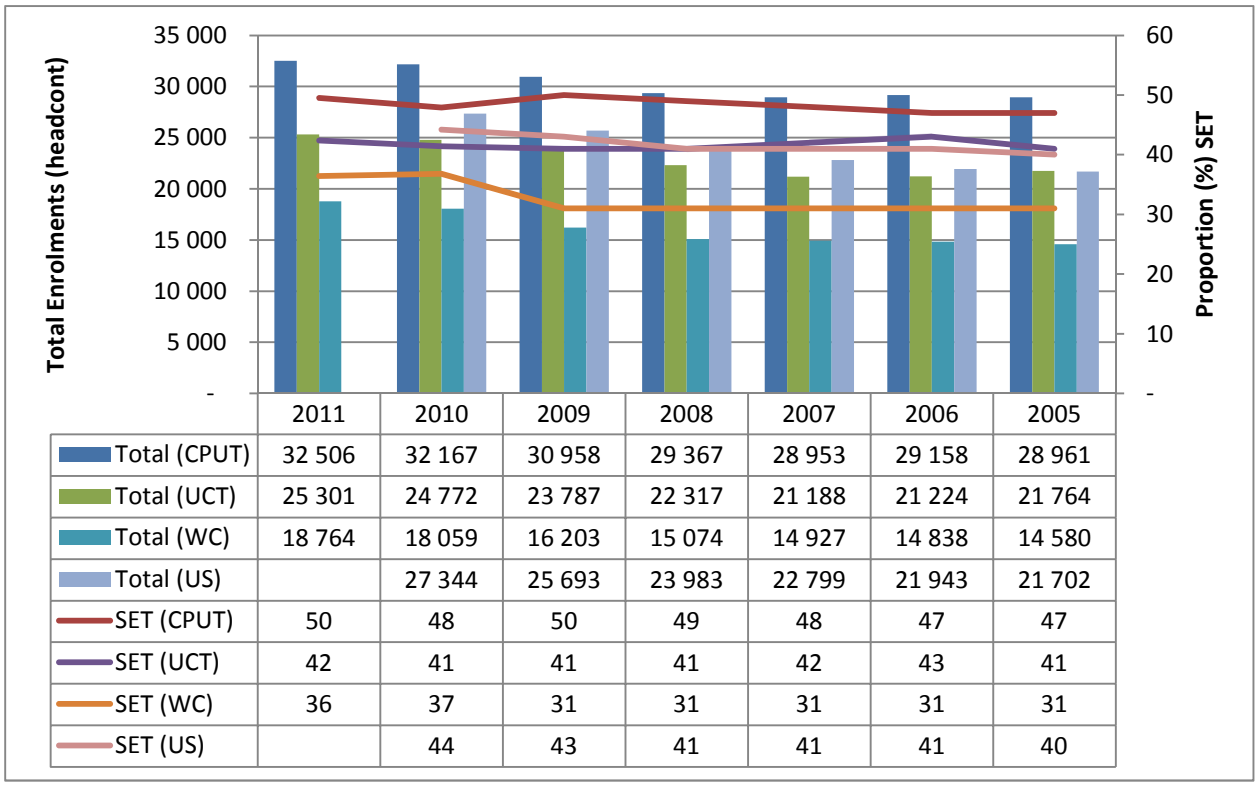
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Electrical engineering	415	532	518	564	627	637	706	795	851	845	858	884
Mechanical engineering	286	320	381	337	328	339	343	401	506	615	754	755
Chemical engineering	202	291	292	263	311	325	362	363	511	533	588	515
Industrial engineering	123	119	152	160	169	212	273	333	387	400	482	343
Metallurgical engineering	32	43	54	37	38	51	86	79	109	99	157	135

Source: merSETA SSP, 2012

The Western Cape has 3 universities and one university of technology, namely; University of Cape Town (UCT), University of Stellenbosch (US) and the University of the Western Cape (UWC) and the Cape Peninsula University of Technology (CPUT). The graph below highlights total enrolments per university and the proportion of students enrolling for science, engineering and technology (SET) related courses.

As can be seen below, the largest university in WC in terms of total enrolment is CPUT. CPUT has the greatest proportion of its students enrolled into the SET field (50%) followed by UCT (42%). The proportion of students enrolling for SET has been increasing across all WC universities since 2005.

Figure 34: University enrolments in Western Cape, 2011



	2011	2010	2009	2008	2007	2006	2005
Total (CPUT)	32 506	32 167	30 958	29 367	28 953	29 158	28 961
Total (UCT)	25 301	24 772	23 787	22 317	21 188	21 224	21 764
Total (WC)	18 764	18 059	16 203	15 074	14 927	14 838	14 580
Total (US)		27 344	25 693	23 983	22 799	21 943	21 702
SET (CPUT)	50	48	50	49	48	47	47
SET (UCT)	42	41	41	41	42	43	41
SET (WC)	36	37	31	31	31	31	31
SET (US)		44	43	41	41	41	40

Source: DHET & Quantec, 2013

UCT- University of Cape Town; WC- University of the Western Cape; CPUT- Cape Peninsula University of Technology; US- University of Stellenbosch; SET- Science, Engineering and Technology.

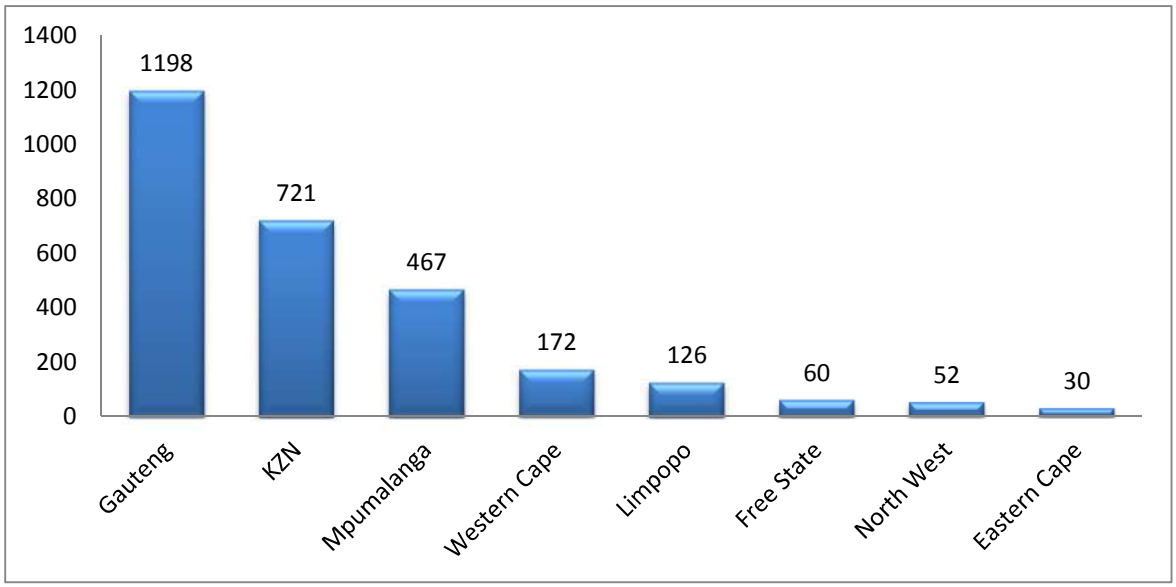
5.2.2. Learnerships and apprenticeships

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

According to the merSETA's 2011/12 Annual report, 3775 learnerships and 2559 skills programme were completed and the organisation exceeded its targets. 6051 learnerships and 5808 learners entered into skills programmes in the 2011/12 financial year. 5168 apprenticeship contracts were registered in the 2011/12 period.

The Accelerated Artisan Training Programme (AATP) is about pacing and structuring the development of competent apprentices over a period of two to three years. The programme was initiated to address the scarce skills needs of the merSETA sector. The structure and exposure to the curriculum is highly regulated, structured and monitored. An analysis of the merSETA (database accessed in August 2012) for phases 1 to 4 of the programme indicates the majority of the recipients are from Gauteng, KZN and Mpumalanga.

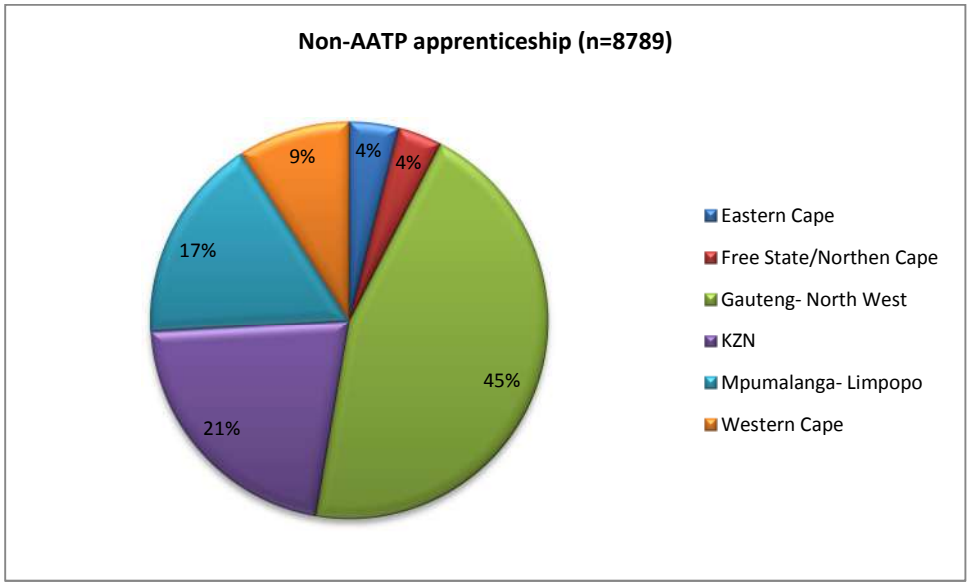
Figure 35: Distribution of registered AATP candidates for Phase 1 to 4, 2012



Source: merSETA Database, August 2012

The non-AATP apprenticeship training is also heavily skewed towards Gauteng and KZN and this is not surprising as the merSETA companies are similarly geographically represented.

Figure 36: Distribution of non-AATP apprenticeship by region, 2012



Source: merSETA Database, August 2012

As shown in the figure above 45% of non-AATP apprentices were from the Gauteng-North West region and only 9% were from the Western Cape region. KZN region is the second largest beneficiary of non-AATP training. The apprenticeship programmes implemented by the merSETA have helped the sector and provided employment opportunities to the previously unemployed.

5.2.3. FET colleges

FET colleges form a critical component of the current training capacity of artisans. FET colleges offer training for the NQF Level 4 National Certificate Vocational (NCV). One of the four routes to becoming an artisan is by doing an internship or skills programme on top of having a relevant NCV. The Minister of Higher Education and Training Minister Blade Nzimande stated in 2012 that enrolments in FET colleges had risen substantially in recent years and were exceeding projected demand[60]. Over 600 000 students enrolled in SA's 50 FET colleges in 2012[61].The department has set an enrolment target of one million by 2014 and has launched some urgent interventions into the sector. The department aims to have 4 million enrolments in FET colleges and other non-university post school institutions by 2030. According to the National Skills Accord between industry and government, SETAs will have to facilitate the placement of FET and university students in industry. The region has a total of 11 FET colleges, 3 in North West and 8 in Gauteng. The FET colleges and their offerings are listed in Appendix A.

Table 15 gives the regional enrolment figures for FET colleges for 2013. An analysis of the enrolment figures indicates that 31% of the N1-N3 enrolment was in the Gauteng FETs and 34% of the N4-N6 enrolment was from the province.

Table 15: FET enrolment figures by region, 2013

Row Labels	Sum of NCV	Sum of Eng_N1_N3	Sum of Eng_N4_N6	Sum of Bus_N4_N6	Sum of Total
Eastern Cape	19,656	4,016	1,454	9,742	34,868
Free State	7,074	5,896	1,695	12,405	27,070
Gauteng	31,671	17,700	9,804	22,487	81,662
Kwa-Zulu Natal	31,487	9,800	5,435	23,213	69,935
Limpopo	22,684	4,157	5,517	10,149	42,507
Mpumalanga	10,079	5,384	2,049	3,433	20,945
North West	10,044	4,906	1,087	5,003	21,040
Northern Cape	2,950	1,156	114	3,356	7,576
Western Cape	16,872	5,002	1,502	10,776	34,152
Grand Total	**152,517**	**58,017**	**28,657**	**100,564**	**339,755**

Source: DHET, The State of FET Colleges in South Africa

The targeted national certification rate for N1-N3 part-qualifications in Engineering Studies was 33% for the 2012 academic year. Twenty public FET Colleges and 12 private FET Colleges achieved the targeted certification rate of 33% and higher on N1, 18 public FET Colleges, 32

[60]http://www.citypress.co.za/news/young-jobless-and-desperate-will-fet-colleges-fix-our-future-20120623/
[61] http://www.fm.co.za/economy/2013/02/01/department-on-track-to-improve-fet-colleges

public FET Colleges on N3[62]. The targeted national certification rate for N4-N6 part-qualifications in Engineering Studies was 40% for the 2012 academic year. Twenty-five public FET Colleges achieved a certification rate of 40% and higher on N4, 12 public FET on N5 and 13 public FET Colleges on N6. The table below shows the national certification rates for FET colleges for the November 2012 examinations cycle.

Table 16: Certification rate of FET colleges, 2012

Qualification/Programme	Certification Rate
1. Report 190/1 Engineering Studies	
National N3 Certificate	37.5%
National N6 Certificate	36.2%
2. Report 190/1 Business Studies	
National N6 Certificate	31.9%
3. National Certificate (Vocational)	
Level 4	39.3%

Source: DHET, The State of FET Colleges in South Africa

From our in-depth interviews with employer representatives regarding FET colleges, industry seems to be willing to work with FETs to ensure more rounded and capable students are produced. Some employers mentioned that FET colleges are strong on theory but do not adequately equip the students practically. Focus on FET should therefore not be on the numbers but rather on the quality of students coming through to ensure their employability and acceptance by industry. Employers interviewed also mentioned that quality of FET students might not be up to their standards because of the quality of lecturers used; specifically using non-tradesmen to teach trades. Greater cooperation between industry and FETs is required to help feedback into the curriculum and also to provide workplace exposure to both the lecturers and students.

The WC has six government and more than thirty Further Education Training (FET) colleges. The Government FET Colleges are Boland FET College, College of Cape Town, False Bay FET College, Northlink FET College, South Cape FET College and the West Coast FET College. Private FET colleges in WC are listed in the table below.

[62] DHET, The State of FET Colleges in South Africa; Presentation at HRD FET College Indaba; 7 March 2013

Table 17: Western Cape Private FET Colleges

FET	Location
Academy for Construction Skills	Cape Town
Academy of Advanced Technology	Cape Town
Act of Grace 33	Somerset West
Africa Skills Training Solutions	George
Barker Footwear	Epping
Braitex-Tensilon	Atlantis
British American Tobacco South Africa	Stellenbosch
Cape Global Construction & Engineering Training Center	Vredenburg
College of Kuilsriver	Kuilsriver
Comficor Professional Development	Ndabeni
Concept Interactive	Rosebank
Damelin Correspondence College	Cape Town
Dyna Training	Observatory
El-Cher Consulting	Wetton
Elgin Community College	Grabouw
Entrepreneurial Business School	Bellville
Feltex Holdings	Milnerton
Franz Falke Textiles	Bellville South
Fusion Outsourcing Services	Century City
Helping Hands Skills Academy	Saldanha Bay
Intec College	Cape Town
LR Group	Observatory
Lancashire Manufacturing Group	Diep River
LSA School of Technology	Uniondale
Nascense Education	Durbanville
Nettex	Bellville South
NQTAC Cape	George
Omni Learning	Mowbray
Operational Process Improvements	Durbanville
Optimum Learning Technologies	Goodwood
Oxbridge Academy	Parrow Valley
Quali- Call	Maitland
Tjeka Training Matters	Durbanville

Source: Own compilation

6.2.1.1. FET Enrolment and throughput

Data is provided for colleges whose data was accessible. The analysis indicates the general pass levels within the different qualifications in the region.

Table 18: Northlink College throughput for N1-4 and NCV Level 2-4, 2012

Programme and Level	Belhar	Bellville	Goodwood	Wingfield	All
NB: Certification: Learners that passed subject. Percentage= Passed/Wrote					
Engineering N1 (Civil)	30% (89/297)				**30%** (89/297)
Engineering N1 (Electrical: Motor Electrical)		43% (20/47)			**43%** (20/47)
Engineering N1 (Electrical)	44% (285/648)		38% (8/21)		**41%** (293/669)
Engineering N1 (Mechanical: Fitting)			39% (7/18)	24% (65/271)	**32%** (72/289)
Engineering N1 (Mechanical: Motor)		39% (104/267)			**39%** (104/267)
Engineering N1 (Mechanical: Boilermaking)		34% (86/253)			**34%** (86/253)
Engineering N2 (Civil)	14% (29/207)				**14%** (29/207)
Engineering N2 (Electrical: Motor Electrical)		29% (9/31)			**29% (9/31)**
Engineering N2 (Electrical)	24% (101/421)		19% (24/126)		**22%** (125/547)
Engineering N2 (Mechanical: Fitting)			22% (24/109)	38% (62/163)	**30%** (86/272)
Engineering N2 (Mechanical: Motor)		36% (55/153)			**36%** (55/153)
Engineering N2 (Mechanical: Boilermaking)		45% (48/107)			**45%** (48/107)
Engineering N3 (Civil)	22% (24/109)				**22%** (24/109)
Engineering N3 (Electrical)	21% (42/200)		21% (15/71)		**21%** (57/271)
Engineering N3 (Mechanical)		31%	8% (7/88)	22%	**20%**

		(19/61)		(14/64)	(40/213)
Engineering N3 (Mechanical: Boilermaking)		17% (5/29)			**17%** (5/29)
Engineering N4 (Civil)	24% (14/58)				**24%** (14/58)
Engineering N4 (Electrical)			29% (67/231)		**29%** (67/231)
Engineering N4 (Mechanical)			22% (41/186)		**22%** (41/186)
Engineering N5 (Civil)	20% (5/25)				**20%** (5/25)
Engineering N5 (Electrical)			10% (9/90)		**10%** (9/90)
Engineering N5 (Mechanical)			5% (2/40)		**5%** (2/40)
Engineering N6 (Electrical)			31% (12/39)		**31%** (12/39)
Engineering N6 (Mechanical)			25% (5/20)		**25% (5/20)**
Engineering & Related Design NCV L2		16% (28/176)		24% (12/51)	**18%** (40/227)
Engineering & Related Design NCV L3		9% (8/87)		16% (3/19)	**10%** (11/106)
Engineering & Related Design NCV L4		13% (6/47)		13% (5/38)	**13%** (11/85)
Electrical Infrastructure Construction NCV L2	6% (6/106)				**6%** (6/106)
Electrical Infrastructure Construction NCV L3	0% (0/32)				**0%** (0/32)
Electrical Infrastructure Construction NCV L4	25% (13/51)				**25%** (13/51)
Civil Eng. & Building Construction NCV L2	5% (5/93)				**5%** (5/93)
Civil Eng. & Building Construction NCV L3	17% (9/54)				**17%** (9/54)
Civil Eng. & Building Construction NCV L4	3% (1/37)				**3%** (1/37)

Source: Northlink College, 2013

The Electrical Engineering N1 course had the highest enrolment of 669 and there was a 41% pass rate. The number of people enrolled for higher level courses is lower than for the entry

level courses and there is a decline in the pass rate. Using Electrical engineering as an example; 547 wrote N2 and 22% passed, 271-N3 21% passed, 231-N4 29% passed, 40 N5 5% passed and 39 N6 with a 31% pass rate. In order for the country to produce high quality electricians and other artisans, there is need for a concerted effort to improve the throughput of FET colleges.

Most of the demand from learners is for N1 and N2 courses. The college has training centres for practical experience but these are not accredited by merSETA. Northlink plans to provide more practical training for the N2 learners in order to make them more work-ready for apprenticeships. There is a higher demand from learners for courses than the FETs can cope with. Northlink's throughput rate is low i.e. for N1 and N2 the pass rate is only 30 – 40%. Many learners are failing all the courses for an N qualification due to poor fundamentals. Learners aren't prepared well enough at school and cannot problem-solve or adapt their thinking.[63]

Table 19: College of Cape Town enrolments, 2012

Qualification	Athlone		Gugulethu		Pinelands		Thornton	
Engineering & Related Design (Auto)- NCV	Level 2	**92**						
	Level 3	**34**						
	Level 4	**0**						
Mechanical Automotive	Level 1	**12**						
	Level 2	**10**						
	Level 3	**10**						
	Level 4	**8**						
Trade Testing	**5**							
Electrical Infrastructure Construction (NCV)			Level 2	**120**	Level 2	**270**		
					Level 3	**180**		
					Level 4	**90**		
Report 191: Electrical					N4	**175**		
					N5	**140**		
					N6	**105**		
Refridgeration					Level 1	**45**		
					Level 2	**45**		
Engineering & Related Design (Fab)- NCV							Level 2	**60**
							Level 3	**14**
							Level 4	**8**
Mechanical: Welding							**24**	
Mechanical: Fitting & Turning							**19**	
Report 191: Mechanical							N2	**47**
							N3	**73**

[63] Research findings from primary interview, May 2013

				N4	**58**
				N5	**26**
				N6	**13**

The highest enrolment for manufacturing and engineering related qualifications in the College of Cape Town was in electrical engineering related qualifications. Qualifications at higher levels tend to have fewer enrolments due to factors such as the fall out of learners in subsequent levels. In 2012, the following pass rates were achieved; N1- 83%, N2- 50% and N3- 45%.[64]

Table 20: Y3K Training Institutions Enrolment and Throughput, 2013

Company	Programme	Year	Enrolled	Qualified	Female	% Passed	% Female	Sector
Mpact	SP 0007/06-17	2013	15	14	12	93	80	Plastic
	SP 0232/06-17	2013	15	13	12	87	80	
M & B Fire	SP 0135/07-17	2012	12	12	6	100	50	Metals
	SP 0123/07-17	2012	12	12	6	100	50	Metals
	SP 0128/07-17	2012	10	10	4	100	40	Metals
Atlantis Foundries	NLRD 23253	2011	30	27	8	90	27	Metals
	NLRD 71950	2012	50	48	19	96	38	Metals

Source: Y3K Training, 2013

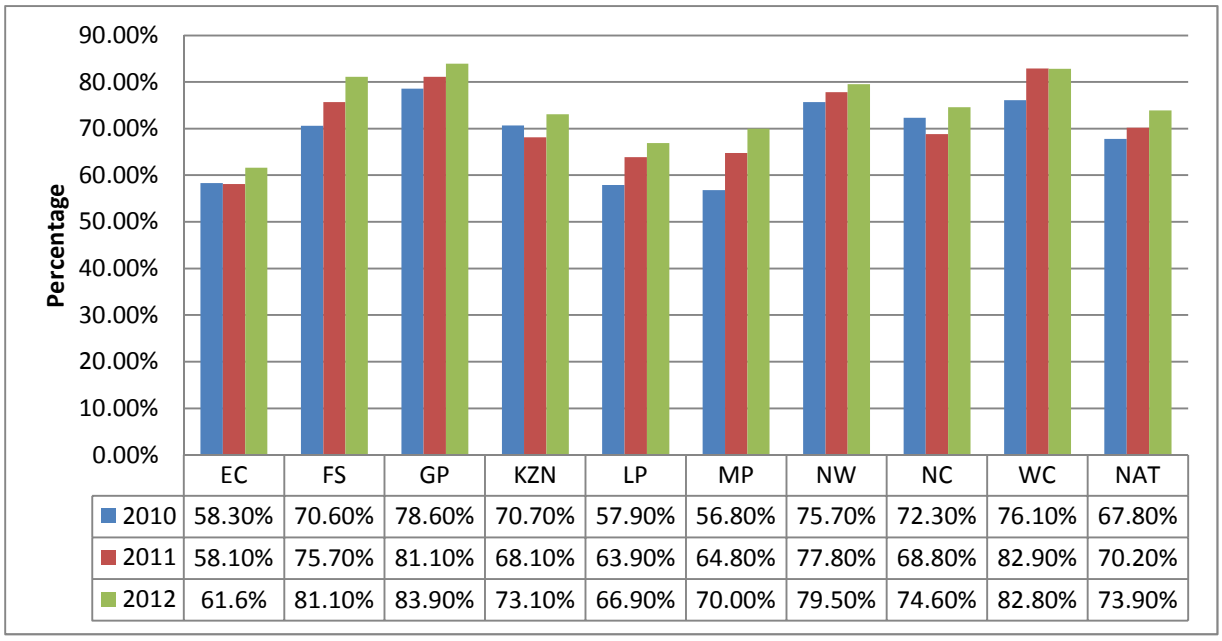
Level 1 and 2 learnerships were trained by Y3K Training on behalf of Atlantis Foundries. M&B Fire learners received training pertaining to quality in the workplace, life skills and safety in the workplace. Mpact's learners obtained an introduction to manufacturing and training on identification and processing of production waste.

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.

[64] *Primary Interview, May 2013*

Figure 37: Comparison of National School Certificate (NSC) passes by province, 2010-2012



Source: Department of Basic Education, NSCE School Subject Report

Nationally; Gauteng, WC and Free State are the best performing provinces in terms of Matric pass rates, with pass rates higher than 80% for the year 2012. In 2012, WC was the second best performing province to Gauteng with 82.8% and 83.9% pass rate respectively.

Table 21: Candidates' Performance in Mathematics by province and level of achievement, 2012

Province	Total Wrote			Total achieved at 30% and above			% achieved at 30% & above			Total achieved at 40% and above			% achieved at 40% & above		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Eastern Cape	38 801	38 067	37 038	14 457	12 752	14 114	37.3	33.5	38.1	8 280	7 469	8 124	21.3	19.6	21.9
Free State	11 003	10 001	9 512	5 321	5 395	6 167	48.4	53.9	64.8	3 422	3 462	4 114	31.1	34.6	43.3
Gauteng	40 024	32 665	33 682	23 839	20 027	23 899	59.6	61.3	71	17 465	14 706	17 638	43.6	45	52.4
Kwazulu- Natal	65 973	61 483	63 168	31 407	24 284	30 408	47.6	39.5	48.1	19 425	14 235	18 676	29.4	23.2	29.6
Limpopo	49 192	35 118	35 044	19 469	15 618	18 346	39.6	44.5	52.4	11 757	9 580	11 926	23.9	27.3	34
Mpumalanga	24 167	19 899	18 835	10 007	9 199	9 998	41.4	46.2	53	6 429	5 947	6 539	26.6	29.9	34.7
North West	12 703	9 818	10 344	6 782	5 282	6 160	53.4	53.8	59.6	4 458	3 361	3 901	35.1	34.2	37.7
Northern Cape	3 627	3 280	2 864	1 896	1 656	1 572	52.3	50.5	54.9	1 259	1 022	1 045	34.7	31.2	36.5
Western Cape	***17 544***	***14 304***	***15 387***	***11 571***	***9 820***	***11 306***	***66***	***68.7***	***73.5***	***8 879***	***7 759***	***8 753***	***50.6***	***54.2***	***56.9***
National	**263 034**	**224 635**	**225 874**	**124 749**	**104 033**	**121 970**	**47.4**	**46.3**	**54**	**81 374**	**67 541**	**80 716**	**30.9**	**30.1**	**35.7**

Source: Department of Basic Education, NSCE School Subject Report

The table above shows that the number of students sitting for mathematics at NSC level in WC decreased by 12.3%% from 17 544 in 2010 to 15 387 in 2012. It's however pleasing to note that the proportion of those who achieved at least 30% pass rate increased from 66% in 2010 to 73.5% in 2012 and those with at least 40% increased from 50.6% in 2010 to 56.9% in 2012. WC has the highest Mathematics pass rate among all provinces. In absolute terms, a total of 8 753 students graduated with a 40% or better in mathematics in WC Province.

In physical sciences, the other subject which allows students to enter into the SET field at university, the number of students who sat for the subject in WC decreased from 12 626 to 11 257 between 2010 and 2012. However, just like mathematics, the pass rates have been increasing.

Table 22: Number of candidates who achieved in Physical Sciences by province and level of achievement, 2012

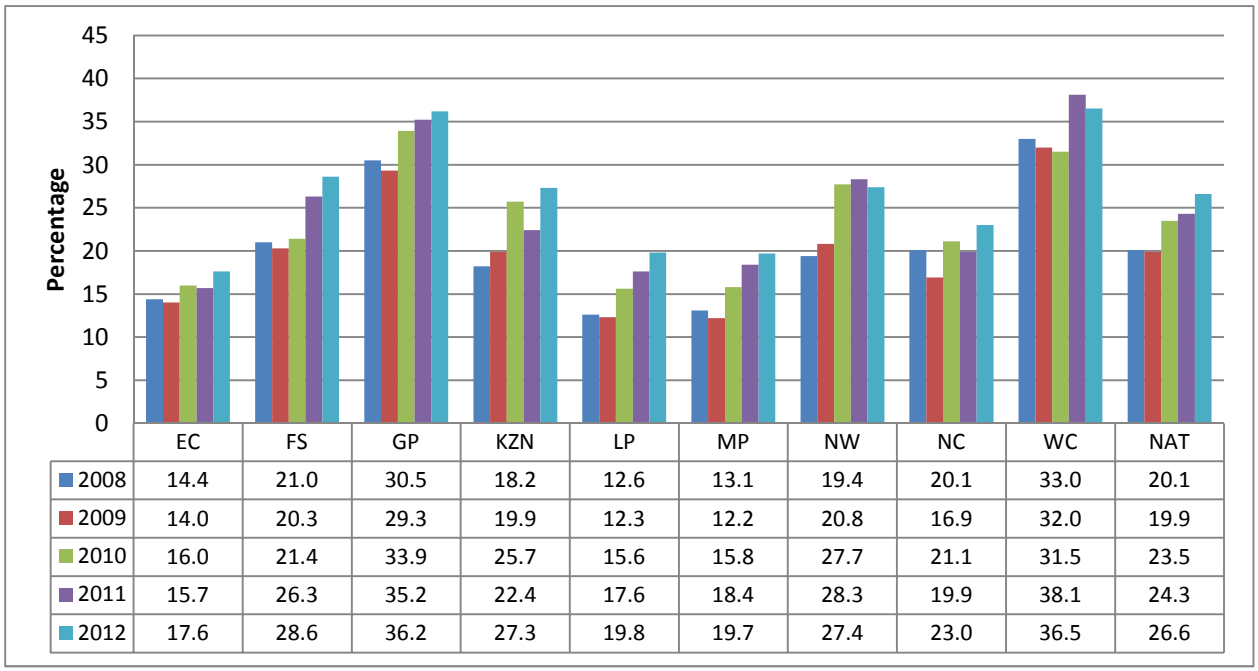
PHYSICAL SCIENCES															
Province	Total Wrote			Total achieved at 30% and above			% achieved at 30% & above			Total achieved at 40% and above			% achieved at 40% & above		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
Eastern Cape	27 163	26 367	25 603	11 753	12 123	12 911	43.3	46	50.4	6 371	6 831	6 922	23.5	25.9	27
Free State	10 592	9 901	8 487	4 656	5 466	5 820	44	55.2	68.6	2 853	3 467	3 748	26.9	35	44.2
Gauteng	33 763	28 605	29 001	18 777	17 069	20 335	55.6	59.7	70.1	12 969	12 142	14 649	38.4	42.4	50.5
Kwazulu- Natal	47 323	45 340	45 951	23 856	23 516	26 783	50.4	51.9	58.3	14 322	13 965	16 163	30.3	30.8	35.2
Limpopo	39 523	30 874	30 975	16 328	16 079	18 566	41.3	52.1	59.9	9 417	9 569	11 194	23.8	31	36.1
Mpumalanga	20 139	17 280	16 493	8 352	9 025	10 426	41.5	52.2	63.1	4 980	5 747	6 842	24.7	33.3	41.4
North West	11 270	8 624	9 225	5 662	4 853	5 769	50.2	56.3	62.5	3 481	3 103	3 593	30.9	36	38.9
Northern Cape	2 965	2 667	2 202	1 352	1 173	1 324	45.6	44	60.1	827	736	840	27.9	27.6	38.1
Western Cape	***12 626***	***10 927***	***11 257***	***7 524***	***7 524***	***7 984***	***59.6***	***65.3***	***70.9***	***5 697***	***5 549***	***6 125***	***45.1***	***50.8***	***54.4***
National	**205 364**	**180 585**	**179 194**	**98 260**	**96 441**	**109 918**	**47.8**	**53.4**	**61.3**	**60 917**	**61 109**	**70 076**	**29.7**	**33.8**	**39.1**

Source: Department of Basic Education, NSCE School Subject Report

The table below provides a more detailed analysis of the 2012 WC NSC results. It shows that those who attained a 30%+ mark for mathematics and physical sciences stood at 73.5% and 70.9% respectively. Even though the statistics generally point to a 'high' pass rate, the proportion of matriculants who qualify to get into universities to pursue a science and/or engineering degree might not be as high.

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 38: Comparison of Bachelor's passes by province, 2012



	EC	FS	GP	KZN	LP	MP	NW	NC	WC	NAT
2008	14.4	21.0	30.5	18.2	12.6	13.1	19.4	20.1	33.0	20.1
2009	14.0	20.3	29.3	19.9	12.3	12.2	20.8	16.9	32.0	19.9
2010	16.0	21.4	33.9	25.7	15.6	15.8	27.7	21.1	31.5	23.5
2011	15.7	26.3	35.2	22.4	17.6	18.4	28.3	19.9	38.1	24.3
2012	17.6	28.6	36.2	27.3	19.8	19.7	27.4	23.0	36.5	26.6

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.

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%. In conclusion, 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 merSETA is involved in a number of initiatives in the Western Cape. These are aimed at equipping individuals with the right skills aligned with the current and developing needs within the region.

Table 23: merSETA Regional Skills Development Initiatives

Initiative	Project Description
Tooling Initiative – Special Purpose Vehicles (Provincial Government)	Western Cape Tooling Initiative has trained 25 unemployed people on a pre-apprenticeship system. merSETA is currently working together with WCTi to find placement for the apprentices at relevant companies. 10 out of the 25 apprentices are female. 25 more unemployed people will go through the same process. Training provider linked to project is Northlink College (Wingfield Campus)
Cape Town Boatbuilding Initiative - Special Purpose Vehicles (Provincial Government)	The industry is looking at training 15 unemployed learners on the small craft construction qualifications, once registered. Falsebay College (Westlake Campus) will be the training provider
South African Oil and Gas – Special Purpose Vehicles	The South African Oil and Gas Alliance has trained approximately 300 unemployed people over the past year, of whom 100 have been placed. However, we will be working very closely with SAOGA to ensure that participating companies give the learners who have not yet been placed, the opportunity of an apprenticeship and/or learnership to receive grants from the Merseta through the funding window. Falsebay and Northlink are the identified providers
Mitchells Plain Summit Project	A commitment to support Mitchells Plain with the unemployment problems has taken place. The commitment of approximately R 10m to 1) Retrain 50 -100 previously retrenched persons, 2) 50 Learnerships at Cape College of Cape Town and Northlink, 3) 75 learners to attend skills programmes particularly New Venture Creation, 4) 25 bursaries, and 5) 25 learners to have the opportunity for experiential learning.
Beaufort West Provincial Government Project	Beaufort West has approximately 45 youth that passed with matric exemptions. We will be meeting with NGO`s CBO`s, municipality, DoL and various other organisations and Merseta stakeholders to find placement for these unemployed matriculants to enter the skills development arena.
Saldanha Bay SEZ skills planning	merSETA has a Memorandum of Understanding with the DTI that includes skills planning for the Saldanha SEZ.

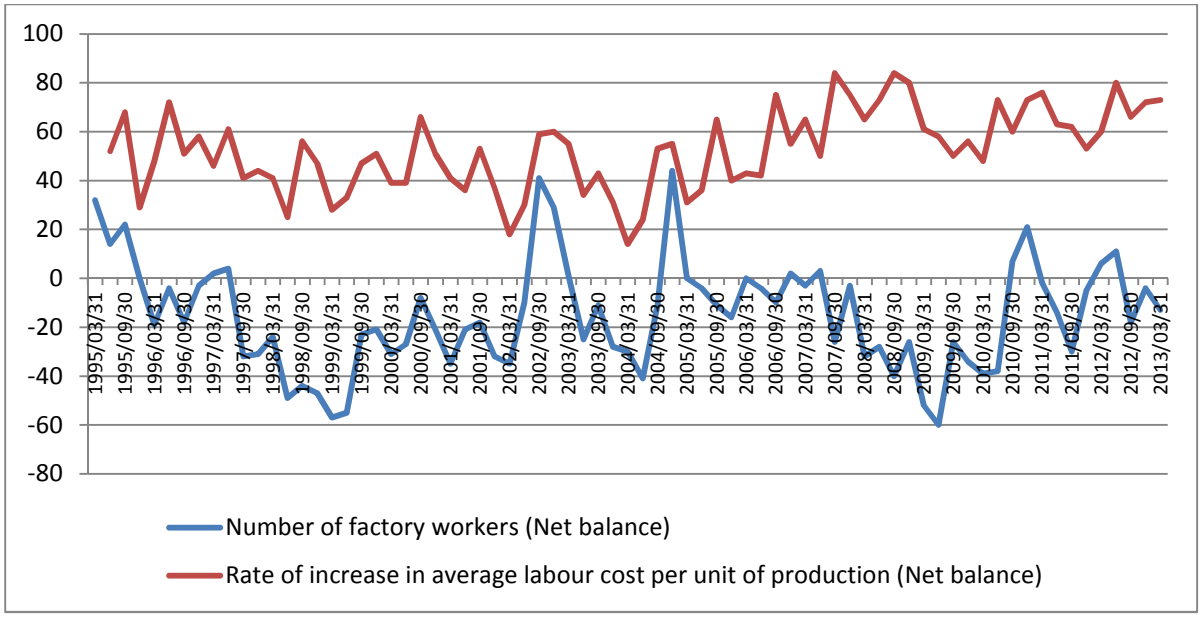
5.4. Factors that Influence Demand of Skills

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 39: Number of factory workers vs labour cost for Western Cape, 2012



Source: BER and Quantec (2013)

There is an almost direct correlation between the rate of increase in the labour cost per unit of production and the increase in the number of workers. In times of slowdown in economic activity there is a reduction in the number of workers employed in the manufacturing sector.

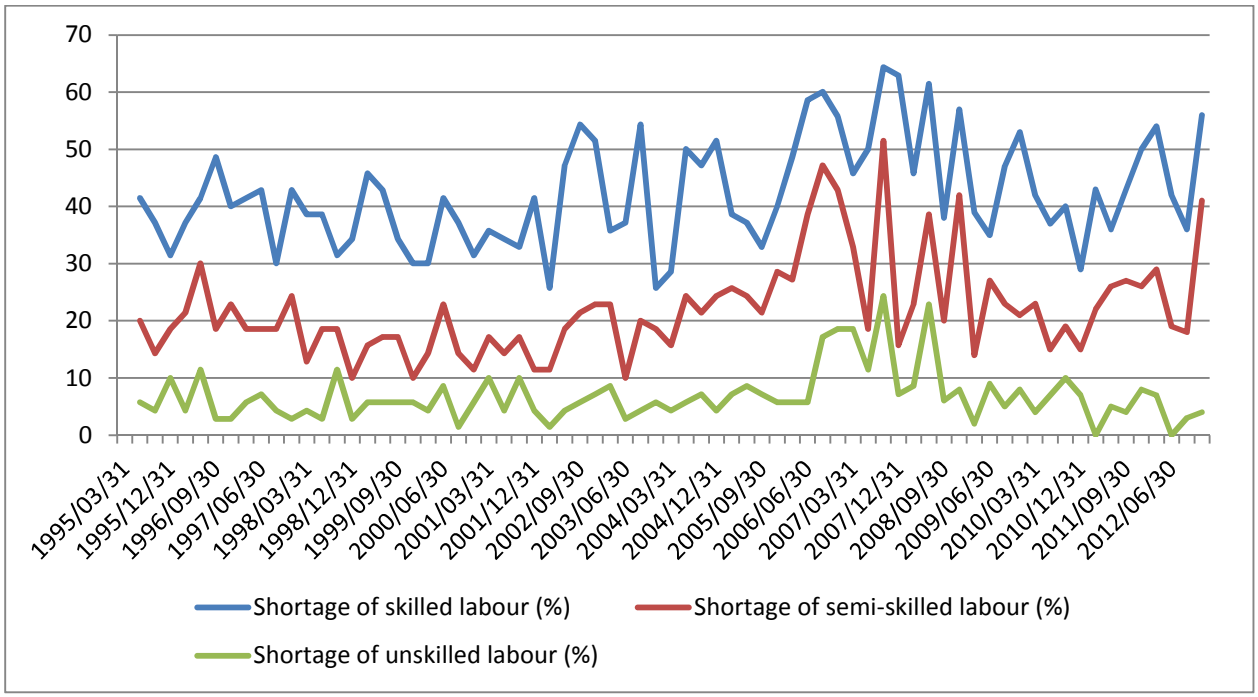
5.4.2. Growth prospects

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 40: Manufacturing constraint of labour for Western Cape, 2012

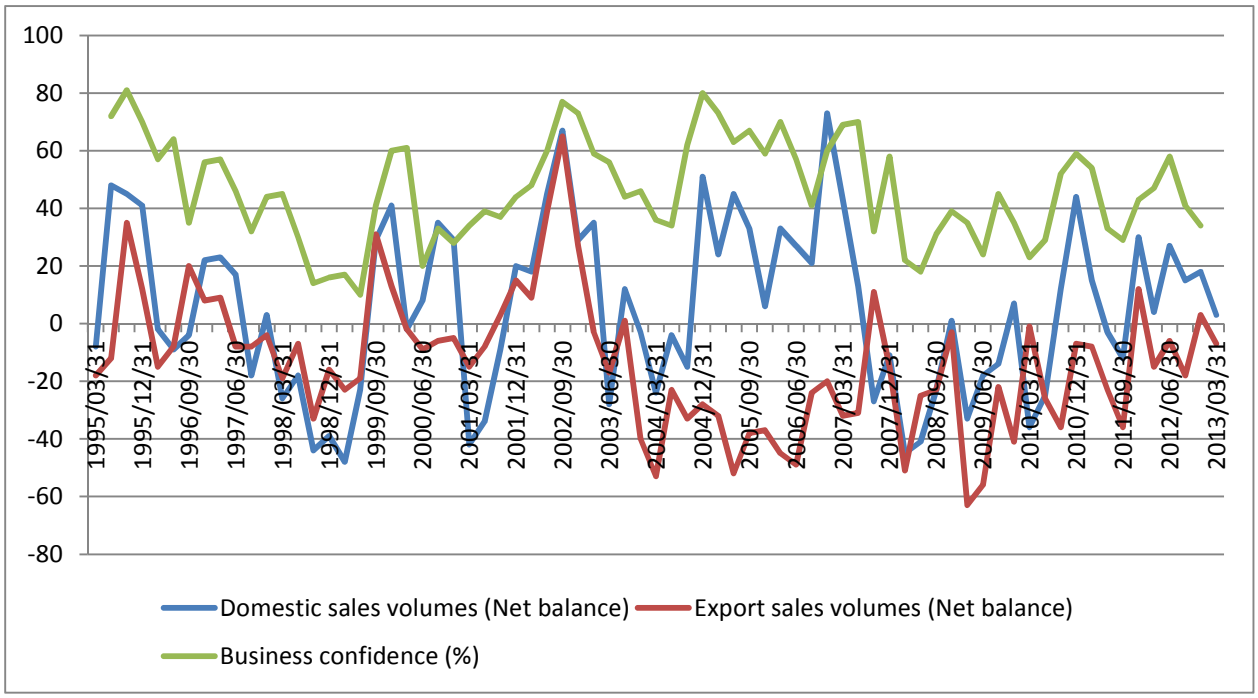


Source: BER and Quantec (2013)

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 41: Business confidence, export and domestic sales volumes- Western Cape, 2012



Source: BER and Quantec (2013)

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 country[65]. Individuals might possess the same qualification but the quality of the work which can be produced differs based on quality of training and work experience obtained by the individuals.

5.5. Conclusions

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 Western Cape national school certificate (matric) results for mathematics and physical science in 2012 were slightly higher than the national results. Students with Bachelor's passes (which qualifies a learner for university i.e. pass 50%+) were 26.6% of 2012 learners, with Western Cape having 36.5%.

[65] Primary interviews with stakeholders in merSETA sectors

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.

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 IN WESTERN CAPE

6.1. Introduction

The major merSETA chambers in the Western Cape are motor, metals and the plastics industry. Other major industries (not necessarily merSETA chambers) in the region are the oil and gas industry and the boatbuilding industry. 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.

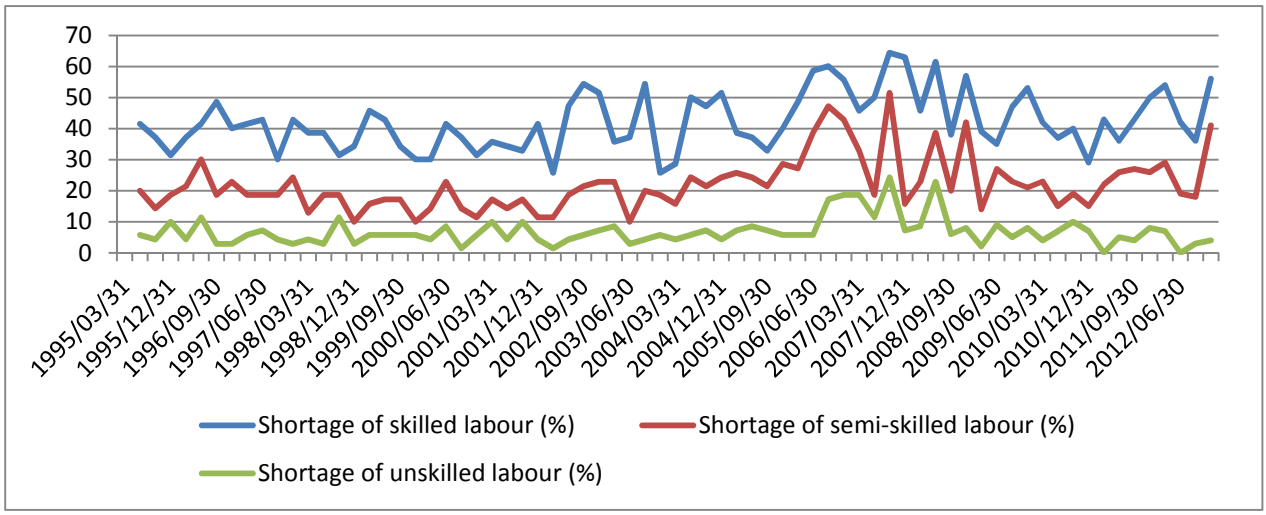
Demand for skills in the merSETA sectors is dependent on the economic growth prospects in the country. The motor, auto, metals, plastics and tyre chambers have different skills needs but some of the occupations are common across the chambers. People with transferable skills are therefore at an advantage 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.

Figure 42: 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 and 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. [66]

[66] *Scarce & Critical Skills 2009/10*
** NB: the older SSPs referred to Critical Skills, these are now termed Priority Skills*

Table 24: National Scarce skills in the metals chamber, 2012

Occupation	Organising Framework of Occupations (OFO) Code
Production / Operations Manager (Manufacturing)	132102
Bricklayer	641201
Plumber	642601
Welder	651202
Sheet Metal Worker	651301
Metal Fabricator	651401
Structural Steel Erector	651402
Toolmaker	652201
Metal Machinist	652301
Fitter and Turner	652302
Metal Polisher	652401
Automotive Motor Mechanic	653101
Precision Instrument Maker and Repairer	661101
Electrician	671101
Millwright	671202
Lift Mechanic	671204
Manufacturing Machine Setter and Minder	712102
Engineering Production Systems Worker	718905
Metal Engineering Process Worker	832901

Source: merSETA National SSP- Scarce & Priority Skills 2012/13

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.

Table 25: National Scarce skills in the Auto sector, 2012

Occupation	Organising Framework of Occupations (OFO) Code
Personnel / Human Resource Manager	121201
Supply and Distribution Manager	132401
Industrial Engineer	214101
Mechanical Engineer	214401
Chemical Engineer	214501
Electrical Engineer	215101
Accountant (General	241101
Marketing Practitioner	243103
ICT Systems Analyst	251101

Mechanical Engineering Technician	311501
Chemical Engineering Technician	311601
Retail Buyer	332301
Purchasing Officer	332302
Toolmaker	652201
Metal Machinist	652301
Fitter and Turner	652302
Electrician	671101
Millwright	671202
Mechatronics Technician	671203
Electronic Equipment Mechanician	672104
Special Class Electrician	672107
Machinery Assembler	721101

Source: merSETA National SSP- Scarce & Priority Skills 2012/13

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 26: National Scarce skills in the Motor sector, 2012

Occupation	Organising Framework of Occupations (OFO) Code
Industrial Engineer	214101
Industrial Engineering Technologist	214102
Mechanical Engineer	214401
Mechanical Engineering Technician	311501
Motor Vehicle Licence Examiner	335401
Vehicle Painter	643202
Welder	651202
Toolmaker	652201
Metal Machinist	652301
Automotive Motor Mechanic	653101
Motorcycle Mechanic	653103
Diesel Mechanic	653306
Panel Beater	684904
Vehicle Body Builder	684905
Technical Customer Liaison Agent	+
Automotive Electronics Fitter	+
Vehicle Component Fitter and Repairer	+

Source: merSETA National SSP- Scarce & Priority Skills 2012/13

NB: **+** No codes for OFO 2012 CODE even OFO 9 CODE

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 27: National Scarce skills in the New Tyre sector, 2012

Occupation	Organising Framework of Occupations (OFO) Code
Quality Systems Manager	121908
Production / Operations Manager (Manufacturing)	132102
Production / Operations Manager (Mining)	132201
Supply and Distribution Manager	132401
Operations Manager (Non-Manufacturing)	134915
Industrial Engineer	214101
Industrial Engineering Technologist	214102
Mechanical Engineer	214401
Mechanical Engineering Technologist	214402
Chemical Engineer	214501
Chemical Engineering Technologist	214502
Electronics Engineer	215201
Organisation and Methods Analyst	242102
Training and Development Professional	242401
Occupational Instructor / Trainer	242402
Assessment Practitioner	242403
Sales Representative / Salesman (Industrial Products)	243301
ICT Systems Analyst	251101
Manufacturing Technician	311904
Integrated Manufacturing Line Technician	313904
Purchasing Officer	332302
Office Administrator	334102
Fitter and Turner	652302
Electrician	671101
Rubber Production Machine Operator	714101
Plastics, Composites and Rubber Factory Worker	832902

Source: merSETA National SSP- Scarce & Priority Skills 2012/13

The rubber production machine operator occupation is the main category of scarce skills on demand in the new tyre sector. 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 28: National Scarce skills in the Plastics sector, 2012

Occupation	Organising Framework of Occupations (OFO) Code
Quality Systems Manager	121908
Production / Operations Manager (Manufacturing)	132102
Industrial Engineer	214101
Technical Director	265405
Mechanical Engineering Technician	311501
Manufacturing Technician	311904
Vehicle Painter	643202
Fitter and Turner	652302
Boat builder and Repairer	684907
Plastic Cablemaking Machine Operator	714201
Plastics Fabricator or Welder	714203
Production Machine Operator (General	714204
Rotational Moulding Operator (Plastics)	714206
Thermoforming Machine Operator	714207
Plastics Manufacturing Machine Minder	714208
Reinforced Plastics and Composite Trades Worker	714209
Product Assembler	721901

Source: merSETA National SSP- Scarce & Priority Skills 2012/13

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

6.3. Scarce and Priority Skills by Sub-sector

6.3.1. Scarce and priority skills analysis for the metals sector

The distance of the Western Cape far from major markets in South Africa resulted in the province being established for light industry (precision industries) and support industries. The metals sector is one such industry developed off the back of the regional structuring.

Table 29: Western Cape Metals sector research findings, 2013

Occupation	Specialisation
Tool making	Mould maker
Tool making	Press worker
Tool making	Pattern maker
Entrepreneurship (Business ownership)	
Tool making	Designer
Electricians	High voltage electricians
Engineering Electricians	Low voltage electricians
Boilermakers	Steel Fabrication
CNC Programmers & Setters	
Grinders	Steel Fabrication
Welders	Steel Fabrication
Machine operators (precision tooling)	
Middle management	
Maintenance Fitter	Electro-mechanical
Maintenance Fitter	Mechanician
Maintenance Fitter	Plant maintenance fitter
Maintenance Fitter	Millwright
Pipe Fitting	Steel Fabrication

There are many electricians in the region but very few who possess high quality skills. There is a need to look at addressing this shortfall in the region and in the country. Someone who wires a house does not have enough experience for a factory, as factories are more complex. It is very important for electricians to get workplace experience as this makes them more employable.

Standards and qualifications for MNCI mechanic trades and tool making exist but the lack of uptake of these trades is resulting in a shortage of this skills set. South Africa has potential to become competitive globally in tool making as the price gap between South Africa and China is narrowing. China currently has a low cost profile for their tool making industry.

The South African metals sector (encompassing) tool making is faced with a number of challenges which are affecting the viability of many entities in the sector. Poor performance of firms in the sector impacts the training and development of existing employees and also of potential employees.

6.3.1.1. Challenges in the metals sector[67]

- the lack of sufficient training programmes in the fields in which the critical skills are,
- lack of basic skills (i.e. Mathematics, English and Science) amongst learners; decrease in desirability of tool making as a career choice

[67] Research findings from major participants in the metals sector

- high cost of production
- high competition from outside SA
- Loss of capacity and capability in the industry
    - *Capacity lost*:
      Quad closed shop- they used to take 50 people for training,
      Maxwells- used to take 60-70 people
      Expert Tool used to employ 70-80 people

    - *Capability lost*:
      SANS produced nylon tyre treads and used to employ around 1,200 people closed 3 years ago. Equipment worth billions of rand was sold upon dissolution
      Gearing foundry- used to employ 130 people, now factory closed
      Atlantis foundry- employer of about 1,400 people, the company has been bought by a German company and there is possibility to shift production to Brazil. All products manufactured are exported
      Scaw Metals- rebar manufacturing affected by downsizing

- Low productivity in the metals sector due to long leave entitlements, decrease in the working hours per week, high minimum wage and underpayment of artisans (as they are paid close to the minimum wage
- No cross-chamber collaborations at national level: meetings happen about 2 times a year, proper interaction happens at regional level. Lack of collaborations result in duplication of efforts i.e. certain trades which are applicable for different sectors end up getting an oversupply because of multiple interventions
- South Africa is currently in defence mode regarding jobs; focus is on keeping/sustaining existing jobs rather than on creating new jobs
- The country is no longer involved in development manufacturing (as was the case during the time when Sasol, Iscor were developed); this has seen engineers being churned out but with nowhere to place them
- The average age of artisans in the metals sector is 55-57 years which poses a large problem as lack of uptake by the younger generation of the trades may stem growth of the trade into the future

6.3.1.2. Recommendations for the sector

- Identify companies doing training and rate them into categories such as gold, silver and other- with gold being firms with sufficient facilities, presence of assesors and moderators etc. Support given to firms will therefore be based on these ratings;

examples of 'gold-companies' *Mittal Steel*, *Metalbox* (had a good training program) and *Machine Builders*

- Quality of output from training programs needs to be looked at and re-examined to ensure there is alignment with industry requirements instead of pushing quantity. (*FET colleges need to be incentivised to produce quality, not quantity)*
- Curricula must be pegged at 'on the job' level- in order to make the learner ready to become productive once they move from training institutions to jobs. There should be no need of having to undergo further intensive training at the workplace as this is duplication of time and effort
- Before apprentices are taken on board there should be aptitude tests i.e. Maths, language and dexterity tests are necessary to separate out candidates with a greater chance of proceeding in their chosen trade
- An analysis should be done of what the N2 shortfalls are in developing learners with adequate maths and science (i.e. an analysis of both curriculum and teachers)
- merSETA needs to develop a bridging course for those whose Maths and Science are not of an acceptable standard
- adoption of the model being used by the Western Cape Tooling Initiative (WCTI) can help address the skills shortfalls in other merSETA chambers.[68]

6.3.2. Scarce and priority skills analysis for the motor and auto sector

The Western Cape motor and auto sector is 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: Western Cape Motor & Auto sector research findings, 2013

Occupation	Specialisation
Motor Sector	
Motor Mechanic General	Automotive Motor Mechanic (Skill Level 3)
Motorcycle Mechanic	Motorcycle (and Scooter) Mechanic (Skill Level 3)
Panel beater	Panel beater (Skill Level 3)
Automotive Spray painter	Automotive Spraypainter (Skill Level 3)
Diesel Mechanic	Diesel Motor Vehicle Mechanic (Skill Level 3)
Vehicle Body Builder	Vehicle Body Builder (Skill Level 3)
Automotive Electrician	Automotive Electrician (Skill Level 3)
Service Advisors	Automotive Sales & Support Services FET Certificate (Skill Level 3)

[68] see Appendix A for WCTI case study

Vehicle Sales, Part Sales	Sales: New and Old Vehicles, Parts, Service and Motor Cycles
Automotive Machinist	Automotive Machinist (skill level3)
Mechanic	Automotive Engine Fitter
Tractor Mechanic	Tractor Mechanic
Diesel Mechanic	Diesel Fuel Injection Mechanic (level 3)
Auto Sector	
Diesel mechanic	
Fitter & Turner	
Automotive machinist	
Boilermaker	
Toolmaker, jig and dye maker	
Autotronics	
Spray painting	
Dual logic skills	
Automotive Motor Mechanic	
Motorcycle Mechanic	
Panel Beater	
Vehicle Body Builder	
Automotive Electronics Fitter	
Vehicle Component Fitter and Repairer	
Paint Shop Assistant & Color matching/mixing	
Polisher	
Auto Trimmer/upholsterer	
Paint Less dent removal	
Paint defects	
Payroll Administrator	

6.3.2.1. Challenges in the Motor & Auto sectors

- Learners lacking the fundamentals (Mathematics, English and Science) make 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

- 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. (In 2010/11 about a third of what was applied for was granted)
- Current training of learners based on merSETA funding is up to Level 2 and not to artisan level
- People who become artisans are more costly to employ which can be a disincentive for companies to put their workers into apprenticeships[69]

6.3.2.2. Recommendations for the Motor & Auto sector

- Reduce the amount of administration and paperwork involved for employers taking on apprentices and learners. Time is wasted on administration instead of on training
- 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
- 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[70]. Petrol mechanics are close to being oversupplied, while diesel mechanics have a shortage.

6.3.3. Scarce and priority skills analysis for the plastics sector

Companies operating in the plastics sector add value to plastic raw materials, through conversion processes such as injection moulding and extrusion, producing components for direct use or assembly.

Table 31: Western Cape Plastics sector research findings, 2013

Occupation	Specialisation
Pattern and mould makers in polymers	Advanced composite workers
Quality Systems Manager	
Plastic machine setters Production / Operations Manager (Manufacturing)	Ink mixers, Print setters Designers, Label setters
Industrial Engineer	

[69] Some small businesses closed down in 2012 because they could not afford labour-related costs and procedures. This is why many of such companies try to use unqualified people- *Primary research finding*
[70] Diesel mechanics can do what petrol mechanics do, but petrol mechanics cannot function in the role of diesel mechanics

Technical Director	
Mechanical Engineering Technician	
Manufacturing Technician	
Spray painter	
Fitter and Turner	
Plastic Cablemaking Machine Operator	
Plastics Fabricator or Welder	
Production Machine Operator (General)	
Rotational Moulding Operator (Plastics)	
Thermoforming Machine Operator	
Plastics Manufacturing Machine Minder	
Reinforced Plastics and Composite Trades Worker	
Product Assembler	

Pattern and mould makers are skills but they are not needed by many companies and often. Once a mould is developed, manufacturing can be carried out using the mould and there is no need to keep making the same mould. There is no trade test for pattern and mould making.
The Plastic machine setter trade (up to NQF Level 4) is a new accredited trade and there is a very high demand for this by employers. Employers require learners to reach Level 4. There are currently no unit standards or qualifications for the Print setter occupation.

Employers in the region's plastics sector have a high demand for supervisory skills. Learners who obtain supervisory skills encompassing presentation skills, communication, planning and management skills are able to progress more in their organisations.

6.3.3.1. Challenges in the Plastics sector

- A big gap is that companies are often not prepared to offer the 3 months of workplace training for students from FET colleges.
- A number of companies in the plastics industry tend to rely completely on grants for them to conduct training. Non-issuance of grants or reduction in funding therefore imperils the training for the sector
- Many students struggle with the fundamentals (Maths and English). The basics are required in order to be able to take on more responsibility i.e. logic and problem solving skills are inherent in the fundamentals
- Learnerships are mainly geared towards resolving short term skills requirements of the current industry

6.3.3.2. Recommendations for the sector

- merSETA can help in ensuring students obtain placements with employers for workplace training so they can get practical experience
- There is currently a higher demand for learnerships as there is a certificate at the end of it and it covers all courses (technical, safety, HIV, softer skills e.g. time management). It might be worthwhile exploring how merSETA can harness the demand for learnerships
- Grant more funding for learnerships and supervisory skills courses
- Interventions should be implemented to assist in addressing the lack of fundamentals
- Programs offered to learners must be structured in order to equip learners with skills applicable to new areas of specialisation in line with global industry trends

6.3.4. Scarce and priority skills analysis for the boatbuilding sector

The Western Cape boatbuilding sector contributes more than R1.2 billion to the economy and employs just over 4,000 people. South Africa is the world's second-largest producer of catamarans after France.[71] Approximately 85% of South Africa's boatbuilding companies are located in the Western Cape and their production is geared towards the export market. Major companies in the sector include Robertson & Caine, Ullman Sail Group and Southern Wind Shipyard.

Table 32: Western Cape Boatbuilding sector research findings, 2013

Occupation	Specialisation	Sub-Specialisation
Advanced composites trade worker		
Marine engineer		
Naval architect		
Yacht designer		
Marine system designer		
Marine surveyor		
Marine project manager		
Marine risk and financial planner		
Marine procurer		
Outboard engine technician		
Estimator	Technical/engineering and business acumen	Analysis of bids, detailed cost estimates, technical knowledge

[71] *Boatbuilding*- Western Cape Business 2013 pg 105

Boat builder	Marine fitters (semi-skilled)	Deck gear, brightwork, glazing
	Marine structural (artisan)	Composites, steel, aluminium
	Marine joiners (artisans)	Joinery, interior fitment
	Marine assembly supervision (Supervision 1)	
	Marine technician (artisan):	Plumbing, air conditioning, steering, propulsion, hydraulics, pneumatics
	Marine electrician (artisan)	Install and repair
	Marine electronics (artisan)	Install and repair

Currently Naval architect and Boatbuilding skills are being imported. Available Carpentry skills are not of a high quality, carpenters need to be knowledgeable about working with boats. There is a need for composites trade workers who can work with infusion technology i.e. setup and overseeing the process. These need to be high level workers able to work with reinforced plastic.

6.3.4.1. Challenges in the Boatbuilding sector[72]

- Industry is reluctant to let artisans go forward in their studies due to the lost production time (time spent at school equals time lost in working on production)
- The project nature of the sector results in cyclical employment
- South Africa is behind in terms of global technological manufacturing
- Boatbuilding sector not given adequate attention despite the potential for growth
- Industry is not taking up learnerships due to the cumbersome paperwork required

6.3.4.2. Recommendations for the sector

- There is need for individual development plans to upskill people in the industry
- Integration needed between training institutions and industry to enable learners to get workplace based experience
- The process for industry to take learners on board should be simplified to avoid an administrative burden
- Increase in subcontracting will help raise employment levels as more people will get opportunities to be employed
- Workers should be equipped with base skills which are transferrable i.e. one able to move from one industry to another and do adaptation course

[72] *Findings from Interview with Marine Industry Association of South Africa CEO, 2013*

- The future artisan is technically savvy i.e. critical thinker, trouble shooter and problem solver
- SA's focus should be on manufacturing as a driver for growth i.e. boat and ship building, repair & maintenance
- Boatbuilding sector should be given prominence in order to not be over looked. New Zealand positioned itself as 'go to place' for super yacht refits (boats > 100 feet) but SA is in better location to tap into this market

6.3.5. Scarce and priority skills analysis for the oil and gas sub-sector

Cape Town's oil refinery and the Mossel Bay gas to liquid (GTL) facilities are the main facilities in the Western Cape. Each year large quantities of oil are transported around the Cape of Good Hope 32.2% of West Africa's oil and 23.7% from the Middle East.[73] Potential exists for the region to benefit from increased activities emanating from operation of rigs close to the region or vessels passing by. Oil & gas developments along the West African coast in Angola and Nigeria have seen expenditure estimated at $15 billion with Western Cape only having captured 1% of the market, which suggests huge growth potential.[74]

An offshore supply base is being developed at the Saldanha Bay Industrial Development Zone (IDZ) and there is potential to tap into the repair market for rigs operating in the West African oil & gas industry. A ship repair facility was established in the Cape Town harbour. According to Wesgro (Western Cape investment agency) an eight-week stay by an oil rig at the Port of Cape Town contributes approximately R200 million to the provincial economy.[75]

Table 33: Western Cape Oil & Gas sector research findings, 2013

Occupation	Specialisation
Simulation Developers	Petroleum Simulation Developers
Technical Sales Representatives	
Jet fuel manager	
Drivers	Bulk truck drivers
Exploration experts	(especially) Shale gas
Welders	Coded Welders
	Subsea welders
High Tech Instrumentation	

[73] *Oil & Gas* Western Cape Business 2013 pg 96
[74] http://www.westerncape.gov.za/other/2011/10/wc_sectoral_economic_prospects_2010-15_final_report.pdf
[75] *Oil & Gas* Western Cape Business 2013 pg 96

Pipe Fitters	Refineries
Engineers	Mechanical and Electrical
Electricians	
Painters	Coating Applicators
Non Destructive Testing (NDT) & Inspection Services	-Remote Operated Vehicle (ROV) Pilots and Technicians -Conventional & advanced Ultrasonic Inspection Technicians -Radiographic Inspection Technicians 1.1.3.
Heat Treatment Services	Magnetic Particle & Liquid Penetrant testing Technicians
	Radiographic Technicians (X-Ray & Gamma)
	Ultrasonic Inspection Technicians
	Phased Array Ultrasonic Inspection Technicians
	Eddy Current Technicians
	Welding Inspectors
	Corrosion Mapping Technicians
	Positive Material Identification Technicians
	Heat Treatment Practitioners
Rope Access	Internationally Accredited Rope Access Technicians and supervisors
Offshore Survival training	Trainers

Multi-skilling is valued by the sector (e.g. someone who can weld and fit) as it enables the work to be done more efficiently and economically. By 2017, there needs to be an upgrade of refineries and power stations to greener technologies. Currently there are not enough welders, boilermakers and pipe-fitters for these upgrades.

Non Destructive Inspection & Testing

South Africa has currently a huge shortage of experienced Ultrasonic & Phased Array as well as Guided Ultrasonic Technicians resulting in current utilisation of expatriates from India, UK and France. The Local experienced Ultrasonic technicians have been sourced by overseas companies mainly from Australia & New Zealand.

Demand for experienced Radiographic technicians outweighs the supply (The NDT Institutions cannot train enough RT technicians to meet the current demand. The experienced RT technicians have also been sourced by other countries). The local NDT Companies are unable to properly provide advanced NDT services such as Eddy Current Inspection, Time of Flight Defraction Inspections, Tank Floor Inspections, Delta Ferrite Measuring Inspections as very few SA NDT technicians are qualified in these disciplines.

Heat Treatment Technicians

Currently only SAIW in conjunction with De-Tect Unit Inspection's run the only Heat Treatment Course for the whole of Africa – SAIW can only accommodate 15 Students per class (only two classes are held per annum). Only In-house training is provided for most of the local candidate heat treatment technicians and a Company Certificate of Competence is issued.

6.3.5.1. Challenges in the Oil & Gas sector

- Existing courses for underwater welding are currently not accredited
- There are currently not enough apprenticeships available for work-place experience. So there is going to be a big problem in the future if more people start applying for apprenticeships
- Some employers have highlighted that apprentices are often not very productive
- Being an artisan is not considered as desirable as it used to be
- Quality of learners coming out of some FETs is of a low standard which results in industry opting not to take on the learners
- Efficiency of the ports and Transnet's relatively dim view of ship repair vis-à-vis the more lucrative container business results in not much support being accorded to the ship repair sector

6.3.5.2. Recommendations for the sector

- A qualification for specialisation in rig maintenance is required which equips an individual to be able to function with a holistic skills set
- In order for South Africa not to miss out on capitalising on the potential market of numerous rigs around the coast-line, there is need for development of a drilling qualification
- Semi-skilled people are in demand because some basic technical skills at the lower levels are also required in the industry. There is a gap in the sector, so short courses which are practical, logical and workplace-focused are required, and which can also be used as a building block to the trade.

- More companies need to be engaged in order to take on apprenticeships in trades required in the oil & gas sector, so they can provide work-place experience
- Companies must ensure that there is internal career progression through development so there can be attraction of more learners into the industry
- Industry needs to be more involved with the FETs in terms of work-place experience and also giving input regarding subjects that should be included in the curricula of institutions
- De-Tect / Cooperheat Of Africa in conjunction with SAIW devised the first and only course for Heat Treatment Practitioners in Africa in 2010 (the demand for heat treatment has grown with the growth in South Africa's Mining and Power Generation expansion programmes), therefore there is need to increase training in this regard.
- Western Cape has mostly technicians qualified to SNT-TC-1A; there is need for the technicians to be bridged to SAIW or PCN – rated higher for use on ESKOM Plants such as KOEBERG, Atlantis, Nuclear New Build, Conventional Plants
- Given there are no public service providers and very few private providers that are able to offer specific technical skills, the trend in the petroleum industry has been to source individuals from abroad who have the specialist technical skills. The individual repairs, designs, configures etc. what is required and then returns (mainly) without imparting any specialist knowledge to local employees.
    - There is therefore a need for specialist knowledge to be documented and/or updated by subject matter experts in the petroleum sector. Industry should therefore play a more prominent role on the advisory boards at the Universities of Technology and FETs

6.3.6. Scarce and priority skills analysis for the renewable energy sub-sector

The renewable energy sector is projected to employ around 20,000 people by 2025. The Green Cape Project sets to promote investment in the sector and partnering with universities for technological innovations.

Western Cape's expertise in the boatbuilding sector gives the province a head start in bidding for wind-turbine manufacturing contracts. Opportunities are expected to be found in the solar power market. Major companies in the sector include AEG Power Solutions, Eskom, Afrox, Solaire direct, and ABB South Africa.[76]

[76] *Energy*- Western Cape Business 2013

Table 34: Western Cape Renewable Energy sector research findings, 2013

Sector	Occupation
Renewable energy	
	Electricians
	Mechatronics Technicians
	Welders
	Hydraulic operators
	Electrical Engineers
	Wind turbine technician

Growth of the sector is expected to occur in next 10 – 20 years which will result in repair and maintenance skills of the wind turbines becoming critical. The ability to plan ahead enables the province to capitalise on the growth potential in the sector.

Non Destructive Testing (NDT) inspection & testing companies fulfil an integral part in the assurance of Quality and Safety from proposed "New Build", and maintenance of existing energy sites. This includes national key points such as Koeberg Nuclear Power Station, Conventional ESKOM Plants and Chevron as well as SASOL refineries.

6.3.6.1. Challenges in the sector

- Some respondents pointed out scarcity of high quality electricians (qualified and experienced)
- Development of the renewable energy sector comes with a need for specialised skills which some training institutions might not necessarily be equipped to provide

6.3.6.2. Recommendations for the sector

- merSETA may be able to assist in bridging the workplace gap for the learners (i.e. incentivising more companies to take on learners for workplace experience)
- The amount of administration required for companies to take on learners must be minimised in order to allow more time to be spent on training rather than on getting learners into the system
- merSETA can assist in providing high quality teaching staff and teacher support services to ensure high quality learners are produced by institutions. Training of skills development practitioners to bring them to a point of their skills aligning with industry standards will contribute to better training of learners.

- The requirement for cross-skilled artisans with skills in electronics, hydraulics and mechatronics can be achieved by ensuring these artisans are equipped with all these skills in a specialised institute
- The establishment of a training center under way in the Western Cape which will be focused on training for the Wind Energy sector will ensure development of the required Wind technicians for the sector. Such institutions can be rolled out in other sectors- where there is focus on providing particular skills sets

6.4. merSETA Skills Development Priorities in the Region

The MERSETA Western Cape uses both public and private service providers for the purpose of training people. FET colleges offer mainly technical training. Some private providers don't have workshops which therefore stand as a hindrance for offering practical training. According to a baseline report on SETA activities, the Western Cape has historically recorded more of a demand for learnerships than skills programmes. "Companies are not interested in short courses because there are no incentives."[77]

MERSETA Western Cape entered into a partnership with all 6 FET Colleges in the province in order to minimise the administrative work involved in learnership implementation. The Colleges are responsible for the portfolios of evidence, monitoring of training and assessments. The SETA's role is to introduce the colleges to the employers. The Colleges do a presentation to the employers and they in turn select the Colleges they require. This College Project is aimed at large companies as well as SMMEs.[78]

MERSETA Western Cape formed partnerships with the province's technikons to look at experiential training. Learners who study mechanical engineering, electrical engineering or industrial engineering are placed in companies for in-service training. The companies where the learners are placed in turn receive grants.[79]

The Western Cape's skills development priority is focused on the following sectors;

- Tooling and Manufacturing: the Wingfield FET College was targeted as a training facility for a project to train learners in association with the Tool Making Association.

[77] Baseline Study on SETA Activities in the Western Cape, First Report Sept 2004
[78] Baseline Study on SETA Activities in the Western Cape, First Report Sept 2004
[79] Baseline Study on SETA Activities in the Western Cape, First Report Sept 2004

- Fabrication: a big demand for Welders and Boilermakers as a result of oil and gas industry development
- Motor: demand for Motor Mechanic, Spray painter, Automotive Body Repairer.
- Metals: demand for Fitter, Fitter and Turner, Tool Jig and Die-Maker. [80]

6.5. Regional Strategic Plan Linked to merSETA Priorities

The RSSP aimed on identifying 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 also input from the research team.

NSDS III Priorities	merSETA Priorities	Regional Strategic Plan
Priority 1: develop a labour market intelligence system and facilitate sector specific research initiatives	– To effect best practice in line with King III, – Establish capacity for research and skills planning, – Implement partnerships for credible skills planning, – Intermediate skills needs are identified and addressed in all merSETA sub-sectors, – High-level national scarce skills need to be identified and addressed, – Relevant R&D and innovation capacity is developed and implemented, – To implement a research programme to identify current and future interventions to support productivity improvements.	ii. Short to Medium Term Priorities – Provide information on careers in the different sectors and labour market information – Research on skills demand for new industries (renewable energy) or change in skills needed for existing industries – Address any gaps in the OFO codes and develop appropriate alternate job titles that accurately reflect work specialization – Implement the recommendations of the sector specific research initiatives from Chamber level and allocate resources accordingly – Integrate the system with the envisaged NAMB/DHET database – Engage with recruitment companies to advise on best practice for developing a system that will allow it to integrate with recruiter databases for maximum exposure of vacancies and matching of candidates – Ensure that funding in sectors is collated to avoid duplication – Create databases of all Artisanal programs offered in the Western Cape. All accredited providers – Ensure that database of all Trade facilities are collated to total numbers in the province – Link Industry grading to Trade careers. e.g. General worker to Qualified Artisans – Collate all research done in the Province via FETI, PSF,SETA's etc. Do applied industry based regional research to validate skills intelligence – Work with industry to promote quality information input into the WSP's

[80] Baseline Study on SETA Activities in the Western Cape, First Report Sept 2004

		v.	Long Term – Do applied industry based regional research to validate skills intelligence – Work with industry to promote quality information input into the WSP's
Priority 2: promote artisan and sector-specific priority skills	– A total of 20 000 artisans qualified over the five-year period	i.	Short to Medium Term Priorities – Ensure grant allocation according to identified scarce and priority skills. – Continue to intensify artisan development given the expected huge demand on the NIP and SIPs – Encourage employers to: o Take up more learners for experiential learning, o Retain trained artisans to help them get experience. o 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 requirements and put in place mechanisms to ensure these requirements will be met by training institutions – Identification of priority skills should be drilled down to an occupation level (when clustered into broad categories the specific skills needs tend to remain unaddressed) – Identify needs of individuals and enterprises in different sectors – Provide flexible and responsive training programmes – Run information and awareness campaigns in regions – Develop an accreditation and quality assurance system – Provision of incentives/ subsidies to students and industry to encourage artisan and skills development – Identify appropriate courses for priority skills and where necessary develop new courses – Address the need for Continuous Professional Development (CPD) in FET colleges through partnerships with industry – Provide work placement stipends for learners on artisan learnerships – DEDAT, SETA's and Chambers to promote on the same platform
Priority 3: establish and facilitate strategic partnerships	– To ensure sector participation in the revision and development of the relevant curricula and qualifications offered by FET colleges – Establish partnerships that result in increased capacity to meet industry needs throughout the country	ii.	Short to Medium Term Priorities – Encourage partnerships and collaboration between employers and FETs so that FETs can have: o Modern training equipment o Curriculum review, development and upgrade o Qualified lecturers with industry know-how, and

	– To enter into partnerships with organisations involved in youth skills development. – To establish cross-sector partnership projects to address skills needs in support of local economic development – Develop mechanisms and models to support skills development in the community-based- and small-enterprise sector through a range of partnerships, programmes, grants and incentives, – Identify and establish partnerships with international-, national- and provincial career-resources agencies	○ More learners being taken up by industry for experiential learning – Form partnership with FETs which offer green skills – Form collaborative partnerships with Eskom, Transnet, Energy SETA, Provincial Government and other stakeholders involved in the rollout of SIPs. This will help merSETA train people who are currently unemployed – Encourage interface between FETs and industry via SETA regional staff active in finding placements for NCV learners – Work closely with industry bodies to enhance the reach and effectiveness of skills interventions – Push for better coordination and collaboration amongst tertiary institutions, education providers, government and agencies to improve skills levels – Strengthen the current task team with correct people to provide strategic direction for implementation of skills development programmes – Facilitate open day sessions with industry, government, private training providers, educators and tertiary institutions – Identify sector specific Client Liaison Officers (CLOs) in merSETA, with relevant technical expertise – Develop course articulation from FET NQF 4 to NQF 5 to further encourage vertical career path articulation into Universities of Technology v. Long term – Map current and future industry growth areas on a continuous basis in collaboration with key stakeholders – Development of a close working relationship with other SETAs whose skills needs align with merSETA to ensure targeted interventions without duplication of efforts (i.e. merSETA can channel funds to the ETDPSETA to equip and train lecturers with technical expertise on their behalf)
Priority 4: increase the flow of appropriately skilled new entrants into the system	– Implement mechanisms aimed at bridging the gap between industry and academic provision – To contribute towards the support and encouragement of initiatives for young learners and educators to achieve maths, science and technology results for entry into the sector – Establish a merSETA career gateway innovation network to market and communicate career	ii. Short to Medium Term Priorities – Develop and strengthen partnership with GET schools to increase pass rates especially in Maths, English and Science – Intensify career guidance, orientation and awareness in schools regarding careers in the manufacturing, engineering and related services industry – Set up career development support desks at major FETs in the province

	pathways and opportunities – To promote comprehensive career development to support sector growth.	– Forging stronger partnerships with HET institutions to ensure that the industry receives technical qualifications such as BSc, BTech, N4-6 and National Diplomas focusing on electrical and mechanical engineering – Incorporate soft skills training to ensure learners and artisans develop holistically i.e. they can be able to take on supervisory and management roles – Use of trainers and facilitators who have industry experience important i.e. use qualified artisans with experience in the skilling of learners – Refresher courses and up-skilling of trainers and facilitators required to ensure learners get up to date knowledge – Assist in the process of FET main campus and satellite campus development i.e. rural campuses tend to lag behind their urban counterparts – Concerted efforts must be made to ensure there is no creation of oversupply of particular skills in the region – Mechanisms must be established to ensure artisans who have obtained training but are currently unemployed can be upskilled to plug the skills gaps in the region – Artisans must be equipped with a core skills set which enable them to be flexible and adaptable to learning other trades in the event that there is a shortage of employment opportunities for them – 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.) – Expose learners at GET level to manufacturing, engineering and related services in order to stimulate interest in the trades – Increase simulated training modules at FET level to increase productive Job Readiness and employability

Priority 5: develop the skills of the existing workforce	– To ensure sound financial accountability – Capacity building of stakeholders – To implement skills development initiatives in the workplace through the effective utilisation of the levy grants system – Intermediate skills needs are identified and addressed in all merSETA sub-sectors, – High-level national scarce skills need to be identified and addressed. – To address low levels of literacy and numeracy amongst workers and new entrants – Identify and implement sector projects to address specific skills gaps and skills imbalances to contribute towards transforming the workplace	i. Short to Medium Term Priorities – 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 – Offer flexible artisan short courses that are cost effective – In partnership with Productivity SA and organized labour deliver improved productivity programmes at shop floor level. – 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, technical sales reps Long Term Priorities - Develop a new, innovative and flexible model for Recognition of Prior Learning (RPL) - Offer a cohesive RPL strategy for all sectors, in partnership with FETs and NAMB and the allocation of funding accordingly

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

Western Cape has some unique sectors which are not chambers in merSETA but are related industries. The Oil & Gas and the Boatbuilding sector are major contributors to the Western Cape provincial economy. Some of the skills development needs of these sectors are aligned with the needs of merSETA chambers. Strategic partnerships can be reached between merSETA and organisations representing these sectors to align the education, training and development strategies for the region.

Appendices

Appendix A

Case Study: Western Cape Tooling Initiative[81]

The WCTI is a not for profit Company (Section 21) and it is governed by a board consisting of members that represent Tool making Association of South Africa (TASA members), other industry players such as Steel and Engineering Industries Federation of South Africa (SEIFSA) and National Association of Automotive Component and Allied Manufacturers (NAACAM), the training institutions (FET's and Universities), merSETA, Organised labour (National Union of Metalworkers South Africa (NUMSA) and the local Government.

South Africa's Tooling Initiative (which includes the Western Cape) has embarked on a program aimed at development of tool-making skills through a 3-year apprenticeship. Candidates need N3 or matric maths, plus science and English. Those that do not make selection can do a 1-year bridging course and then reapply once they have passed the course. This program was started almost 3 years ago and there are 650 students nationally (who are in their final year). The program has a very low dropout rate which is attributed to the rigorous selection process, strong support provided to students and strong management processes in place.

The association approached the companies directly and personally to take on their apprentices for workplace experience (26 companies in the WC). There was need to find the right teachers for this pilot programme. This is an outcomes-based programme, not time-based. The apprenticeship is currently being approved by the QCTA and once approved it will be handed over to merSETA.

South Africa's Jobs Fund has granted 3-year funding for another 720 apprentices. Next year (2014) the WCTI hopes to go from 43 apprentices to 95. The same companies are prepared to take the new intake of apprentices. The target of 720 apprentices per year nationally is a good start, but more can be trained if there is funding and workplace experience opportunities available from more companies.

The model utilised in establishing the WCTI was derived from the University of Minnesota in the United States of America. In order to reduce the unemployment in some regions of the USA, an induction and re-education program was set up where people get trained to get into jobs requiring use of their hands. Replication of this model in other sectors and regions of South Africa can go a long way in assisting national and provincial governments in addressing the high unemployment levels in the country, along with promoting economic growth.

[81] Source: Insights from interview with WCTI CEO, 2013

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List of Participants in Research

Name	Role/Designation	Organisation/Area of specialisation	Nature of contact
Troy Pascucci	Skills Development Unit	Department of Economic Development and Tourism (DEDAT)	Primary Interview & Task Team Meeting
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Abie Dunn	Employer	Retail Motor Industry (RMI)	Primary Interview & Task Team Meeting
Jan Schoeman	General Manager	RMI	Primary Interview
Moegamat Abrahams	Motor Industry representative	National Union of Metalworkers South Africa (NUMSA)	Primary Interview & Task Team Meeting
Anton Gerretsen	Labour representative	Solidarity Union	Primary Interview & Task Team Meeting
Bernard Ashlin	CEFA representative	Cape	Primary Interview & Task Team Meeting
Oliver Dawson	Director	Composites Training Academy	Primary Interview
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Jacques Erasmus	Training Manager	STI Group	Primary Interview & Task Team Meeting
John McEwan	CEO	Western Cape Tooling Initiative (WCTI)	Primary Interview & Task Team Meeting

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Bronwin Abrahams	Regional Manager	merSETA Western Cape	Primary Interview & Task Team Meeting
Chris Merts	Occupational Training Manager	False Bay College	Primary Interview
Dion Miller	Programme Manager - Engineering Learnership & Skills	Northlink College	Primary Interview
Bev Miller	Branch Manager	Siyaya Skills Institute	Primary Interview
Ebrahim Peters	Deputy CEO	College of Cape Town	Primary Interview
Jan van Taak	Training Instructor	Barloworld Equipment (Training Centre)	Primary Interview
Mike Davies	Director	Optimum Learning	Primary Interview
Roland Innes	Director	Dyna Training	Primary Interview
Gerrie Basson	Regional Secretary	Motor Industry Bargaining Council (MIBCO)	Primary Interview
Janine Crocker	Training Manager	Beekman Super Canopies (Training Centre)	Primary Interview
Loretta Welcomets	Training Administrator	PlasticsSA	Primary Interview
Jim Small	Company Owner	Escape Gauges	Primary Interview
Richard Black	Human Resources Manager	Elco Plastics	Primary Interview
Runel Swanepoel	Human Resources Manager	AMC Cookware	Primary Interview
Pieter Kroon	Managing Director	Belmet	Primary Interview
Phillip Moller	Company Owner	Y3K Training	Primary Interview

Issues raised by stakeholders during comments stage

Stakeholder & Organisation	Issue/comment	Response/Action taken
Vanessa Davids- Marine Industry Association of South Africa (MIASA)	Quantum Sail Group is now the Ullman Sail Group	Correction made in report on page 112
Paul D. Ram – Administration Manager De-Tect Unit Inspection (Pty) Ltd & Cooperheat of Africa (Pty) Ltd	1.*Non Destructive Inspection & Testing as a Scarce Skill specifically for the following disciplines*: 1.1.1. Conventional & advanced Ultrasonic Inspection Technicians (SA has currently a huge shortage of experienced Ultrasonic & Phased Array as well as Guided Ultrasonic Technicians – we currently utilise foreigners from India, UK and France. The Local experienced Ultrasonic technicians have been sourced by overseas Companies mainly from Australia & New Zealand). 1.1.2. Radiographic Inspection Technicians – The demand for experienced Radiographic technicians out ways the supply (The NDT Institutions cannot train enough RT technicians to meet the current demand. The experienced RT technicians have also been sourced by other countries). 1.1.3. The local NDT Companies are unable to properly provide advanced NDT services such as Eddy Current Inspection, Time Of Flight Defraction Inspections, Tank Floor Inspections, Delta Ferrite Measuring Inspections as	The input was incorporated into the report on pages 115,116 and 118

	very few SA NDT technicians are qualified in these disciplines. 2. *Heat Treatment Technicians*: 2.1.1. Currently only SAIW in conjunction with De-Tect Unit Inspection's sister Company run the only Heat Treatment Course for the whole of Africa – SAIW can only accommodate 15 Students per class – only two classes are held per annum. 2.1.2. Only In-house training is provided for most of the local candidate heat treatment technicians and a Company Certificate of Competence is issued. With regards to the establishment of renewable energy such as the wind farm projects mention in the SSP report, we as NDT inspection & testing Companies fulfil an integral part in the assurance of Quality and Safety from proposed "New Build", and maintenance of existing sites including national key points such as Koeberg Nuclear Power Station, Conventional ESKOM Plants and Chevron as well as SASOL refineries.	
Colin Boyes Executive Director Cape Engineers & Founder's Association (CEFA)	- Our association Cape Engineers and Founders Association (CEFA) was not approached -Wind farms were stated as being established in Cookhouse, Adelaide and Bredasdorp in the Eastern Cape	-One of the manufacturers was interviewed on basis of them being part of CEFA's executive -Bredasdorp is in the Western Cape, the correction was made in the report on page 62