

INTRODUCTION

1.1 Background to the study

The South African metal and engineering industry is of utmost importance to the South African economy as a whole, particularly because of the underlying potential for employment creation. However, there is general consensus amongst stakeholders that employment in these sectors has declined significantly over the last decade.

In the view of the above, the National Economic and Labour Council (NEDLAC) commissioned this “study to facilitate the formulation of an integrated strategy for the retention and creation of employment in the South African Metal and Engineering industry” through the Fund for Research into Industrial Development, Growth and Equity (FRIDGE).

The Terms of Reference (TOR) for this study asked for a number of specific issues to be investigated, as follows:

- Potential growth sectors (sectors in decline)
- Drivers of growth of these sectors and sub-sectors
- Spin-offs for vertical and horizontal integration
- Extent (number, type) of job losses over the last two decades
- Reasons for job losses (structural considerations, external and internal drivers, regulatory considerations, etc)
- The relationship between industry development (growth, profitability, export penetration, etc) and requirement and availability of employees of various skill levels
- Approaches to, and practices of, employment such as temporary employment, and its impact on the sustainable development of the industries
- Work methods such as multi-skilling, flexibility, etc, and their impact on job creation/loss as well as its impact on the sustainable development of the industries
- Policy frameworks (including government incentive schemes, procurement policies, etc) and regulatory environment (including tariff structures), and its impact on the industries, and specifically the impact on industry growth and job creation
- Factors that impact on industry growth and job creation, including technological considerations, changes to industry structure, globalisation, capital investment considerations, etc.

- Impact of internal practices, as well as internal and external constraints to the development of the industries in terms of downstream beneficiation, innovation, and integration.

The outcome of the study is short, medium and long term recommendations in this regard, which can successfully inform the Industrial Policy Forum on strategies to address these issues.

This report contains the findings and recommendations of a eight month study executed according to the study TOR and conducted by a consortium consisting of Bentley West Management Consultants (Pty) Ltd and the National Labour and Economic Development Institute (NALEDI).

1.2 Objectives of the study

The fundamental objective of this study is to research and analyse the South African metals and engineering industry with a view of recommending strategies aimed at facilitating growth and the creation (also retention) of quality employment within these industries.

The achievement of above required three sub-objectives to be met:

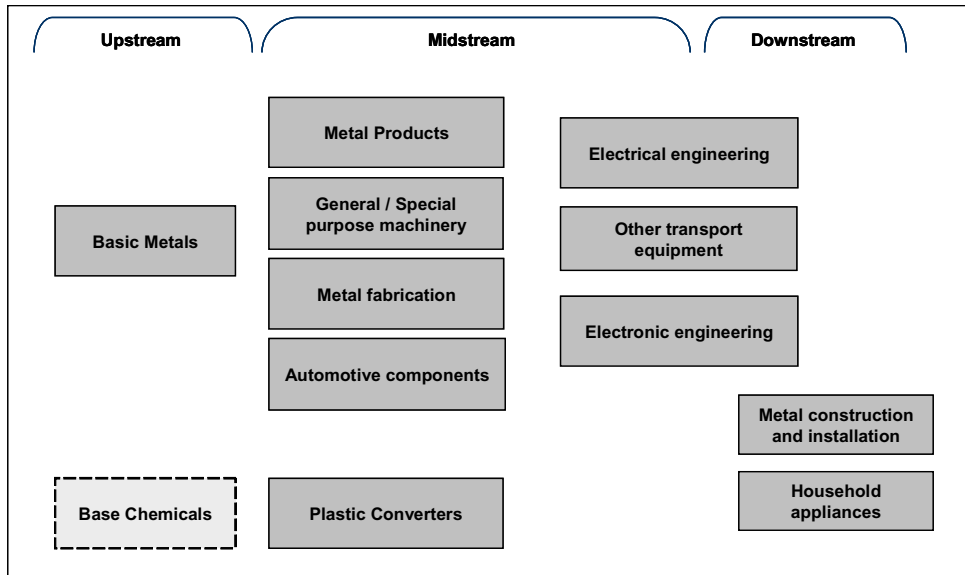
- Quantitative assessment of the industries that make up the metals and engineering industry, their potential for growth (decline) and the identification of key drivers of growth
- Quantitative and qualitative assessment of the historical, current and expected future situation with regards to industry development (growth), job retention and job creation in the industries
Strategy recommendations to facilitate the development of a growth/ job creation strategy

The industry sectors that were researched displayed diverse characteristics and are driven (or constrained) by different factors. It therefore necessitated the development of an integrated strategy as well as sector specific strategies.

1.3 Scope

After considerable consultation and investigation a scope was developed for the engagement. The scope was to include five major sectors namely basic metals, electrical and electronic engineering, heavy and light engineering, machinery and equipment and plastic converters. Figure 1 illustrates this segmentation of metals and engineering industry and shows where each sector is placed in the context of the value chain.

Figure 1: Project scope with respect to sectors' positioning within the value chain



The scope of the research with respect to the activities (by SIC code) included under each sector is reflected in Figure 2 below.

Figure 2: Scope and segmentation of the metals and engineering industry

1. Basic Metals	2. Electrical and electronic engineering	3. Heavy and light engineering	4. Machinery and Equipment
<ul style="list-style-type: none"> • Manufacture and casting of basic Iron and steel (SIC 351, 3531) • Manufacture and casting of non-ferrous metals (SIC 35202, 3532) 	<ul style="list-style-type: none"> • Manufacture of radio, television and communication equipment and apparatus (SIC 371, 372, 373) • Manufacture of precision instruments (SIC 374) • Manufacture of electrical machinery and apparatus (SIC 361, 362, 363, 364, 365, 366) • Manufacture of household appliances (SIC 358) 	<p>Automotive components</p> <ul style="list-style-type: none"> • Manufacture of bodies or coachwork and trailers (SIC 3820) • Manufacture of parts and accessories for motor vehicles and their engines (SIC 3830) <p>Metal fabrication</p> <ul style="list-style-type: none"> • Structural metal products, tanks, reservoirs and steam generators (SIC 354) <p>Metal construction and installation</p> <ul style="list-style-type: none"> • Construction by specialist trade contractors (SIC 5024) • Building installation (SIC 503) <p>Metal Products</p> <ul style="list-style-type: none"> • Manufacture of furniture (SIC 39101) • Manufacture of other fabricated metal products, (SIC 355) 	<ul style="list-style-type: none"> • Manufacture of general purpose machinery (SIC 356) • Manufacture of special purpose machinery (SIC 357) • Manufacture of other transport equipment (SIC 384, 385, 386, 387)
			5. Plastic Converters
			<ul style="list-style-type: none"> • Plastic converters (SIC 338)

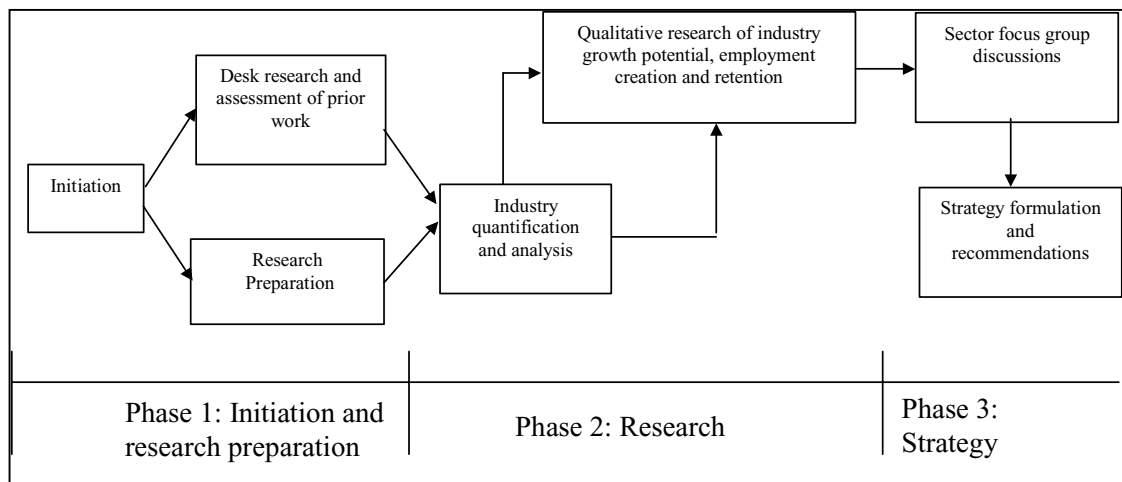
For purposes of analysis the electrical and electronic sectors have to a large extent been reported on at two more defined grouping levels namely electronic engineering (radio,

television, communication equipment and apparatus; precision equipments) and electrical machinery (electrical machinery and apparatus and household appliances). Similarly, the heavy and light engineering sector has been largely reported on at two levels namely automotive components (bodies or coachwork and trailers; parts and accessories for motor vehicles and their engines) and metal products and fabrication (metal fabrication; metal construction and installation; metal products).

1.4 Methodology

The engagement was broken down into a number of main work packages within three main phases. The phases and the work packages that were included in these are depicted in the diagram below.

Figure 3. Work packages in the three phases of the project



The end of each phase was marked with a meeting of the CPG where progress and outputs were evaluated and agreement reached on the next step of the engagement. What follows is a broad overview of the methodology followed during the study. A more detailed explanation is contained in Appendix B.

The first phase involved a thorough analysis of all relevant literature in order to provide a sound basis for both qualitative and quantitative questionnaire development. The sampling details of phase 2 were also developed during the first phase.

The second phase consisted of both a qualitative and quantitative dimension. The qualitative investigation involved interviewing companies in each sector, the lists of which are provided in Appendix A. The quantitative aspect took the form of a random, statistically representative

survey of all the sectors within the MEIBC. Additional detail regarding the methodology used can be found in Appendix B.

The third phase was an intense part of the engagement and had two main goals; a process of data verification and the development of strategy recommendations for the industry. The process included further interviews with key stakeholders, sector-based focus groups with stakeholders and a strategy workshop with the Counterpart Group.

This process of consultation was vital to assist data verification and fine tune strategies for the industry. In all, six focus groups were held (with the heavy and light engineering sector having two focus groups; one for automotive components and one for metal products and fabrication). The focus groups were attended by trade union, industry and government representatives and ensured that all aspects of the sectors were taken into consideration in the formulation of strategy recommendations.

The outcome of this consultation process (built on Phase 1 and 2 findings) is a Findings and Recommendations report. This report consists of an overarching chapter that outlines key trends and the main drivers and impediments to growth and employment creation in the industry. It also includes the fundamental output of the engagement; industry recommendations and interventions. The report includes further chapters that focus on sector-specific findings and recommendations that are unique or of particular relevance to each sector.