



THE REPUBLIC OF GHANA

GHANA INDUSTRIAL POLICY

FOREWARD

The formulation of this Industrial Policy has been accomplished through a comprehensive and inclusive process based on analysis and wide consultation with stakeholders in Ghana, in order to ensure that it is a broad-based policy embraced by all stakeholders.

The exercise was carried out in six sequential phases, similar to the Trade Policy development process. First, the key thematic areas of the policy were defined in outline, by stakeholders at Industry and Trade Fora organized by the Ministry. This was followed with a review of studies and reports on industrial development, trade and competitiveness in Ghana, which provided background material for the third phase of the exercise. This provided the Ministry with the structure and general framework for developing the content of the Industrial Policy.

In the third phase, a full range of policy options were examined and developed in respect of each thematic area under the policy framework defined in the first phase. These options were developed by experts in the various thematic areas, based on Ghana's development experience and aspirations, cost effectiveness, best practice, focus group meetings and stakeholder consultations.

In all, over 500 Policy Options were developed and presented to stakeholders for consideration at a first Round Table in September 2008 and second Round Table in November 2009. These consultations involved the Government Ministries, Public Sector Implementing Agencies, Private Sector, Educational Institutions, Research Institutions and Civil Society. They afforded stakeholders the opportunity to make recommendations, deselect some of the policy options and add new ones. This constituted the fourth and fifth phases of the exercise.

In the sixth and final phase, the Ministry reviewed in detail the recommendations of the second Round Table and made a final determination in respect of all policy recommendations. These final recommendations are what have been presented as the Industrial Policy prescriptions in this Policy document.

I am grateful to His Excellency, President John Evans Atta Mills, for his personal interest in the need to provide clear policy direction for the development of Industry in Ghana.

Also I acknowledge the contribution of Development Partners for supporting the Ministry with resources to conduct thorough research and extensive consultations for the development of the Policy.

I also wish to express my appreciation for the contribution made by stakeholders from the private sector, public sector and civil society at the various fora, without which this document would not acquire a national character.

Finally, I wish to thank the staff of the Ministry of Trade and Industry for the countless hours committed to the realization of the Industrial Policy document.

ACRONYMS

AIDS	-	Acquired Immunodeficiency Syndrome
ABD	-	Agricultural Development Bank
BACs	-	Business Advisory Centres
BDS	-	Business Development Services
CEDECOM	-	Central Region Development Commission
CSIR	-	Council for Scientific and Industrial Research
DFI	-	Development Finance Institution
GDP	-	Gross Domestic Product
GSA	-	Ghana Stock Exchange
GIPC	-	Ghana Investment Promotion Centre
GSS	-	Ghana Statistical Service
HIV	-	Human Immunodeficiency Virus
ICT	-	Information, Communication Technology
IP	-	Industrial Policy
ISO	-	International Standards Organisation
ISSP	-	Industrial Sector Support Programme
LAP	-	Land Administration Project
MDAs	-	Ministries, Departments and Agencies
MEST	-	Ministry of Environment, Science and Technology
MMDAs	-	Metropolitan, Municipal and District Assemblies
NBSSI	-	National Board for Small-scale Industries
NIB	-	National Investment Bank
OHS	-	Occupational Health and Safety
PPP	-	Public-Private Partnership
PSDS	-	Private Sector Development Strategy
SME	-	Small and Medium Enterprises
S&T	-	Science and Technology
ST&I	-	Science, Technology and Innovation
SOE	-	State-Owned Enterprises
TR	-	Technical Regulations

INTRODUCTION

This Policy is set within the context of Ghana's long-term strategic vision of achieving middle income status by 2020, through transformation into an industry-driven economy capable of delivering decent jobs with widespread, equitable and sustainable growth and development.

The Policy provides clear and transparent guidelines for the implementation of Government's industrial development agenda, with particular respect to the growth, diversification, upgrading and competitiveness of Ghana's manufacturing sector.

The Industrial Policy is fully aligned with Ghana's Trade Policy, reinforcing each other in ensuring that a consistent and stable environment is in place for accelerated industrial development.

Whilst the two policies are consistent with the underlying principle of Private Sector Development, that Government provides the enabling environment for the private sector to effectively perform its role as the engine of growth in a dynamic and competitive economy, the Industrial Policy specifically seeks to address an array of challenges faced by the manufacturing sector that affect production capacity, productivity and product quality.

In order to become competitive in the global and domestic market, Ghanaian manufacturers must be able to offer high quality products, processes and services, and be empowered to effectively engage in competitive trade and take advantage of opportunities to expand and retain market share.

For this to be achieved, the full spectrum of industrial policy instruments across 21 Policy Thematic Areas will be implemented. These thematic areas have been categorized into 4 main Components, namely:

- Production and Distribution
- Technology and Innovation
- Incentives and Regulatory Regime
- Cross-cutting Issues

To ensure clarity of presentation, each policy thematic area has been analyzed on the basis of policy context, policy objective and policy prescriptions. This will ensure that the specific policy prescriptions to be adhered to, are not only clearly identified, but also properly understood within their relevant context.

The Industrial Policy presented in this document provides essentially, broad guidelines for concrete action in the field of industry. The actual implementation will be effected through an Industrial Sector Support Programme (ISSP), with a detailed Action Plan and Budget specifying activities to be undertaken annually. The ISSP will be driven primarily by the Ministry of Trade and Industry but will be coordinated through a cross-Ministerial Industrial Policy Coordinating Committee, in recognition of its cross-cutting nature.

DEVELOPMENT OBJECTIVES

Ghana's Industrial Policy is designed to promote increased competitiveness and enhanced industrial production, with increased employment and prosperity for all Ghanaians. It will also provide a broader range of fair-priced, better quality products for the domestic and international markets.

The key development objectives of the Industrial Policy are:

1. To expand productive employment in the manufacturing sector
2. To expand technological capacity in the manufacturing sector
3. To promote agro-based industrial development
4. To promote spatial distribution of industries in order to achieve reduction in poverty and income inequalities

In this regard, this Industrial Policy represents the set of specific policy instruments and measures to be applied to improve access to competitive factors of production within the economy; and enhance productivity, efficiency and growth of Ghana's manufacturing sector.

Its strategic thrust is derived from the key development planning frameworks of the Government of Ghana, namely the:

- Growth and Poverty Reduction Strategy (GPRS II) – 2006-2009;
- National Trade Policy
- National Medium-term Development Framework (MTDF) – 2010-2013; and
- Private Sector Development Strategy (PSDS) – Phase I (2005-2009) and Phase II (2010-2015)

Within the context of the MTDF and PSDS, this Industrial Policy represents a critical component of Ghana's strategic effort to alter the industrial structure by developing a competitive manufacturing sector (and other sectors that add value to manufactures) over the medium-term, whilst pursuing economy-wide factor productivity growth over the long-term.

Ultimately, the success of the Industry Policy will be measured by the extent to which it empowers the private sector, predominantly but not limited to Small and Medium Enterprises (SMEs), to expand and create opportunities for employment and reduce poverty and spatial inequalities in Ghana.

COMPONENT ONE

PRODUCTION AND DISTRIBUTION

1.0 INTRODUCTION

Ghana's manufacturing sector has not responded well to the various economic and trade policy reforms pursued over the past decade. Manufacturing firms have faced considerable challenges in the form of increased competition in the domestic and export markets and high production and distribution costs arising from high interest rates, aged and obsolete equipment, inefficient infrastructural services and low productivity. Government will initiate and implement policies to develop requisite skills, ensure adequate and cost-competitive production inputs and services and provide needed finance for industrial development.

1.1 RAW MATERIALS, INPUTS SUPPLY, PLANT, EQUIPMENT AND MACHINERY

1.1.1 Introduction

The critical success factor in local production and distribution of goods is the availability of cost-competitive and quality raw materials and other inputs supply. Major local raw materials supplies are inadequate and costly, and local fabrication of plant and machinery is virtually non-existent. Local manufacturers have to rely on imported raw materials and equipment. Government will initiate policies to increase local content in the manufacturing process by encouraging the production of local raw materials and the fabrication of plant and machinery.

1.1.2 Agro-based Local Raw Materials

Policy Context

In spite of the favourable climatic and soil conditions for agriculture production, industry continues to be challenged by the inconsistent and inadequate supply of local raw materials.

Policy Objective

Ensure that agro-based industrial raw materials are produced locally in such quantities and quality at competitive prices for local manufacturing.

Policy Prescriptions

1. Government will encourage intensification and or expansion of hectareages of selected agro-based raw materials such as oil palm, cassava, cocoa, cotton, sorghum, sugar-cane, pine-apples, citrus, mangoes and tomatoes.

2. Government will support the adoption of best agronomic practices, and the development of yield, quality and productivity benchmarks for locally cultivated agricultural raw materials.
3. Government will encourage the expansion and the establishment of irrigation facilities and provision of inputs, such as machinery and fertilizer, for the cultivation of selected agricultural raw materials for industry.
4. Government will support commercial agriculture including the creation of Public Private Partnerships (PPP) for selected crops in selected regions.

1.1.3 Non-Agro-based Local Raw Materials

Policy Context

Local sources of supplies of non-agro raw materials such as limestone, kaolin and salt have not been fully explored and exploited. Production and supply are therefore inadequate and unreliable.

Policy Objective

To harness and fully utilize the mineral deposits available in the country in support of rapid industrial development.

Policy Prescriptions

1. Government will encourage extensive exploitation of mineral deposits such as Limestone, Kaolin, Iron Ore, Clay, Salt, Aluminium Sulphate, Oil and Natural Gas.
2. Government will provide incentives to attract investments into non-agro raw material sector.

1.1.4 Imported Raw Materials

Policy Context

Most industries rely on imported raw materials for manufacturing. However, imports of raw materials tend to be costly. Access to competitively priced raw materials is essential for ensuring continuous production.

Policy Objective

To ensure availability of competitively priced imported raw materials for manufacturing.

Policy Prescriptions

1. Government will encourage the setting up, by the private sector, of consignment stocking of critical imported raw materials in customs bonded warehouse.

2. Government will support industry groups to negotiate favourable port charges and shipping costs.
3. Government will continue to improve handling facilities and turn-around times at the ports.
4. Government will work with the private sector to explore opportunities for the negotiation of regional and sub-regional joint sourcing arrangements.

1.1.5 Plant, Machinery and Equipment

1.1.6 Policy Context

The deployment of modern technology is essential in determining the competitiveness of industry. In Ghana most industrial plants and machinery are aged and obsolete making manufacturing operations inefficient.

Policy Objective

To ensure the adoption of modern technology and the deployment of state-of-the-art plant and machinery in industry.

Policy Prescriptions

1. Government will encourage financial institutions to support the re-tooling of local industries.
2. Government will encourage the deployment of state-of-the-art plant and machinery in industry.
3. Government will facilitate the setting up of Capital Goods Production Units and manufacture of specialized niche engineering sub-units and intermediates.
4. Government will regulate the importation of aged equipment except where the associated technology is right.

1.2 INDUSTRIAL MANPOWER DEVELOPMENT AND TRAINING

1.2.1 Introduction

Adequate skilled manpower and high labour productivity are critical to manufacturing competitiveness. However, in Ghana industry is faced with inadequate supply of skilled labour and low labour productivity.

1.2.2 Supply of Skilled Labour to Industry

1.2.2.1 Entrepreneurial and Management Skills

Policy Context

Ghana's manufacturing sector, which is dominated by SMEs, is characterised by low levels of entrepreneurial and managerial skills. This has tended to slow the pace of development of the sector.

Policy Objective

To increase the supply and improve the quality of entrepreneurial and management skills in the manufacturing sector.

Policy Prescriptions

1. Government will strengthen existing training institutions to deliver entrepreneurship and management training programmes that meet the current and future needs of the manufacturing sector.
2. Government will encourage industry to provide necessary training for its own staff to meet its entrepreneurial and managerial skills requirements.
3. Government will encourage investments in the development of entrepreneurship and management training institutes.
4. Government will provide incentives for sector-specific training and skills development in entrepreneurship and management, in public and private sector training institutions as well as within industry associations and at the firm-level.

1.2.2.2 Technical Skills in Specialized Areas

Policy Context

The lack of adequately trained manpower for specialized areas such as Oil and Gas Production and Capital Goods Manufacture is a constraint to the growth of these sectors. The availability of such personnel in these key sectors is an essential pre-requisite for industrial development.

Policy Objective

To ensure the availability of the requisite technical manpower for specialized areas on a sustainable basis.

Policy Prescriptions

1. Government will develop programmes to support the training of technical manpower in the specialized areas.

2. Government will establish facilities for the requisite manpower development and training on a sustainable basis.
3. Government will provide incentives for investments in the development of training facilities for specialized areas of industry.

1.2.2.3 Other Skills for Industry

Policy Context

The manpower needs of industry also cover products of vocational, technical and commercial institutions as well as apprenticeship programmes. With increasing emphasis on specialisation, there is the need to develop a pool of artisans and tradesmen ready for the job market.

Policy Objective

To develop a pool of tradesmen for the current and future needs of industry.

Policy Prescriptions

1. Government will commit increased resources to technical, vocational and commercial education and training to develop skills and manpower resources for industrial development.
2. Government will promote skills development for the youth through on-the-job training in collaboration with industry outside the formal education system as well as internships and artisanal apprenticeships.
3. Government will re-orient vocational, technical and commercial education to put more emphasis on skills development to address the needs of industry.

1.2.3 Labour Productivity

Policy Context

The manufacturing sector is beset with low levels of labour productivity which affects the competitiveness of the sector.

Policy Objective

To increase worker productivity in the manufacturing sector as a means of enhancing competitiveness

Policy Prescriptions

1. Government will provide increased support to the public and private sector institutions engaged in management training and education to enhance managerial and supervisory capacity within industry.

2. Government will institute national programmes for promoting productivity awareness and improvement within industrial establishments.
3. Government will encourage and support industry to introduce compensation schemes and mechanisms linked with productivity.
4. Government will encourage industry and labour to jointly develop productivity benchmarks in a bid for labour to adopt the right attitudes and work culture that enhance productivity.

1.2 FINANCING FOR INDUSTRIAL DEVELOPMENT

1.3.1 Introduction

Financing is a major challenge that confronts the manufacturing sector in Ghana. It significantly affects the ability of firms to upgrade technology to support vital operations and achieve competitiveness. Adequate and competitively priced financing is needed for plant and equipment as well as working capital.

1.3.2 Cost of Credit

Policy Context

The high cost of borrowing limits access to credit and raises the cost of doing business for manufacturing firms and this restricts the scope for growth.

Policy Objective

To lower the cost of credit to industry.

Policy Prescriptions

1. Government will keep the annual budget deficit in line with the target set in the 1992 Constitution (10% of GDP) and reduce dependence on Treasury Bills as financial instruments to cover budgetary deficits.
2. Government will support the banking sector to reduce transaction cost and risks through measures such as strengthening credit reference bureaux, expanding credit guarantee schemes, strengthening commercial courts and contract enforcement, promoting capacity building for SME lending and promoting BDS for SMEs.
3. Government will support the removal of Secondary Reserve Requirements of Banks to ensure adequacy of funds for lending to SMEs.
4. Government will continue to encourage competition in the banking sector.

1.3.3 Venture Capital and Private Equity Market

Policy Context

Venture Capital and Equity Markets as sources of long-term financing in Ghana are largely undeveloped for effective support of industrial development

Policy Objective

To promote the development of Venture Capital and Equity Markets to finance industrial development.

Policy Prescriptions

1. Government will create enabling environment for the development of venture capital and private equity markets.
2. Government will provide incentives to attract both foreign and local investors to the venture capital market.
3. Government will promote the study of Fund Management in management training institutions in Ghana.

1.3.4 Stock Market

Policy Context

Despite the very important role stock markets play in the provision of long-term funds for industry, there is low listing of manufacturing companies on the Ghana Stock Exchange (GSE).

Policy Objective

To increase listing of manufacturing companies on the Ghana Stock Exchange (GSE).

Policy Prescriptions

1. Government will encourage GSE to reduce the cost of listing on the exchange.
2. Government will create awareness particularly among SMEs of requirements as well as the benefits that accrue to listed companies.
3. Government will provide incentives to SMEs engaged in manufacturing which list on the GSE.

1.3.5 Lease Financing

Policy Context

Lease financing is a convenient alternative source of providing the necessary equipment for manufacturing firms without collateral. However, in Ghana, lease financing remains under developed.

Policy Objective

To increase the use of lease financing for industrial development.

Policy Prescriptions

1. Government will encourage the growth of lease financing.
2. Government will facilitate access to medium and long term funds for lease financing for industrial development.
3. Government will strengthen commercial courts to ensure speedy resolution of commercial disputes and contract enforcement.

1.3.6 Trade Financing

Policy Context

Trade financing in Ghana is costly and difficult to access. This raises the cost of doing business for manufacturing firms and restricts the scope for growth.

Policy Objective

To ensure availability of and access to competitively priced trade financing.

Policy Prescriptions

1. Government will encourage banks to develop innovative instruments to deliver less costly and timely trade financing.
2. Government will review and strengthen the existing export financing mechanisms and agencies to improve access to export trade financing.
3. Government will collaborate with industry, distributors and the banking sector to improve access to competitively priced trade financing.

1.3.7 Development Financing

Policy Context

Availability of medium and long term financing is essential for industrial development. There is a general lack of medium and long term funds for financing manufacturing projects in the country.

Policy Objective

To improve the availability of medium and long term funds for financing manufacturing projects.

Policy Prescriptions

1. Government will establish an Industrial Development Fund to provide long-term financing for industry based on clear and transparent criteria.
2. Government will explore other options for raising medium and long-term funds for financing industrial development.
3. Government will ensure that Financial Sector Reforms take account of the need to increase access to medium and long term financing for industrial development.
4. Government will streamline existing public-funded financing schemes to enable SMEs access them.

1.4 LAND AND INFRASTRUCTURE FOR INDUSTRIAL DEVELOPMENT

1.4.1 Introduction

The challenge of land acquisition and the lack of adequate and cost-competitive physical infrastructure are critical factors constraining investment and competitive manufacturing performance in Ghana. Infrastructural needs are planned and executed over a long term, and require massive funding.

1.4.2 Land for Industrial Development

Policy Context

Access to land is largely determined by traditional practices, resulting in fragmented and inefficient land administration.

Policy Objective

To develop effective land administration at national, regional and district levels to facilitate easy acquisition and security of land for industrial development.

Policy Prescriptions

1. Government will ensure that the on-going Land Administration Project aimed at developing a sustainable and well functioning land administration system is implemented fully.
2. Government will establish industrial estates for selected manufacturing clusters, in partnership with the private sector.

3. Government will strictly enforce zoning regulations to ensure that industrial zones/estates are reserved only for industrial purposes.
4. Government will publicise the availability of land banks for industrial and agricultural purposes.

1.4.3 Electricity and Water

Policy Context

The provision of adequate, efficient and cost-competitive electricity and water supplies is a pre-requisite for accelerated industrial development. There is therefore the need to ensure reliable and sustainable supply of electricity and water to industry.

Policy Objectives

1. To ensure adequate, sustainable and cost-effective delivery of electricity and water to industry.
2. To promote efficient use of electricity and water.

Policy Prescriptions

1. Government will ensure that industry's requirements of electricity and water are met at competitive prices and in an environmentally sustainable manner.
2. Government will encourage private sector participation in the supply of electricity and water.
3. Government will draw up and implement energy and water efficiency and conservation programmes.

1.4.4 Telecommunications Infrastructure

Policy Context

Efficient communication infrastructure and services are critical for competitive production and distribution. The development of the telecommunication sector is therefore essential.

Policy Objective

To ensure adequate and cost-effective telecommunications services to industry.

Policy Prescriptions

1. Government will initiate measures to support the development of the telecommunications sector through the implementation of the National Communications Policy.
2. Government will encourage the private sector to increase investment in the telecommunications sector to meet the growing demand from industry.

1.4.5 Transport Infrastructure

Policy Context

The provision of an integrated, efficient and cost-effective transportation network is necessary for Ghana's industrial competitiveness. There is therefore the need to develop the various modes of transportation to support industrial production and distribution.

Policy Objectives

1. To develop an inter-modal transport system to ensure reliable and cost-effective modes of transporting goods.
2. To promote investment in the various forms of transportation to enhance industrial production and distribution.

Policy Prescriptions

1. Government will develop and implement an integrated plan for the development of the transport sector.
2. Government will promote private sector investment in the transport sector to ensure the development of all forms of transportation.
3. Government will continue to support improvement of port infrastructure and services.

1.5 INDUSTRIAL SUBCONTRACTING

1.5.1 Introduction

Industrial subcontracting of parts, components and sub assemblies is an effective mechanism to stimulate industrialization. In addition to light engineering, it also supports other industrial sectors such as textiles and garments, packaging, construction and industrial services. It provides opportunities for SMEs to benefit from linkages with larger manufacturing firms such as access to finance, technology and markets.

Policy Context

Currently, firms offering industrial subcontracting opportunities are limited and the mechanisms are not well developed. SMEs also lack the capacity to meet the requirements of the large firms and to take advantage of subcontracting opportunities.

Policy Objectives

1. To expand opportunities and improve mechanisms for subcontracting in the industrial sector.
2. To develop the capacity of SMEs to take advantage of subcontracting opportunities.

Policy Prescriptions

1. Government will encourage investment in the capital goods, automobile, electronics, and other manufacturing sectors that offer opportunities for subcontracting.
2. Government will encourage large companies to offer vendor development programmes to subcontractors.
3. Government will support capacity building of SMEs to take advantage of subcontracting opportunities.
4. Government will establish a capital goods centre in the country through Public Private Partnership (PPP) to support subcontracting.
5. Government will enact Local Content Law to support SME development.
6. Government will promote the use of public procurement to enhance subcontracting.
7. Government will support the development of exchange mechanisms to facilitate subcontracting in selected sub-sectors.

1.5.2 Informal nature of Small and Micro Businesses

Policy Context

Small-scale enterprises are the backbone of the manufacturing sector in Ghana but most of these businesses are not formalized. As a result, most small businesses do not get access to business support services and incentives. Worse still, most of these enterprises are not concentrated in one particular area, making it difficult for them to enjoy the benefits accruing from localization of industries.

Policy Objective

To formalize small scale businesses to help them get access to business support services and incentives

Policy Prescriptions

1. Institute incentives to encourage the formalization of the informal sector enterprises.
2. Encourage cluster development of micro and small enterprises.

1.6 MARKETING AND DISTRIBUTION OF INDUSTRIAL PRODUCTS

1.6.1 Introduction

The industrial sector is dominated by SMEs which are unable to adopt modern marketing and distribution practices, as a result of limited knowledge and resources for brand building and market development. This constitutes a handicap to the growth of the manufacturing sector.

1.6.2. Internal Trade

Policy Context

An efficiently functioning domestic market is essential for the development and distribution of products for local consumption. Patronage of locally manufactured goods tends to be hampered by the perception that most made-in-Ghana goods are of inferior quality. Moreover, consumers are often unaware of the wide variety of goods produced in Ghana. The predominantly informal nature of domestic trade also limits the scope for growth, development and efficiency gains.

Policy Objective

To increase demand for locally manufactured goods.

Policy Prescriptions

1. Government will deepen the study of marketing and business management studies in vocational and tertiary institutions.
2. Government will encourage the private sector to establish marketing companies to service local SME manufacturers.
3. Government will assist SMEs to upgrade technology to enhance their competitiveness.
4. Government will assist the intensification of internship programmes for marketing students.
5. Government will continue to actively promote Made-in-Ghana goods.
6. Government will support the provision of infrastructure and other facilities to enhance the distribution of locally manufactured goods.
7. Government will ensure that informal sector traders are provided with support to formalise their businesses.

8. Government to enhance the local content in Government procurement.
9. Government will facilitate the training of SME manufacturers on the development and efficient management of distribution chains.

1.6.3. Export Trade

Policy Context

The growth of the industrial sector will depend to a large extent on increased export of manufactured goods, in view of the relatively small size of the domestic market. There is therefore the need to address the challenges of low production capacities, low productivity, lack of requisite market information, poor product quality and unattractive packaging, which tend to make most locally manufactured products uncompetitive.

Policy Objective

To increase the export of locally manufactured goods.

Policy Prescriptions

1. Government will assist SMEs to upgrade technology to enhance their competitiveness.
2. Government will support SMEs to implement quality assurance systems.
3. Government will ensure that export promotion strategies focus on manufactured products.
4. Government in partnership with the private sector will facilitate the development of the packaging industry to support the export sector.
5. Government will strengthen the linkage between market research and advertising institutions and manufacturing firms.

1.7 STANDARDS FOR INDUSTRIAL DEVELOPMENT

1.7.1 Introduction

Development and effective use of national standards, based on relevant international standards, for production play a key role in promoting industrialization. This assures consumers of the safety and suitability of products.

1.7.2 Voluntary Standards

Policy Context

Voluntary standards are essential for assuring quality in the manufacturing sector. They provide the basis for assessing the quality of products, processes and systems and are developed by consensus among relevant stakeholders.

The absence of consensus regarding the process of developing such standards has resulted in low commitment on the part of manufacturers.

Policy Objective

To achieve consensus in the development and use of voluntary standards in industry.

Policy Prescriptions

1. Government will facilitate the strengthening of the linkage between Ghana Standards Board and industry associations in the development of voluntary standards.
2. Government will encourage the application of national standards in manufacturing.
3. Government will support initiatives to improve institutional capacity of Associations to develop standards of interest to their members.

1.7.3 Technical Regulations

Policy Context

Technical regulations are mandatory standards applied to protect the health and safety of consumers and the environment.

Regulatory Agencies tend to use different procedures for developing Technical Regulation (TRs). Also the enforcement of most existing Technical Regulations has not been effective because they do not provide well defined administrative procedures for compliance.

Policy Objectives

1. To establish clear procedures for the development of TRs.

2. To establish mechanisms for enforcing and monitoring of TRs.

Policy Prescriptions

1. Government will facilitate coordination amongst the regulatory bodies in the development of TRs.
2. Government will improve the institutional capacity of regulatory bodies to enforce the application of TRs in industry.

1.7.4 Conformity Assessment

Policy Context

Conformity assessment is carried out to ascertain whether products, processes and systems conform to applicable Standards or Technical Regulations. International practices demand that conformity assessment is conducted by accredited independent bodies to enhance credibility.

Policy Objective

To establish accredited bodies to undertake independent conformity assessment.

Policy Prescriptions

1. Government will strengthen the legal and regulatory framework for conformity assessment, to bring it in line with international best practices.
2. Government will support the establishment of accredited conformity assessment bodies.

1.7.5 Scientific Metrology

Policy Context

The establishment of National Physical Laboratories for scientific metrology ensure that national measurements are accurate and reliable, and also traceable to international standards. The existing facilities and capabilities for scientific metrology are inadequate.

Policy Objective

To ensure that national measurements are accurate and reliable.

Policy Prescriptions

1. Government will establish a National Metrology Institute.
2. Government will upgrade facilities and build capacities for scientific metrology.

1.7.6 Legal Metrology

Policy Context

An effective system of legal metrology is essential for ensuring the inspection and verification of measuring instruments and devices used in commerce. This requires the establishment of regulatory bodies to verify weights and measures, as well as weighing and measuring instruments used for commercial purposes.

Policy Objective

To ensure that economic interest of consumers are protected through the use of accurate weights and measures.

Policy Prescriptions

1. Government will enforce the implementation of the law on weights and measures.
2. Government will establish a regulatory body for legal metrology
3. Government will provide adequate facilities and develop relevant capacity and capabilities at the district level for legal metrology.

1.7.7 Industrial Metrology

Policy Context

Industrial metrology ensures the application of precise, reliable and accurate measurements in industrial processes. The regular calibration of industrial equipment and devices by accredited calibration laboratories are therefore critical. Expanding access to these services will require the active participation of the private sector.

Policy Objective

To ensure widespread availability of quality calibration services for industry.

Policy Prescription

Government will promote private sector investments and participation in industrial metrology.

1.7.8 Accreditation

Policy Context

Internationally recognized Accreditation Bodies are required to ensure that conformity assessment bodies meet the applicable standards of competence in their area of specialization. The establishment of such bodies with certified local assessors will reduce the cost of accreditation to the benefit of local industries.

Policy Objective

To ensure access to affordable and credible accreditation services.

Policy Prescriptions

1. Government will establish a national accreditation body with the assistance of relevant internationally recognized organisations.
2. Government will encourage the private sector to establish accreditation bodies.

COMPONENT TWO

TECHNOLOGY AND INNOVATION

2.1 TECHNOLOGY, INNOVATION, RESEARCH AND DEVELOPMENT FOR INDUSTRY

2.1.1 Overall Level of Science, Technology and Innovation in Ghana

Policy Context

There is an overall low level of science, technology, research and development and innovation in industry. This limits the absorption and adaptation of modern technologies into the manufacturing sector, thus affecting its competitiveness

Policy Objective

To increase the overall level of science, technology, research and development for innovation in industry.

Policy Prescription

Government will support the strengthening of the Science, Technology & Innovation (ST&I) base available to Ghanaian industrial firms through the following:

1. Strengthening of public research institutions
2. Raising the ability of private firms to carry out Research & Development and absorb Technology
3. Support the outsourcing of S&T requirements of industries

2.1.2 Public Sector Science and Technology Base in Ghana

Policy Context

The public institutions that support the manufacturing sector face constraints in their ability to undertake worthwhile research to meet the needs of industry in general, and the manufacturing sector in particular. These constraints include underfunding, inadequate human capital, inadequate technical training and insufficient equipment and infrastructure.

Policy Objective

To raise the level of science & technology and innovation undertaken in the public sector and enhance industrial competitiveness

Policy Prescription

Government will increase the percentage of GDP committed to public sector research.

2.1.3 Capacity and Capability of the Manufacturing Sector to Undertake and Absorb Science and Technology for Innovation

Policy Context

The manufacturing sector in Ghana is characterised by a large population of micro, small and medium sized firms, most of which use obsolete technology and have a low capital and human resource base. This limits their ability to undertake and absorb science and technology for innovation, in order to improve productivity and become more competitive.

Policy Objective

To raise the level of science and technology undertaken in the private sector to enhance industrial innovation and competitiveness

Policy Prescriptions

1. Government will strengthen and expand the provision of business development services and support for industrial firms undertaking and exploiting S&T for innovation.
2. Government will provide support to raise the absorptive capacity of firms, with a particular emphasis on indigenous micro, small and medium sized enterprises.
3. Government will support public research institutions to raise awareness of the existence of such institutions and their products and services.

2.1.4 Quantity and Quality of Human Capital for Science, Technology and Innovation

Policy Context

The skills base for science and technology is relatively limited. The educational system lacks adequate infrastructure for the study of science and technology. In addition, only a limited number of students are attracted to the study of science and technology, particularly at the tertiary level. The limited skills base constrains the manufacturing sector's ability to innovate, in order to enhance their productivity and become more competitive.

Policy Objective

To raise the quantity and quality of the labour force engaged in science and technology, and innovation (STI) in the industrial sector.

Policy Prescriptions

1. Government will strengthen existing training institutions to deliver training programmes that better meet the existing and future STI needs of industry.
2. Government will support increased enrolment in science and technology related courses at the tertiary level.
3. Government will encourage industry to provide the necessary training for its own STI needs.
4. Government will integrate science and technology related elements into management training.

2.1.5 Linkages within the Science, Technology and Innovation System

Policy Context

There is a weak science, technology and innovation system, with limited interactions between key agents in the system such as universities, research and technology transfer institutions, and industry. These weak linkages have resulted in inadequate support for technology innovation, adaptation and transfer to the industrial sector.

Policy Objective

To strengthen linkages among key agents in the science, technology and innovation system.

Policy Prescriptions

1. Government will strengthen the capability and capacity of the public research base to effectively engage with industry.
2. Government will support firms to access and absorb the STI knowledge directly from the public research institutions.
3. Government will strengthen technology transfer organisations to disseminate STI knowledge to industry.
4. Government will encourage co-location of technology intensive firms with relevant organizations in the public research base.
5. Government will encourage public research institutions to harness the S&T capabilities of the Ghanaian diaspora.
6. Government will encourage the development of science, technology and innovation links and programmes with international centres of excellence.

2.1.6. Science and Technology Promotion and Delivery

Policy Context

The effective promotion and delivery of S&T and innovation to the industrial sector will largely depend on improved coordination and collaboration among relevant MDAs, S&T institutions and industry.

Policy Objective

To strengthen coordination mechanism for the promotion and delivery of STI to industry.

Policy Prescriptions

1. Government will establish a strategic high-level cross-ministry body to coordinate and promote the application of science, technology and innovation for industrial development.
2. Government will strengthen CSIR and other relevant research institutions to effectively deliver STI to the manufacturing sector.

2.1.7 Institutional STI Capability

Policy Context

Weaknesses exist in the capability of science and technology and innovation related institutions, and they constrain the overall development, coordination and implementation of STI-related policies. They also reduce the overall impact that S&T can have on the manufacturing sector and industry in general.

Policy Objective

To strengthen the capability of STI-related institutions to develop and implement science, technology and innovation strategies for industrial development.

Policy Prescriptions

1. Government will promote and strengthen links between STI related institutions and their foreign counterparts to improve their capabilities.
2. Government, in collaboration with public research institutions, will provide training for key public officials in the area of science and technology for innovation.

2.2. ICT FOR INDUSTRIAL DEVELOPMENT

2.2.1 Adoption and Use of ICT in the Manufacturing Sector

Policy Context

Growth and accelerated industrial development in this age depends to a large extent on Information and Communications Technology (ICT). Modern manufacturing process requires ICT in planning, design, supply chain management, production and distribution. ICT is therefore strategic in determining the competitiveness industrial firms.

Policy Objective

To enhance the adoption and effective use of ICT in the manufacturing sector, to drive competitiveness.

Policy Prescriptions

1. Government will work with the private sector to undertake programmes to increase the use of ICT in the manufacturing sector.
2. Government will strengthen existing educational and training institutions to develop the requisite skills to support the application of ICT in manufacturing.
3. Government will use incentive and regulatory measures to encourage investments in ICT infrastructure and reduce costs to serve as a catalyst to accelerate its use in industry.
4. Government will encourage the development of Business Incubation centres, at the universities and research institutions, to help promote the use of ICT in the manufacturing sector.
5. Government will promote the development of Technology Parks to facilitate the creation of an effective linkage between ICT, technology transfer and the manufacturing sector.
6. Government will promote the use of ICT for the collection of industrial data from the manufacturing sector.
7. Government will promote the development ICT programmes to link raw material suppliers, manufacturers, marketers and service providers.
8. Government will provide incentives to industry to invest in and utilize ICT to modernize manufacturing and make it more competitive.

2.2.2 Globally Competitive ICT-related Manufacturing Industries

Policy Context

Ghana has the potential to develop a competitive ICT industry. This potential can be fully realized through the promotion of ICT-Enabled Services (ICTES) and Business

Process Outsourcing (BPO), accompanied by the local production of related manufactures.

Policy Objective

To develop globally competitive ICT-related manufacturing industries.

Policy Prescriptions

1. Government will attract investment into ICT manufacturing.
2. Government will promote Ghana as a globally competitive location for ICTES and BPO

2.3 INTELLECTUAL PROPERTY RIGHT FOR INDUSTRIAL DEVELOPMENT

2.3.1 Adequate and Appropriate Legal Forms of Intellectual Property Rights

Policy Context

The establishment of adequate and appropriate legal forms to protect intellectual property rights encourages the development of new technologies to increase industrial production. It will also promotes domestic and foreign investment and facilitate technology transfer.

Policy Objective

1. To establish of adequate and appropriate legal forms of Intellectual Property Rights.
2. To stimulate innovation and technology development in Ghana

Policy Prescriptions

1. Government will provide effective rules to protect intellectual property rights and a coordination mechanism to ensure effective administration of such rights.
2. Government will promote awareness of and education on Intellectual Property Rights.

COMPONENT THREE

INCENTIVES AND REGULATORY REGIME

3.1 INCENTIVES FOR INDUSTRIAL DEVELOPMENT

3.1.1 INTRODUCTION

Incentives are important policy instruments for promoting industrial growth. Targeted incentives can help overcome market failures that lead to under-investment, low export capacity and limited use of domestic content in the manufacturing sector. Ghana has developed series of incentives that have general application which need to be strengthened to support the objective of increased value addition and promote industrial development.

3.1.2 Investment Incentive

Policy Context:

Mobilizing domestic and international resources for investment in production, especially for value added products, is essential for developing adequate national supply capacity.

Policy Objectives:

1. To encourage both domestic and foreign investments in the manufacturing sector, throughout Ghana.
2. To increase the size and number of productive enterprises, especially those in high value added sectors.

Policy Prescriptions:

1. Government will facilitate and support the development of key strategic sectors based on clear and transparent criteria.
2. Government will strengthen grant financing schemes to target selected sectors.
3. Government will ensure that investment incentives are appropriate to attract investments into the manufacturing sector.

3.1.3 Export Incentives

Policy Context:

The export sector requires incentives to attract investments into the sector. Incentives targeted at the export sector will boost export-led industrial development.

Policy Objective:

To increase export of manufactured products.

Policy Prescriptions:

1. Government will strengthen export finance institutions and programmes to enhance their effectiveness.
2. Government will streamline and enhance incentives to export-oriented manufacturing firms.

3.1.4 Local Content

Policy Context:

Incentives that promote the use of local raw materials and inputs by the manufacturing sector are critical for the growth of manufacturing and other sectors of the economy.

Policy Objective:

To promote the production and utilization of local raw materials and inputs.

Policy Prescriptions:

1. Government will provide incentives for the production and utilization of local raw materials and inputs.
2. Government will provide incentives to strengthen the linkage between the manufacturing and other sectors.
3. Government will monitor the effectiveness of local content incentives in collaboration with key private sector organisations.

3.2. INDUSTRIAL LEGISLATION AND REGULATION

3.2.1 Procedures for Licensing and Registration of Business

Policy Context:

The Companies Code of Ghana requires that all companies and enterprises be registered. However, most SMEs are not registered due to the fact that the processes for business registration and acquisition of operating permits are cumbersome, time-consuming and costly.

Policy Objectives:

To simplify procedures for business registration and acquisition of permits.

Policy Prescriptions:

1. Ensure easy access to business registration and acquisition of permits.

2. Strengthen the capacity of relevant institutions to delivery efficient services countrywide.

3.3. LABOUR AND INDUSTRIAL RELATIONS

3.3.1 Introduction

Labour and industrial relations are essential elements of industrial competitiveness. The manufacturing sector in particular thrives on harmonious labour and industrial relations and clearly articulated legislation that is effectively implemented.

Policy Context:

The Labour Act, (Act 651) 2003 established the National Labour Commission but its implementation has been hampered by limited resources and the lack of effective labour education.

Policy Objective:

To promote harmonious labour and industrial relations in the manufacturing sector to increase productivity.

Policy Prescriptions:

1. Government will strengthen the National Labour Commission with resources, capacity and establish a network of regional offices to effectively implement the Labour Act.
2. Government will expand and intensify the education of all stakeholders on the Labour Act.
3. Government will ensure that up-to-date labour market information is available for all stakeholders.
4. Government in consultation with stakeholders will develop a National Productivity Programme linking training, staff development and remuneration with productivity.

3.4. SPATIAL DISTRIBUTION

3.4.1 Introduction

Spatial distribution of industries is critical for achieving government's strategic objective of widespread job creation and economic development in deprived areas.

Policy Context:

Manufacturing establishments in Ghana are mainly concentrated in urban areas. This uneven distribution of industries is a challenge to balanced economic development and equity in the distribution of job opportunities and incomes.

Policy Objective:

To promote even distribution of industries to stimulate economic development countrywide.

Policy Prescriptions:

1. Government will encourage the development of Regional and District Industrial Estates, Logistic Parks and Incubators.
2. Government will collaborate with the private sector to develop cluster initiatives for SMEs.
3. Government will enhance incentive schemes for industries to locate in rural areas.
4. Government will encourage MMDAs to give special attention to industry in their development plans.

3.5 STRATEGIC INTERVENTIONS FOR INDUSTRIAL DEVELOPMENT

3.5.1 Introduction

The survival and growth of the manufacturing sector is key for industrial development. In the face of limited resources, there is the need to identify strategic industries as well as distressed but potentially viable industries for special support to enable them overcome market failures.

Policy Context:

A number of manufacturing industries are faced with various challenges making them unable to compete. Interventions directed at strategic industries are however, uncoordinated, inadequate and untimely. There is therefore the need to streamline interventions to enhance the competitiveness of such industries.

Policy Objective:

To ensure a vibrant, competitive and sustainable manufacturing sector.

Policy Prescriptions

1. Incorporate financing for strategic interventions into the annual budget.
2. Develop criteria and guidelines, including entry and exit strategies, for government intervention in industry.
3. Direct a percentage of the proposed Industrial Development Fund to support strategic interventions in industry.
4. Use public procurement regulations and practices to support strategic interventions.

CHAPTER FOUR

CROSS-CUTTING ISSUES

4.1 QUALITY HEALTH IN INDUSTRIAL DEVELOPMENT

The industrial policy seeks, among others, to provide a safe and healthy workplace environment for employees in industrial establishments. This will be achieved through the application of good practices and compliance with relevant health and safety rules and regulations.

4.1.1 Occupational Health and Safety

Policy Context:

Occupational health and safety requires an effective legal and regulatory framework as well as strong commitment from both employers and employees to enforce rules. SMEs in particular face challenges in implementing health and safety regulations, resulting in weak enforcement.

Policy Objective:

To ensure quality health in industrial establishments.

Policy Prescriptions:

1. Government will enact the proposed Health and Safety Law.
2. Government will enforce Occupational Health and Safety (OHS) laws and address poor health and safety standards in the manufacturing sector to protect workers and enhance productivity.
3. Government will encourage employers to take insurance policies for workers' compensation schemes.
4. Government will enforce regulations on the use of safety equipment and protective clothing in manufacturing enterprises.

4.1.2 Workplace HIV/AIDS

Policy Context:

The HIV/AIDS pandemic has a negative impact on the productivity of workers. It is therefore essential that manufacturing firms recognise the potential impact of HIV/AIDS on their workforce. This requires the development of workplace HIV/AIDS policies and programmes that creates awareness, provides care and prevents discrimination.

Policy Objective:

To reduce the incidence and impact of HIV/AIDS in industry.

Policy Prescriptions:

1. Government will encourage manufacturing firms to develop and implement workplace HIV/AIDS policies and programmes.

4.2 ENVIRONMENTAL SUSTAINABILITY

The pursuit of industrial development has implications on the environment. The challenge is to ensure that industrial development is pursued in an environmentally sustainable manner.

4.2.1 Cleaner Production

Policy Context:

Increasing production whilst safeguarding the environment can be achieved by introducing environmentally friendly technologies and improved manufacturing processes.

Policy Objective

To ensure environmentally sustainable industrial production.

Policy Prescriptions

1. Government will facilitate the development of programmes that promote the efficient use of raw materials, energy and water in industry.
2. Government will support industry to adopt cleaner production technologies and improved manufacturing processes.
3. Government will strengthen the capacity of regulatory bodies to enforce environmental regulations as well as effectively monitor manufacturing processes.
4. Government will ensure the promotion within industry of relevant ISO standards on environmental management.
5. Government will encourage industry to develop and implement self-regulatory measures on environmental management.

4.3 INDUSTRIAL DATA AND INFORMATION

Timely and credible data is fundamental to decision making by firms and government. Such data therefore should be readily available and accessible to all stakeholders.

Policy Context:

Although timely and credible industrial data is fundamental to monitoring and assessment of industrial performance, record keeping is a major challenge, particularly in the SME sector.

Policy Objective:

To ensure availability of quality industrial data.

Policy Prescriptions:

1. Government will enforce regulations that require companies to keep records.
2. Government will provide assistance to SMEs to improve record keeping.
3. Government will review and strengthen the legal and regulatory framework for the collection of industrial data.
4. Government will resource GSS to conduct regular industrial census and surveys to update industrial data.

4.4 GENDER IN INDUSTRY

Gender issues still persist in the manufacturing sector in spite of legislation and the existence of relevant agencies to ensure gender equity.

Policy Context

In industry, gender issues have not received the required recognition. This has manifested itself most prominently in the areas of access to credit, education and training and the provision of business development services.

Policy Objective

To ensure equal opportunities for men and women in industry.

Policy Prescriptions:

1. Government will facilitate the development of lending programmes for women and low income earners engaged in industrial activities.
2. Government will encourage the provision of affordable business development services to female entrepreneurs.
3. Government will continue to promote equal opportunities in the labour market and in industry.

CONCLUSION

The formulation process for this Industrial Policy has been intensely consultative and has taken into account the views of all the major stakeholders in Ghana, as well as what constitutes international best practices.

It is intended as a guide to action in the industrial sector of Ghana's economy. It provides predictability and consistency of Government policy for the sector and provides sufficient direction for both industry players and our Development partners. It also assures our producers of a level playing field where their rights and obligations are fully respected.

This final product is to be considered as a living document that will provide guidance to action across government and offer room for continuous consultation on issues that may come up in the future.