THE DEPARTMENT OF TRADE & INDUSTRY

the dti
Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

INDUSTRIAL POLICY ACTION PLAN

IPAP 2016/17 – 2018/19

Economic Sectors, Employment and Infrastructure Development Cluster

JOBS ... GROWTH ... EQUITY

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CONTENTS

FOREWORD BY THE MINISTER OF TRADE AND INDUSTRY

Dr Rob Davies MP

Situational and strategic overview

The launch of this year's eighth edition of the Industrial Policy Action Plan (IPAP 2016/17 – 2018/19) takes place in tough economic times, characterised by depressed global economic conditions and great uncertainty. The lingering effects of the great global recession continue to be felt worldwide; most obviously reflected by stagnant demand from developed and developing countries alike. The contraction and 'rebalancing' of the Chinese economy towards a greater focus on domestic demand has had significant and negative consequences for commodity-exporting countries. Growth projections for many African countries will most likely fall below expectations, mainly as a result of the collapse of the oil price and the wider slump in primary commodity demand.

The domestic economy has continued to be impacted by the lingering effects and successive 'after-shocks' of the global recession. The two most significant domestic casualties have been the mining and steel industries. The very sharp downturn in the former - a direct effect of the generalised slump in commodity demand and prices – carries with it significant knock-on effects for the domestic economy in general. Similarly, the crisis occasioned by massive over-capacity in the global steel industry has hit South African producers very hard, threatening the competitiveness and sustainability of many domestic producers and necessitating the deployment (both here and in other steel-producing countries) of a range of emergency trade and support measures.

In addition to these after-shocks, the prolonged and severe drought in many parts of the sub-region is having a severe impact on agricultural production of staple goods and will result in a significant increase in agricultural imports. This in turn will have significant repercussions for the broader economy in the year ahead.

In these difficult circumstances lower than projected GDP growth and continuing depressed domestic demand are likely, constituting a very significant barrier to economic growth – and in particular the *inclusive growth* that is the critical pre-requisite for overcoming South Africa's persistent high levels of unemployment and inequality.

All of these adverse factors underline yet again the crucial point that the National Development Plan (NDP), the National Industrial Policy Framework (NIPF) and successive IPAP iterations have repeatedly emphasised (albeit with differing emphases): namely *the pressing need for structural change in the economy* to break out of commodity dependence and move to a more diversified base in which increasing value-addition and export-intensity come to define South Africa's growth trajectory.

If South Africa was unable to optimise the opportunity to effect structural changes that the commodity boom provided, the severe and negative domestic impact of the global recession and ensuing commodity slump only serve to *underline how urgent and inescapable this task is* - even as we recognise, unfortunately, that the challenges now have to be met under much more adverse circumstances, including very tight fiscal constraints.

In short, the strategic necessity to restructure requires nothing less than a massive national industrial effort. This must be built on four main pillars: (i) policy coherence and policy certainty across government; (ii) a close collaborative effort between government, business and labour; (iii) a commitment to ensure that the linkages between the primary and secondary productive sectors of the economy are maximised; and (iv) a combined and constructive drive to overcome the key constraints to manufacturing-led, value-adding growth, with special emphasis on labour-intensive sectors such as agro-processing and clothing and textiles.

We cannot underestimate the shift of direction this requires. The services sector of the economy has been growing at twice the rate of the production sectors, driven in the main by credit-fuelled consumption and import-intensity. This imbalanced growth model, which has increasingly run out of steam, has left the economy vulnerable. It is, quite simply, not sustainable.

Securing a sustainable growth trajectory will therefore require (amongst other things) intensely focused collaborative efforts by both government and business to redirect the strength of the financial sector to much more strongly support the productive (and especially the manufacturing) sectors, in order to marshal domestic resources for increasing investment in the real economy.

Government's response to the serious economic challenges the economy is faced with is encapsulated in the President's Nine-Point Plan. *A higher-impact IPAP* is one of the key pillars of this plan. Its objectives will not be achieved either by waving a magic industrial policy wand or through policy prescriptions that invoke an exclusive role for the private sector. What is required instead – in tandem with the collaborative commitments outlined above – is to build decisively on what we already have in place. This means expanding the scope and depth of all the interlocking (cross-cutting and sector-specific) programmes set out in the IPAP - and putting our combined efforts into ensuring their steady (practical, incremental) implementation.

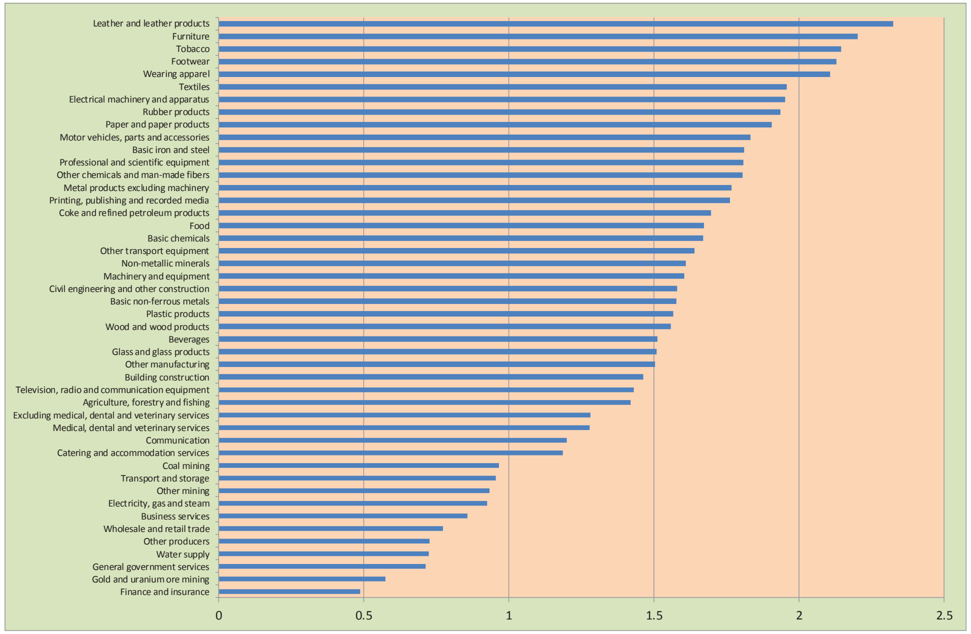
Significant successes have been achieved in the Clothing, Textiles, Leather and Footwear (CTLF) and Automotive industries through collaboration between government and business, based on a commitment by all parties to invest in and grow these key sectors. There is potential to replicate these successes by progressively transferring the lessons learned from the CTLF and Auto interventions to further identified sectors where South Africa has and/or wishes to build globally competitive industrial and export capabilities. The next area identified for a similar mix of support measures and reciprocal commitments to supplier development and value chain integration is the rail and mining capital equipment sector.

Further, the commitment to 'higher impact' requires an intensified focus on using the transversal (cross-cutting) policy levers that are already in place to fully support both the critical 'spill-over' sectors and the manufacturing sector in general - with a strong focus on labour intensive sectors and sub-sectors.

The labour intensive sectors and sub-sectors are principally: (i) the agro-processing sector (which also lends itself to economic decentralisation); (ii) clothing, textiles, leather and footwear; (iii) the component manufacturing and sub-assembly sub-sectors in automotives; (iv) rail, light manufacturing and engineering in the metals sector; (v) plastics and associated sub-sectors; (vi) electro-technical assembly, sub-assembly and component manufacturing; (vii) downstream timber and pulp products, including furniture and boatbuilding.

As the following figure indicates, IPAP's intensifying focus on labour intensive sectors is driven by an understanding of their employment multiplier effects across the economy.

Figure: Employment: Backward Indirect Impacts



Source: Quantec

In pursuit of its core growth and employment objectives, IPAP deploys a broad range of cross-cutting policy and support instruments – e.g. procurement; industrial financing, incentives and SEZs. These are complemented by targeted, sector-specific support measures which are being continuously refined and strengthened. Making all the instruments work effectively in tandem with one another requires focussed inter-departmental and institutional effort to build the linkages between the primary (agriculture and mining) sectors and the services and manufacturing sectors. In addition, enabling economic and transport infrastructure must be deployed to support these labour intensive sectors and to achieve a higher degree of economic and industrial decentralisation.

To expand a little further on some of the key cross-cutting instruments:

(i) Public procurement

IPAP has over the past few years developed a very strong emphasis on the deployment and strengthening of public procurement to support the local manufacturing sector and the growth of world class industries. Compliance across government and state-owned companies (SOCs) is now identified as the critical issue in ensuring that this policy instrument reaches full effectiveness.

Various tools have been designed to accommodate different procurement processes. These include Designation, the Competitive Supplier Development Programme (CSDP) and the localisation requirements of the Preferential Procurement Policy Framework Act (PPPFA). The core goal of these instruments is to raise aggregate domestic demand, in support of localisation, supplier development and enhanced competitiveness.

Much stricter compliance by public entities will be achieved by making their performance in meeting government's 75% procurement localisation target an integral component of the annual audit process. In addition, special mention must be made of the localisation requirements which are increasingly being embedded in the roll-out of the Presidential Infrastructure Co-Ordinating Committee's National Infrastructure Investment Programme.

(ii) Industrial financing and incentives

An expanded and refocused system of industrial financing and incentives will be a key requirement going ahead. It will include much stronger export credit and export credit insurance support, in combination with a wide range of sector-specific incentives – beginning, as noted above, with the rail and mining capital equipment sectors.

Importantly, this package of incentives includes the recently launched Black Industrialists Incentive, designed to ensure that broad-based black economic empowerment and inclusive growth characterise all-round efforts to secure and grow SA's manufacturing base.

(iii) Leveraging the devaluation of the Rand

Notwithstanding the problems and uncertainties associated with currency volatility, the weaker Rand should be a strong contributory factor in helping to make South African manufactured products more globally competitive. At the same it also opens up a range of opportunities for the expansion and further development of SA's domestic manufacturing capabilities.

In the national market, the increased cost of imported goods presents immediate opportunities for import substitution and the local production of far more cost-competitive, value-added products, both in the domestic economy and for export.

The decline of commodity prices has also led to dramatically increased synergies between the mining and manufacturing sectors. With the weakening Rand, mining companies have recognised that procuring from nationally-based manufacturers will provide them with significant cost and other competitive advantages, both now and into the future.

Most importantly, a weaker Rand provides the basis for a much more comprehensive and aggressive export focus that consciously seeks to optimise the competitive advantage that the devalued currency provides. This should apply in particular to the significant opportunities on offer across the African continent, in the context of SA's commitment to African regional industrialisation.

Growing exports

There are a number of benefits that accrue to a country as a result of increased exports. These include the ability to specialise in attractive sectors, to build dynamic cluster economies of scale and scope, to increase employment and to increase foreign exchange earnings that enable the importation of advanced technologies. However, there are also major obstacles to exporting manufactured products. These include the need for a complex discovery process to learn about customer requirements and competitor offerings in new markets. In addition, there are significant transaction complexities, costs and risks in doing business across different legal and financial systems.

Finally, it is often necessary to invest in logistics and service infrastructure in a new market before it is possible to market a product. Given the benefits of exporting, the state needs to play a critical role in supporting companies to manage the costs and risks of entering new markets.

The first pillar of our export strategy will involve building partnerships with global Original Equipment Manufacturers (OEMs) who already have global trade networks and associated infrastructure and who are interested to developing production hubs in South Africa. These partnerships will be focused on transferring technologies, either through direct investment or partnering, to build our national design and manufacturing capabilities in all relevant supply chains, as well as growing our exports in OEM value chains.

In addition, the state will partner with national export champions to catalyse increased national technology absorption for the development of high value exports and will provide a battery of export promotion incentives.

Three programmes have been developed to catalyse increased exports, in the context of these partnerships.

(i) A programme to provide *better support for existing exporters*, designed to help them rapidly increase the quantity of their external sales. The biggest problem both export-orientated national companies and global OEMs have noted is *the (less than optimal) quality of our current export credit and insurance products; and the efficiency with which these products are delivered*.

Exporters from South Africa are placed at a significant disadvantage in relation to exporters from countries that provide a seamless export credit support service. In this context, it is worth noting that a number of global OEMs operating in South Africa have indicated that the provision of efficient export credit support is a condition precedent to their choosing South Africa as an export base. With these issues in mind, existing export credit processes are now being thoroughly reviewed, in conjunction with efforts to put in place more sharply focused, politically-supported missions dedicated both to expanding existing markets and capturing new ones.

Our key concern is to ensure that the capabilities built through the procurement and supplier development programmes can be leveraged and sustained through a focused export promotion drive.

(ii) The recent turn-around of our clothing and textile sector has largely been a result of a company-by-company effort to build world class manufacturing capabilities. The second programme *therefore seeks to improve productivity along existing and potential export-orientated supply chains.* This relates to improving quality controls; re-engineering the design of production processes and plant layout (lean disciplines); improving supply chain management; and providing specialised skills development.

Certain global OEMs supplying SOCs have already initiated upgrading programmes in their South African supply chains to meet their Supplier Development Programme obligations.

the dti will be continuously developing its partnerships with these companies to deepen and broaden the upgrading processes that are needed to build and strengthen export-orientated supply chains. In this context, our manufacturing incentives will become more tightly targeted towards companies that have been through, or are going through, either a global OEM accreditation programme or an upgrading programme recognised by **the dti**.

(iii) The third programme looks at how to build new export-competitive capabilities. This will require us to support a targeted process of technology acquisition, by a) attracting investors who own desirable technologies; b) facilitating technology transfers; and c) supporting focused national technology development efforts where appropriate and viable.

The support currently being given to component manufacturers in the rail supply chain by the Technology Localisation Unit of the Council for Scientific and Industrial Research (CSIR) is a clear example of what can and must be done.

Developing export-oriented production hubs

A number of international companies have either invested in or shown considerable interest in establishing facilities in South Africa that will contribute to setting South Africa up as a production hub into the rest of the continent. Whilst there have been some recent successes in landing these investments, there is still a good deal of room for improvement. We will therefore be focusing on areas where SA wishes to build globally competitive industrial capabilities, while at the same time closely examining ways in which the *Special Economic Zones and Clusters Programmes* can be positioned to help close the gaps.

As in previous years, **the dti** will also be working closely with the Department of Science and Technology and our technical infrastructure institutions to consolidate the required testing infrastructure and other incentives to support the technology transfer process. In addition to support for existing industry associations and export councils **the dti** will be putting in place an export council with a specific Africa focus, fully representative of both the public and private sectors.

Importantly, when considering the rest of Africa as an export market, companies also need to consider procurement of cost-competitive inputs from other African countries wherever appropriate - a developmental *quid pro quo* that should serve to bolster the growth of both our own and our neighbours' economies.

Industrial decentralisation

Industrial decentralisation, difficult under any circumstances, is particularly difficult in SA, given the deep-seated structural/spatial distortions inherited from apartheid. That said, the key instrument identified by IPAP to drive the necessary industrial re-balancing/decentralisation effort is the Special Economic Zones (SEZ) programme, supported by other initiatives such as agri-park development and industrial park revitalisation. It is critical that rail and port infrastructure investment and improved efficiencies are mobilised to support this effort.

Sustained growth of the manufacturing sector as a whole is best served by the efficiencies which stem from (i) proximity to markets and ports; (ii) efficient supply and logistics chains; (iii) agglomeration and clusters; and (iv) supportive economic infrastructure. Whilst these economic features have been historically centralised (at great human cost in terms of uneven spatial development) the plain fact is that they are structurally entrenched and cannot now be rolled back in any simplistic manner.

Nevertheless, every effort is now being made - in circumstances of the need for complex intra-governmental co-ordination - to strengthen the instruments which will enable appropriate and viable economic and industrial decentralisation to take firm root in previously under-served regions – connecting them into the wider national economy and discovering potential new export opportunities - particularly through SEZs and regional economic clusters.

Beneficiation and resource diversification

A key priority of IPAP 2016 is to strengthen the *vital economic linkages between the primary agriculture, mining and manufacturing sectors of the economy* in order to secure much greater downstream beneficiation and maximise upstream linkages.

Important programmes arising from the Mining Phakisa increasingly reflect this approach, announced last year by the President and further set out in IPAP 2016.

In a parallel policy thrust, IPAP 2016 introduces a medium term programme to ensure that *gas-based industrialisation* increasingly develops into one of the spines of our industrial strategy - leveraging natural gas as both a source of power generation and a driver of industrial diversification. Scaling up from the preparatory work that has been in progress over the past year, the second quarter of 2016 will see the launch and initial implementation of the programme.

It will be based on three phases of natural gas supply:

- *Near term*: building the necessary distribution infrastructure to support bulk importation of liquefied natural gas (LNG) from international sources and begin supplying key industrial requirements such as fuel cell-generated energy and efficient smelters.
- *Medium term* (over the next decade): bulk LNG importation from Mozambique as the huge natural gas reserves located in the Rovuma Basin start coming on-stream - which will allow for further scaling-up of infrastructure and the establishment of gas as a viable broad-based alternative source of industrial energy.

- *Longer term*: (if this proves to be both commercially and ecologically viable), leveraging the very large indicative reserves of shale gas in the Karoo basin to transform South Africa into a significant producer of natural gas in its own right - with enormous potential effects for industrialisation.

Meeting the challenges of technological change

As we have said before, government seeks to work in an increasingly close collaborative effort with business and labour to restructure the economy and place it on a value-adding and export-intensive trajectory - a process characterised as government 'steering but not rowing'. In the current depressed and volatile global economic conditions, it will find itself doing this against a continuously shifting backdrop of both 'drag' and 'push' factors. As previous iterations of IPAP have suggested, the 'push' factors – becoming ever more intense - include:

(i) The 'Fourth Industrial Revolution' and the quantum technology leaps which accompany this phenomenon

SA companies cannot be left behind by the huge advances in additive manufacturing, 'big data' access, advanced information technology and digitalisation capabilities - including the rapidly emerging 'Internet of Things'. Disruptive technologies are set to lead both to huge changes in production processes and – so it is widely predicted – very significant job losses.

It is imperative that fact is separated from fiction in order to understand both the potentially negative impacts and the opportunities this revolution will bring - and to ensure that industrial policy is designed in such a way as to minimise the negative social impacts and maximise the opportunities for 'leapfrogging' to new technologies. Some of this work is set out in this IPAP's chapter on Innovation and Technology, which is primarily the responsibility of the Department of Science and Technology.

(ii) Climate change and 'greening'

The forms taken by our drive to industrialise will of necessity be strongly shaped by the responses we develop to meet the very real and considerable pressures all economies face to adopt far less energy- and carbon-intensive production processes.

Faced with the challenges of climate change, a number of policies and instruments have already been implemented to incentivise local industries to reduce their greenhouse gas emissions and to support the development of new green sectors. The achievements of the National Cleaner Production Centre, set out in IPAP 2016, demonstrate what can be achieved.

But more needs to be done to support domestic industries to adopt less carbon-intensive production processes, in addition to seizing the manufacturing opportunities available in the dynamic renewable energy and green industries space. Reduction of waste and/or its utilisation as an input for other industries is increasingly gaining ground through the process of 'Industrial Symbiosis'.

Minimising regulatory and red tape barriers

Strong efforts are already under way to open up space for more development-friendly governance processes. There is increasing alignment across government and private stakeholders around the importance of the industrialisation project.

The IPAP has become an accepted strategic compass for industrial development which guides government departments in their policy formulation. There are now increasing efforts across a range of fronts to improve the efficiency of administrative processes by eliminating red-tape bottlenecks that hinder investment and expansion.

In this regard, the President has announced an inter-Ministerial Committee (IMC) on Investment to tighten up the intra-governmental coordination required to underpin the new One-Stop Investment Centres, whose core purpose is to ease the process of doing business in South Africa.

An important first step, implemented in April 2016, was the launch of CIPC Online. The CIPC (Companies and Intellectual Property Commission) has partnered with all the major banks and in April I launched a partnership with Nedbank to provide business registration facilities within their branches. It is important to emphasise that it is no longer necessary to travel to CIPC offices to register a company. Company registration will now be able to be done at a rapidly growing number of bank branches and online through the partner banks, as well as at CIPC's self-service terminals - so far installed in four Provinces - or on-line through the CIPC website.

Already in the past year, 300,000 businesses were formally registered at the CIPC. 88% of these applications were received through online channels.

Overcoming constraints – moving forward

As government pushes ahead with the interventions summarised above - and set out in greater detail in the programmes and Key Action Plans of IPAP 2016 - we are very mindful of the work that still needs to be done to more adequately overcome various lingering and persistent constraints and obstacles to growth that still confront us. The main challenges are as follows:

- Overcoming electricity supply constraints and elevated prices - including creating an enabling environment for own- and co-generation, with a particular focus on renewable energy and the fuel cell technology opportunities that South Africa is playing a pioneering role in developing.
- A continuing effort to secure port and rail network reforms to overcome inefficiencies and associated high costs, with a particular emphasis on supporting export competitiveness. A first step along this road has been achieved through a starter commitment of R7 billion for new port facilities, following on from the adoption of a public-private partnership model for port infrastructure development by Transnet National Ports Authority (TNPA).
- Concerted efforts to address deep-seated and serious skills deficits and mismatches that impact on the capacity of the economy to grow faster and diversify more effectively.
- Careful and attentive management of the steel sector operational environment, to ensure stability and get the industry back on its feet across the entire value chain.

There are no quick-fix solutions to any of these problems; but incremental progress is being made. We have to emphasise again: all these (and all our other) industrial policy measures are having to be implemented in the most difficult of economic conditions. This context requires - if any further motivation were needed - an even greater commitment towards the serious and concerted collaborative effort we have been proposing: one which encompasses all national government departments; all other spheres of government; the private sector and labour, and all of our most important tertiary and research institutions.

To all those who are part of this effort and have contributed to this latest iteration of IPAP, I offer my deepest appreciation.

Dr Rob Davies MP
Minister: Trade and Industry

A MESSAGE FROM THE DIRECTOR GENERAL
Lionel October

The Industrial Policy Action Plan is a product of the Economic Sectors, Employment and Infrastructure Development (ESEID) Cluster of the South African national government. Both its preparation and its implementation rest not just with **the dti** - although this department has a core responsibility in this regard - but with all the economic departments which are part of the cluster; and with many other outside contributors.

As you will have seen in Minister Rob Davies' Foreword, policy coherence and programme integration must lie at the heart of the national industrial effort. The overarching goal is to grow the economy; but to succeed in doing so we must ensure that all programmes and efforts in the primary and secondary economic sectors are aligned; and that this alignment is underpinned by close collaboration between government, business and labour. We need to work together as one to overcome existing barriers to growth and seize the opportunities that present themselves in 2016 and beyond. We all understand that we are on a long and difficult road towards the building of a diversified, growing economy with a robust industrial base.

The history of industrial development and economic growth amply demonstrate that there are no alternative 'quick-fix' solutions. The problems in our economy that IPAP describes and addresses are long-standing and structural in nature. Having identified them, the task becomes to work together more and more effectively to break free of their constraining hold and secure the strong, inclusive growth required to overcome unemployment and inequality in South Africa.

In this regard – and in addition to focused government-business-labour cooperation – there is also a special role for South Africa's state owned companies (SOCs) to play.

Many of the IPAP policy instruments – and in particular the lever of state procurement to promote local industrial development - have been designed in large measure for implementation by the SOCs – one good example being the Competitive Supplier Development Programme (CSDP).

Significant strides have already been made in aligning the work of the SOCs with the key policy thrusts of IPAP; but much more still needs to be done.

An important role is also assigned to South Africa's development finance institutions (DFIs): The Industrial Development Corporation (IDC), the Development Bank of South Africa (DBSA) and the Export Credit Insurance Company (ECIC). Significant progress has been achieved; but as this year's IPAP sets out to demonstrate, the work of these institutions must be particularly honed-in on getting secure long term investment into the productive sectors of the economy and strongly supporting SA's export drive.

IPAP 2016 exemplifies the spirit of constructive collaboration between many departments and institutions; but here I would like to make special mention of the Department of Science and Technology (DST), the Council for Scientific and Industrial Research (CSIR) and the Industrial Development Corporation (IDC). Their ongoing, committed support – which includes the preparation of specific chapters in IPAP 2016 - is invaluable, and greatly appreciated.

A special word of gratitude is extended to all **the dti** personnel who have worked tirelessly to produce this publication; and to the various departments, SOCs, DFIs and technical infrastructure institutions (SABS, NMISA, SANAS and NRCS). Thanks are also due to our partner research and tertiary institutions and to all those from business and labour who have made invaluable contributions to this iteration of IPAP. Their ongoing support is of great importance to the national industrial effort.

My profound appreciation to all concerned.

Lionel October
Director General
Department of Trade and Industry

IPAP IN CONTEXT: ECONOMIC ANALYSIS

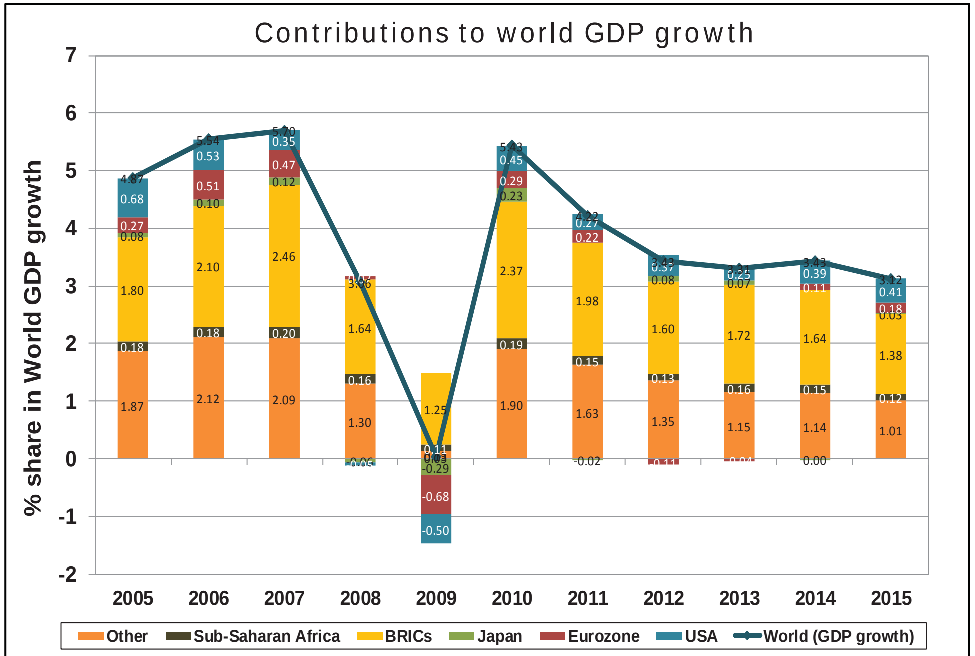
Global economy

The world economy has been performing substantially below its potential since the US financial crisis of 2007 and the ensuing Great Recession of 2008-09 - and continues to face considerable headwinds and uncertainty at the present time.

The developing economies have been supporting the global economic recovery since the Great Recession of 2009 through rapid expansion rates. More recently, however, they have experienced a decelerating growth momentum. The developed economies, which have flirted with recessionary conditions or subdued rates of growth post-crisis, are also being affected by increased instability in global markets.

World growth moderated further in 2015 towards an estimated 3.1%, the lowest level in the post-recession period.

Figure 1: World GDP growth: 2005-2015



Source: IDC - compiled from IMF data

The United States economy continues to expand at a sturdy pace and the economic recovery is proceeding steadily in Eurozone. However, the downside risks are still considerable in light of slowing world trade and fixed investment activity, highly inadequate employment creation and income distribution, as well as increased instability in global financial markets.

China's slowdown has been largely in line with expectations. The world's second largest economy is rebalancing its growth model to one more driven by domestic consumption instead of exports and fixed investment activity. However, this enormous structural change has been altering the country's demand for mineral commodities, in the process affecting the performance of numerous emerging and developing economies.

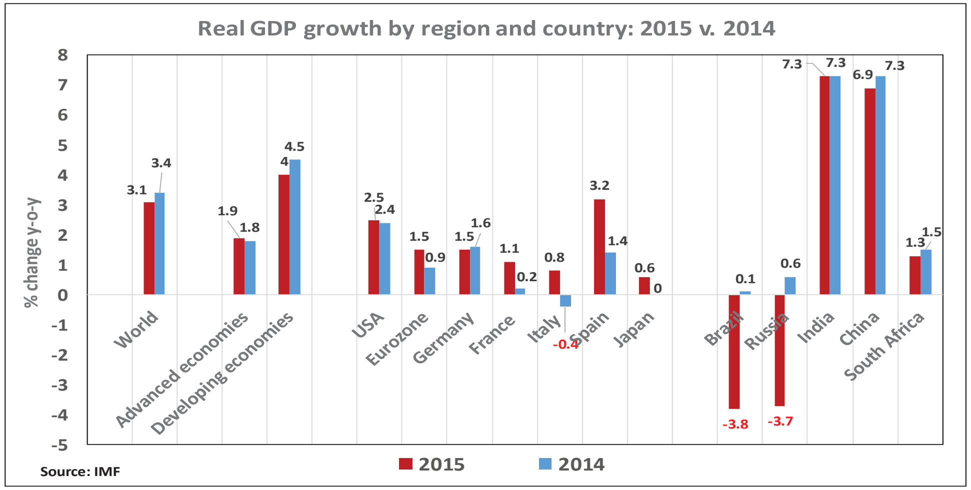
Most resource-based economies have been adversely affected by sharply lower and still downwardly trending industrial commodity prices and volume requirements. Trade imbalances have been widening, capital has been flowing outward in massive quantities and currencies have depreciated sharply. Facing larger fiscal deficits and rising inflationary pressures, many commodity-reliant economies have been forced to utilise policy instruments for stabilisation purposes, further compromising their growth performances.

Despite the growth moderation experienced in a number of emerging markets and developing economies, their relative contribution to world GDP growth is still rising, albeit at a slower pace. In 2015, the BRICS economies expanded at a combined rate of 4.7%, contributing 1.4 percentage points, or roughly 44% to the overall world growth of 3.1%.

This aggregate figure is, however, deceptive. In reality, the BRICS contribution can be attributed almost exclusively to continuing strong growth in India and China – the latter now beginning to fall off. Recessionary conditions persist in Russia and Brazil, while South Africa is recording substantially slower rates of economic growth.

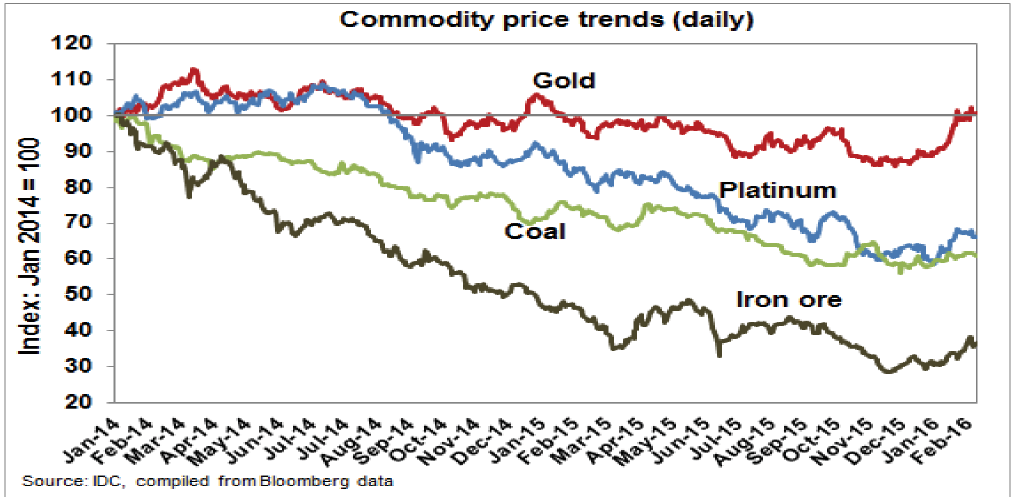
Falling commodity prices and export volumes, increased instability in financial and currency markets, investor uncertainty and lower foreign direct investment inflows, as well as fiscal constraints have weighed on Sub-Saharan Africa's growth performance. Output growth in this region, which is a key market for South Africa's exports, is estimated to have slowed to 3.5% in 2015, from an annual average of 5.6% from 2000 to 2014.

Figure 2: World GDP growth by region/country: 2014-2015



Sharply lower and still down-trending industrial commodity prices have not only been a reflection of softening demand globally, particularly from China, but also of over-supply by major producers in commodity markets including oil, industrial and base metals.

Figure 3: Commodity price trends: Jan 2014-Feb 2016



Global trade has slowed remarkably since the peak of the commodities' super-cycle around 2011. Subdued or weakening demand conditions in various regions of the world have contributed to this trend. Whereas global trade increased at roughly double the pace of world GDP in the 1990s and early 2000s, the two rates of expansion have been more or less in line in recent years.

Figure 4: Global export volumes: 2005-2015

World manufacturing output came under pressure during the course of 2015 as operating conditions deteriorated in many regions and countries around the globe. This was reflected in lower average readings for the purchasing managers' index (PMI) compared to the preceding two years.

Figure 5: Global manufacturing PMI by region/country: 2006-2015

In the United States, the PMI recently dipped below the crucial 50-point mark, indicating a contraction in manufacturing output, while employment creation also slowed. Contributing factors have included a very strong dollar, subdued global demand and lower levels of fixed investment, particularly in the oil sector. Manufacturing output in the Eurozone has expanded for 31 successive months, with the PMI reading towards the end of 2015 being the highest since April 2014. China's manufacturing sector is taking strain, with subdued rates of growth recorded over the past year. Weak demand, especially in external markets, is taking a toll on manufacturing activity.

Fuelled by the massive liquidity injections and cheap credit associated with the quantitative easing programmes of advanced economies and record low interest rates, stock-market performances around the globe had long been completely out of line with the economic fundamentals. Inadequate regulation of global financial markets has amplified the volatility and dissociation from developments in the real economy.

Emerging market assets were expected to take the brunt of portfolio adjustments as the United States Federal Reserve eventually unwound its quantitative easing and started raising interest rates. As investor sentiment turned against assets perceived to be riskier, sharp stock-market corrections were widely anticipated to materialise, and emerging market currencies were expected to come under increasing pressure.

Net capital outflows from emerging markets have been estimated at USD735 billion in 2015 according to the Institute of International Finance, compared to outflows of USD111 billion in 2014. Total capital flows out of China were estimated at USD676 billion, underscored by concerns over a weakening currency and a slowing economy.

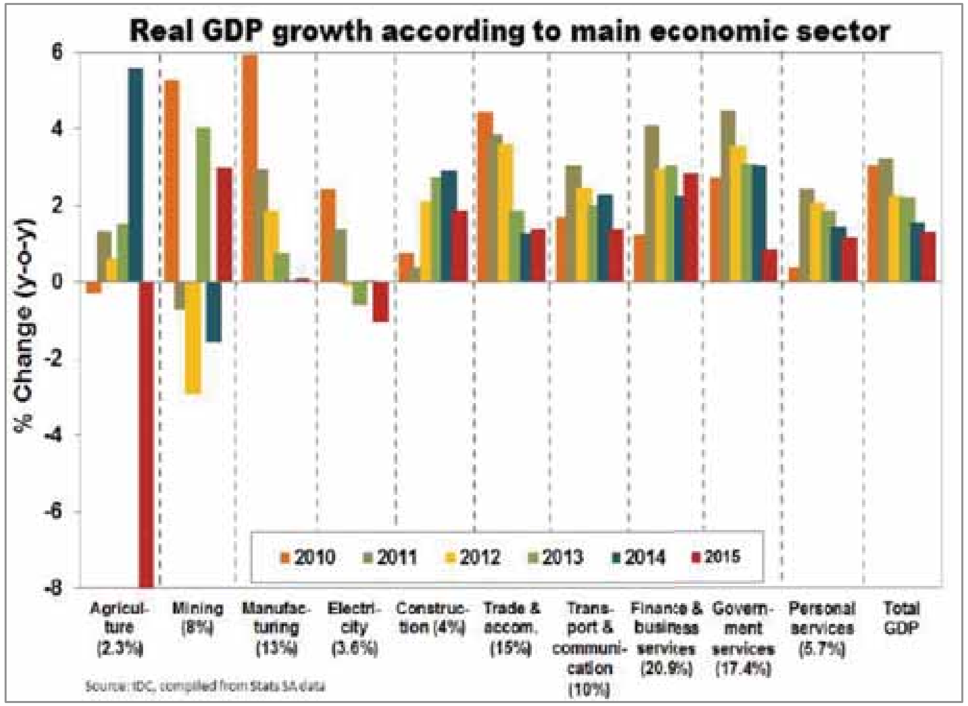
China's equity markets plummeted during the second semester of 2015 and, after a short-lived and mild recovery, the negative sentiment re-surfaced at the start of 2016, with spill-over effects onto other world markets, including the Johannesburg Stock Exchange. Bearish investor sentiment was driven by increasing apprehension over the outlook for the global economy, instability in currency markets, poor asset performance, commodity prices that have yet to bottom out – and which, according to the IMF, are likely to remain low until at least 2020 - as well as by heightening geopolitical risk.

Figure 6: Global equity market movements Jan 2015-Feb 2016

South African economy

Successive "aftershocks" since the global recession, the high levels of uncertainty prevailing worldwide and several home-grown challenges have taken a toll on the South African economy. Growth slowed further in 2015 to 1.3%, with the weak performance being fairly broad-based at the sector level.

Figure 7: SA real GDP growth by sector: 2010-2015

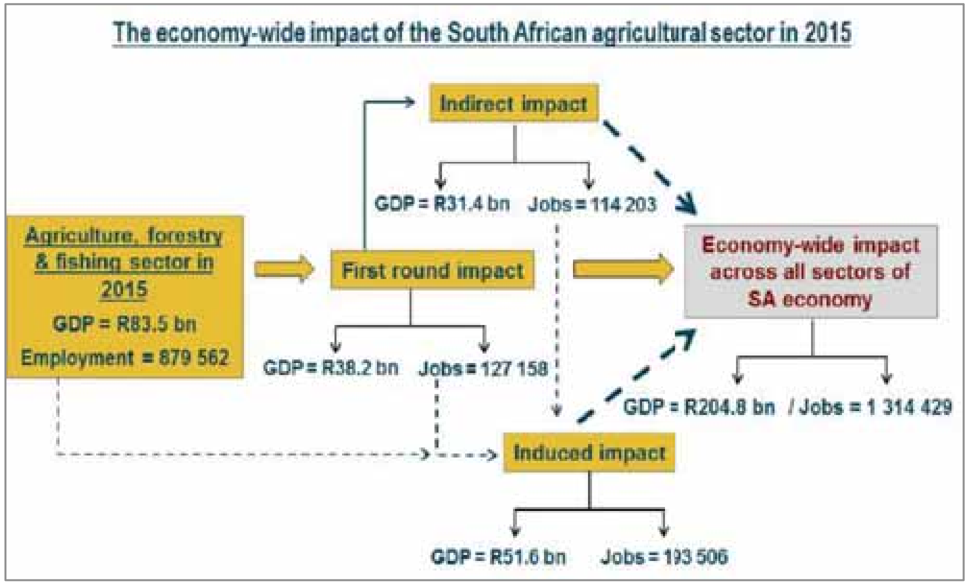


The worst drought on record (the average rainfall in 2015 was the lowest since 1904) has affected South Africa's agricultural sector and rural populations particularly hard. The sector's real GDP contracted by 8.4% in 2015. Decreases in the production of field crops such as maize, sunflower and sugar cane were the main contributors to the fall in the agricultural sector's output.

Due to the strong linkages between agriculture and other sectors of the economy, the negative effects have extended beyond farming operations to downstream producers in a number of value chains (such as food processing) and many suppliers of goods and services.

Agriculture is a very important sector of the South African economy. It employed almost 880 000 people in 2015 and, through its linkages with other sectors of the economy, its overall contribution (direct and indirect) to national employment has been estimated at 1.35 million. In terms of gross domestic product, whereas its direct contribution amounted to R83.5 billion in 2015, the economy-wide impact was substantially larger at R204.8 billion.

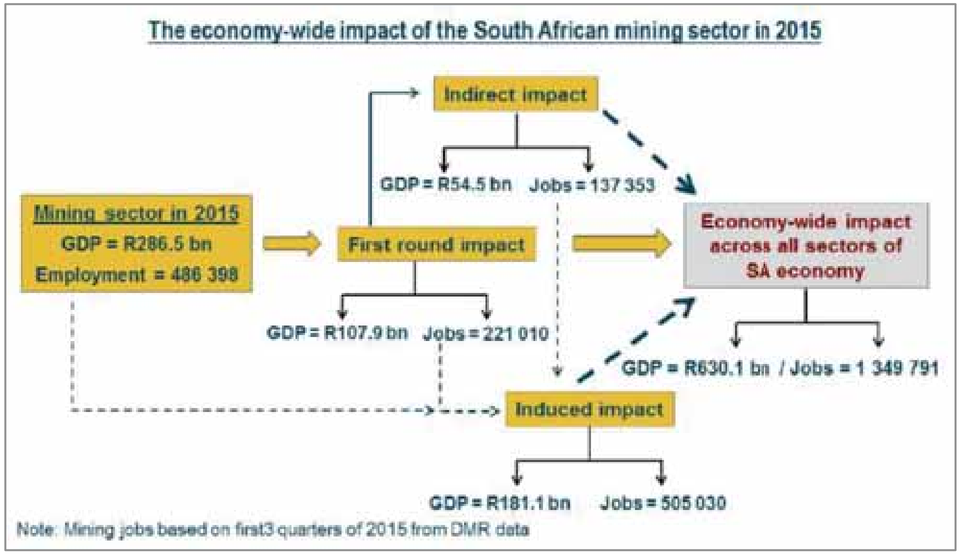
Figure 8: Agriculture in the SA economy: Direct, indirect and induced impacts



In the mining sector, the rebound in output recorded in 2015 was largely due to the recovery in the platinum group metals segment after the production stoppages due to industrial action in the first five months of 2014. Fixed investment in the mining sector declined by 2.3% in 2015, compared to a modest rise of 1.9% in 2014. Considering the depressed conditions in industrial commodity markets, further upheavals can be expected in the sector, with short- to medium term prospects remaining unfavourable.

The mining sector also plays an important role in the South African economy through its strong multiplier effects, with its overall contribution to national GDP and employment being substantially higher than its own direct impact, as illustrated in Figure 9 below.

Figure 9: Mining in the SA economy: Direct, indirect and induced impacts

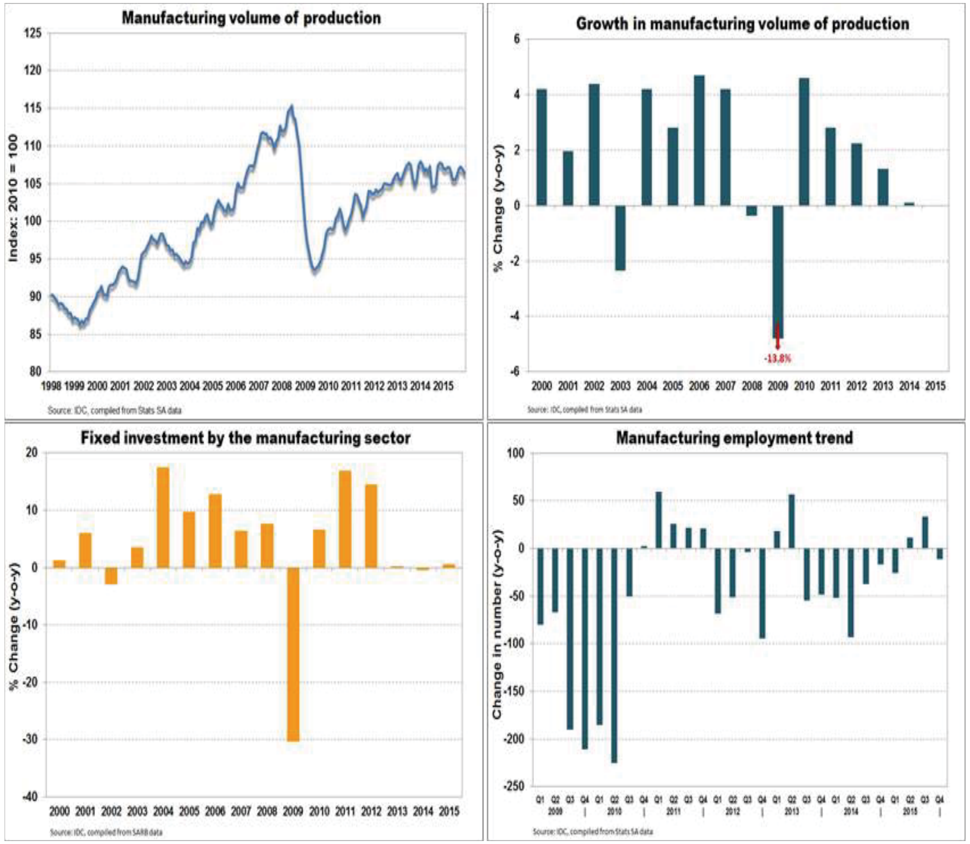


Difficult conditions in the mining sector are thus impacting on activity levels in several industries, specifically suppliers of goods (such as suppliers of machinery and equipment, chemicals, wood and wood products, fabricated metals and food products) and services (such as suppliers of transportation, logistics and catering services).

Manufacturing is a key sector of the South African economy. Over and above its direct contribution to overall economic activity (manufacturing accounted for 13.0% of the gross domestic product in 2015), the sector has strong linkages with the rest of the economy. The manufacturing sector is a critical supplier of intermediate and final consumption products, as well as an important source of demand for primary products (mineral and agricultural) and various services. Importantly, the manufacturing sector employs 1.74 million people and, through its relatively high multiplier effects, sustains a large number of indirect jobs throughout the economy. Furthermore, manufactured goods accounted for 60.5% of South Africa’s merchandise export basket in 2015.

The performance of the domestic manufacturing sector has been hindered in recent years by weak demand conditions in local and external markets, as well as by increased competition from imported products. The sector has experienced rising operational costs and its production activity has been negatively affected by infrastructure constraints (particularly electricity supply, transportation and logistics) and industrial action.

Figure 10: Manufacturing volumes, growth rates, investment and employment levels

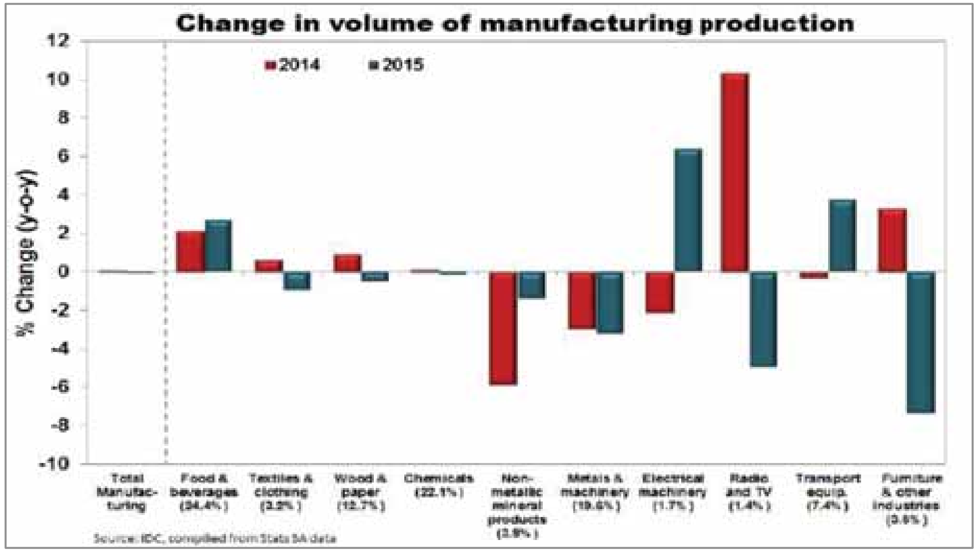


A weaker currency should, under normal circumstances, lead to an improved export performance as the external price competitiveness of locally manufactured products improves. However, with the Eurozone continuing to experience a very weak economic recovery, its import demand for SA manufactured goods has remained muted. In addition, important markets in Africa have been affected by the downturn in commodities, which has affected investment activity and overall import demand.

Growth in domestic demand has slowed considerably. South African households have had to curtail spending due to constrained budgets, high debt levels, rising interest rates and living costs, as well as difficult conditions in the labour market. The business sector, government and public enterprises have generally had to keep expenditure levels in check. As a result, growth in manufacturing output virtually ground to a halt in 2014 and 2015, and the sector remains under severe pressure. This is evidenced by a number of key indicators, as illustrated below. In light of a difficult operating environment, fixed investment activity in the manufacturing sector has recently declined in real terms.

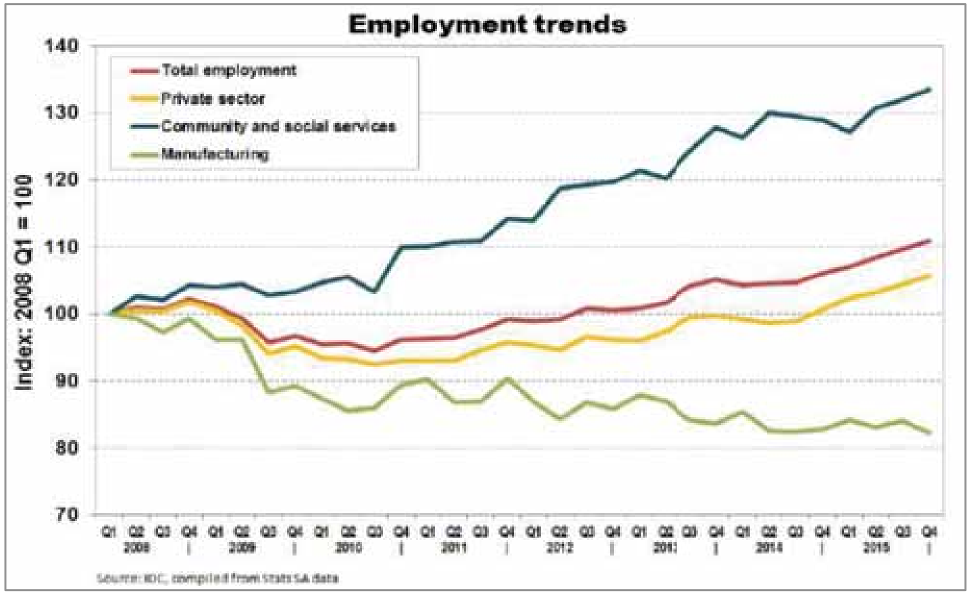
Several manufacturing sub-sectors are experiencing recessionary conditions (such as fabricated metal products, non-metallic mineral products, general purpose machinery, chemicals, furniture, footwear, textiles and clothing), while subdued rates of growth have been reported by many others.

Figure 11: Manufacturing sub-sectors' performance: 2014-2015



Considering these developments, the manufacturing sector shed 11,000 jobs during the course of 2015. Importantly, the declining employment trend appears to have been arrested. The sector presently accounts for 12.6% of formal employment in South Africa and, due to its strong linkages with numerous local suppliers of goods and services, supports a substantially larger number of job opportunities economy-wide.

Figure 12: Employment trends: 2008-2015

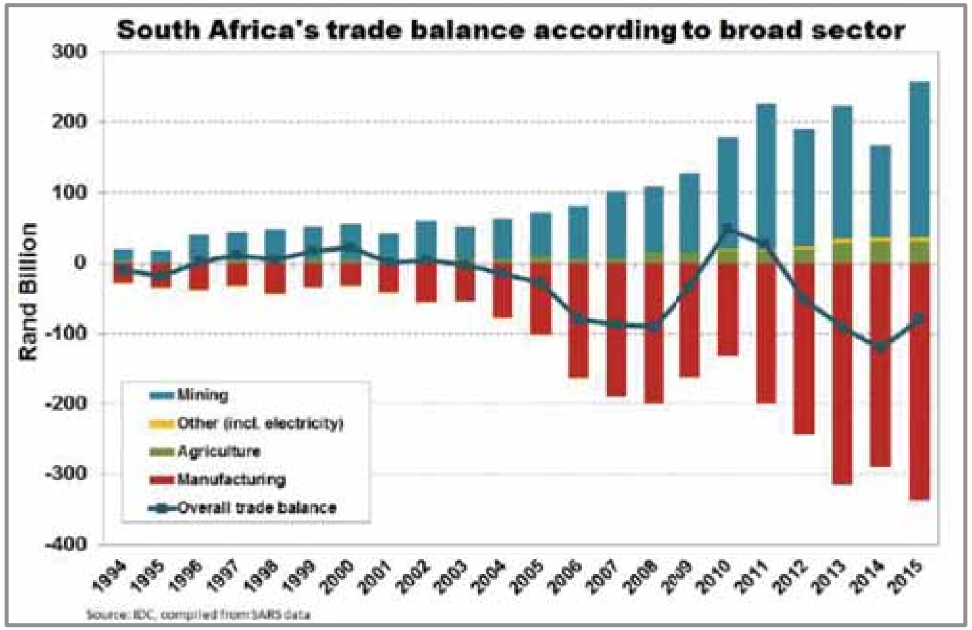


The difficult economic environment is being reflected in the manufacturing purchasing managers' index, which has been below the 50-point mark for six consecutive months and dropped to 43.5 points in January 2016.

Considering the short-term outlook for demand conditions both domestically and abroad, it is important for local manufacturers to expand their global reach beyond the traditional export markets. Diversification is imperative not only in terms of external markets but also in the composition of the manufactured export basket.

On the external trade front, South Africa recorded a trade deficit of R78.7 billion in 2015. This was an improvement on the R121 billion deficit recorded in the previous year.

Figure 13: Trade balance by broad sector: 1994-2015



Merchandise exports increased by a modest 5% in nominal value terms despite the significant depreciation of the rand. Weaker global demand, low commodity prices and adverse climatic conditions impacted on the country's export performance in 2015, although a weaker currency assisted in raising export revenues.

A lower overall trade deficit was mainly the result of a larger surplus in the mining category, as South Africa benefitted from the sharp drop in crude oil prices while import volumes declined by 8% in 2015. The import bill for crude oil decreased from R180 billion in 2014 to R102 billion in 2015. The agricultural category also made a positive contribution since its trade surplus remained virtually unchanged at R31 billion.

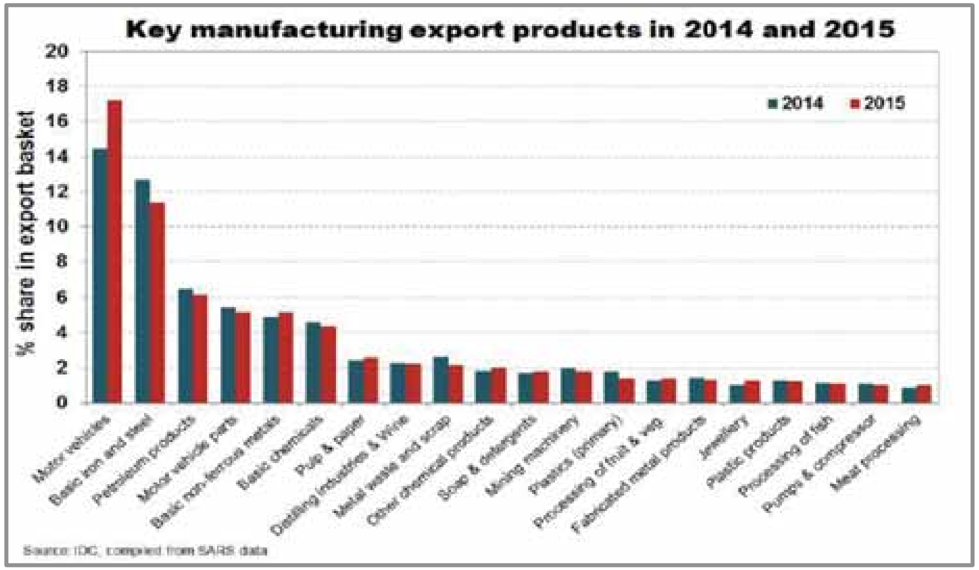
The manufacturing category, however, recorded an enormous trade deficit of about R340 billion, representing a R48 billion increase compared to 2014, as demand for imported products rose at a faster pace than exports of locally manufactured items.

Exports of motor vehicles and parts increased substantially to R140.4 billion, from R117.7 billion in 2014. Nevertheless, the automotive category still recorded a substantial trade deficit, with imports of motor vehicles and parts totalling R171 billion in 2015. In nominal value terms, exports of basic iron and steel, industrial chemicals, petroleum products (not crude) as well as fabricated metal products declined in 2015.

The top 10 manufactured export categories (out of a total of 120 categories) accounted for 58% of overall manufactured exports in 2015. Although this was an improvement on the 63% share recorded in 2014, it is still indicative of a high level of concentration. Manufactured exports were mainly destined for the rest of the African continent, the European Union and the United States.

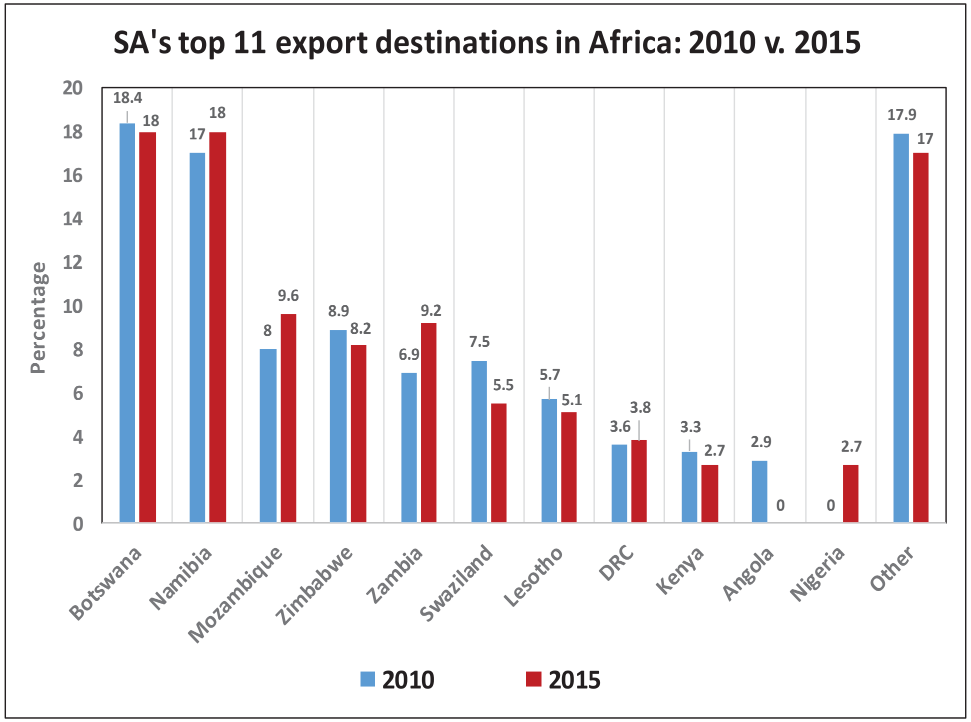
The manufactured export basket was dominated by motor vehicles with a 17.2% share of the total, as illustrated in the following chart. This highlights the positive impact of governmental support on the industry's development and export performance. Basic iron and steel (11.4%) and petroleum products (6.2%) followed as the second and third largest manufactured export categories in 2015. The lower share of the basic iron and steel category relative to 2014 is attributable to over-supplied global markets in the face of subdued demand.

Figure 14: Manufacturing exports by sub-sector: 2014-2015



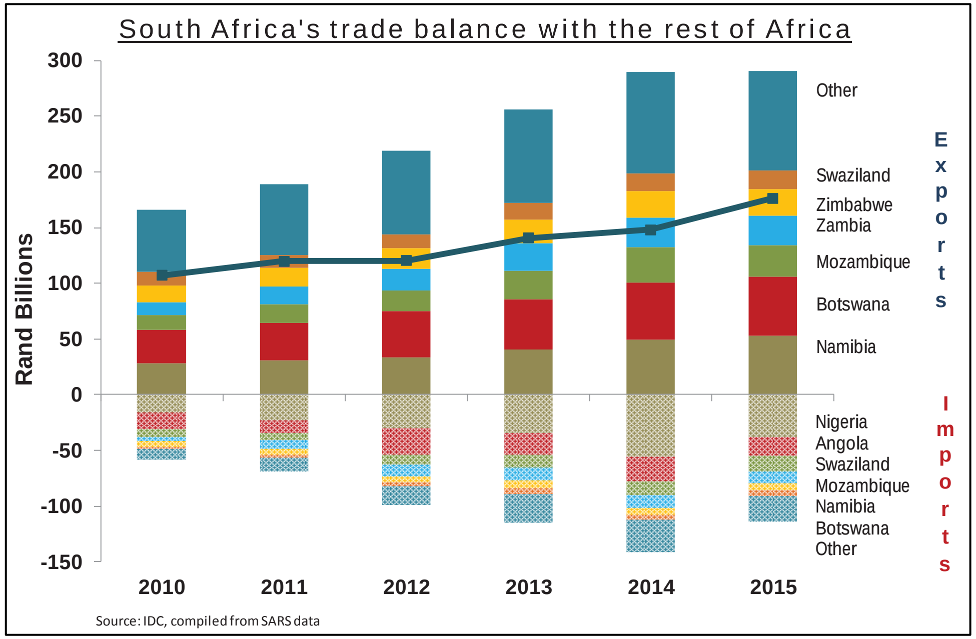
Almost 29% of South Africa's merchandise exports in 2015 were sold in other African markets. The six leading African export markets – Botswana, Namibia, Mozambique, Zimbabwe, Zambia and Swaziland - accounted for 69% (R200 billion) of merchandise exports to the rest of the continent.

Figure 15: Major African export destinations: 2010 vs. 2015



South Africa has been running a substantial trade surplus in its trade with other African countries. This amounted to R176 billion in 2015, up from R107 billion in 2010. South Africa's imports from other African economies totalled R113 billion in 2015, 80% of which having originated from the six African countries illustrated in Figure 16.

Figure 16: SA trade balance with Africa: 2010-2015



Manufactured products represented 87.4% (R254 billion) of South Africa's merchandise exports to other African countries in 2015. These were quite diversified, with the leading export categories including non-electrical machinery and equipment (mostly agricultural and mining machinery and equipment); motor vehicles, parts and accessories; processed food; basic iron and steel products; chemicals and chemical products; fabricated metal products; petroleum and petroleum products; and electrical machinery and equipment.

The proportion claimed by manufactured goods in the export basket to the African continent is by far the largest relative share compared to other leading destinations for South African exports, as indicated in the following table.

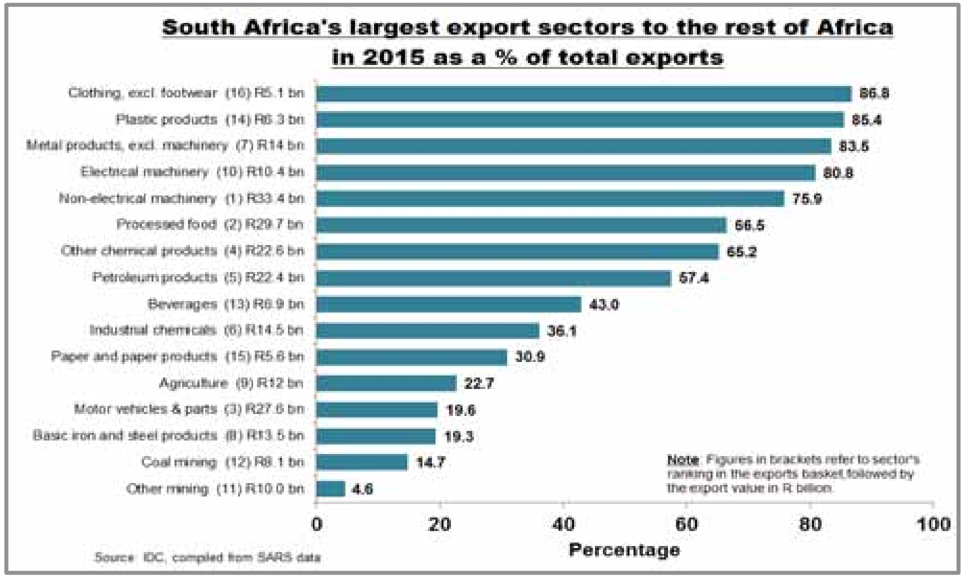
Table 1: SA export basket to selected regions/countries: 2015

South Africa's exports to selected countries/regions in 2015 (% share of exports)							
Broad sector	World (Total exports)	USA	European Union	Japan	China	Africa	Rest of World
Agriculture	5.2	2.5	8.9	1.6	3.5	4.1	5.6
Mining	33.3	29.2	27.1	59.9	62.2	6.2	52.2
Manufacturing	60.5	68.3	64.0	38.5	34.3	87.4	40.9
Other (incl. electricity)	1.0	0.0	0.0	0.0	0.0	2.3	1.2
Total exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: IDC

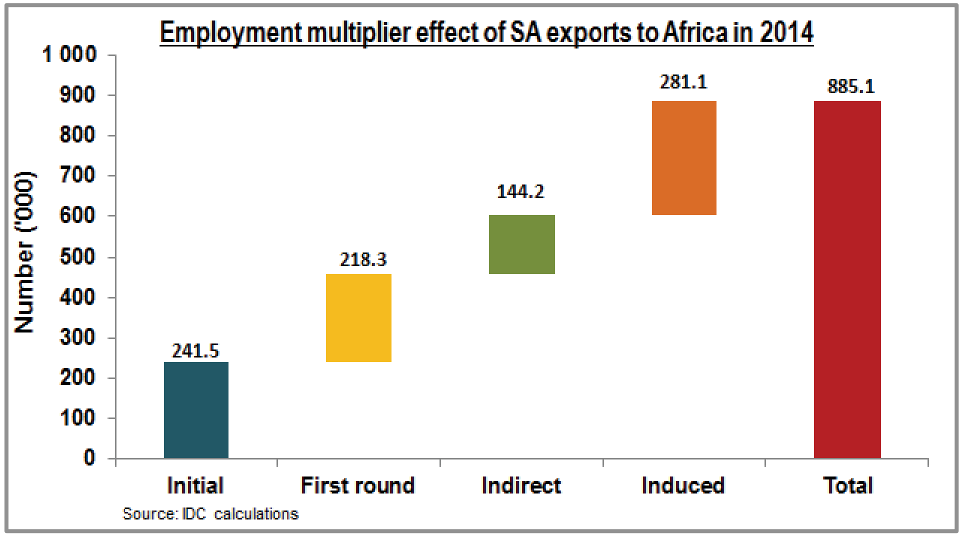
In addition, African markets accounted for 75.9%, (R33.4 bn) of South Africa's exports of non-electrical machinery and equipment in 2015. The continent is also an important market for exports of processed food (66.5% of all exports to the world), fabricated metal products (83.5%), electrical machinery and apparatus (80.8%) and petroleum products (57.4%). Although African markets accounted for 86.8% of SA's clothing exports in 2015, this sector only ranked in 16th place with R5.1 bn worth of exports.

Figure 17: SA exports to Africa as % of total exports – by sector in 2015



An estimated 241,500 direct jobs in South Africa were associated with exports to the African continent in 2014. Through inter-industry linkages (multiplier effects), the overall number of jobs associated with South African exports to other African markets has been estimated at around 885,000.

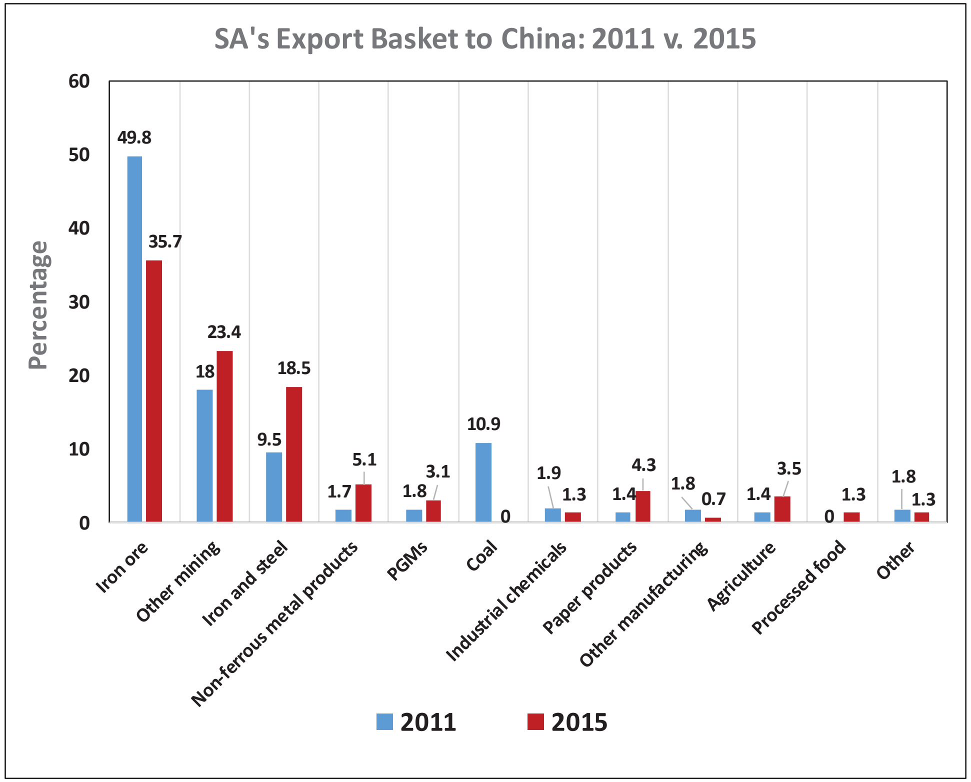
Figure 18: Employment multiplier effect of SA exports to Africa: 2014



Sub-Saharan Africa will remain one of the world's fastest growing regions in the foreseeable future. Accordingly, South Africa must promote its products in other African markets, thus enabling the expansion of local manufacturing production, raising fixed investment activity and creating employment opportunities.

At the individual country level, China is still the leading destination for South Africa's exports. The Chinese market accounted for 9.1% (R92.1 billion) of overall merchandise exports in 2015. However, the export basket to the world's second largest economy is overweight in commodities and base metals, with a combined contribution of almost 86% in 2015. Iron ore was the top export category with a 35.7% share of South Africa's export basket to China in 2015. This was followed by the "other" mining category (including chrome and manganese) with a 23.4% share, while iron and steel represented 18.5% of the export basket. Although 21% of South Africa's total non-gold mining exports were destined for China in 2015, this country claimed a mere 5.2% of overall manufactured exports.

Figure 19: Composition of SA's export basket to China: 2011 vs. 2015

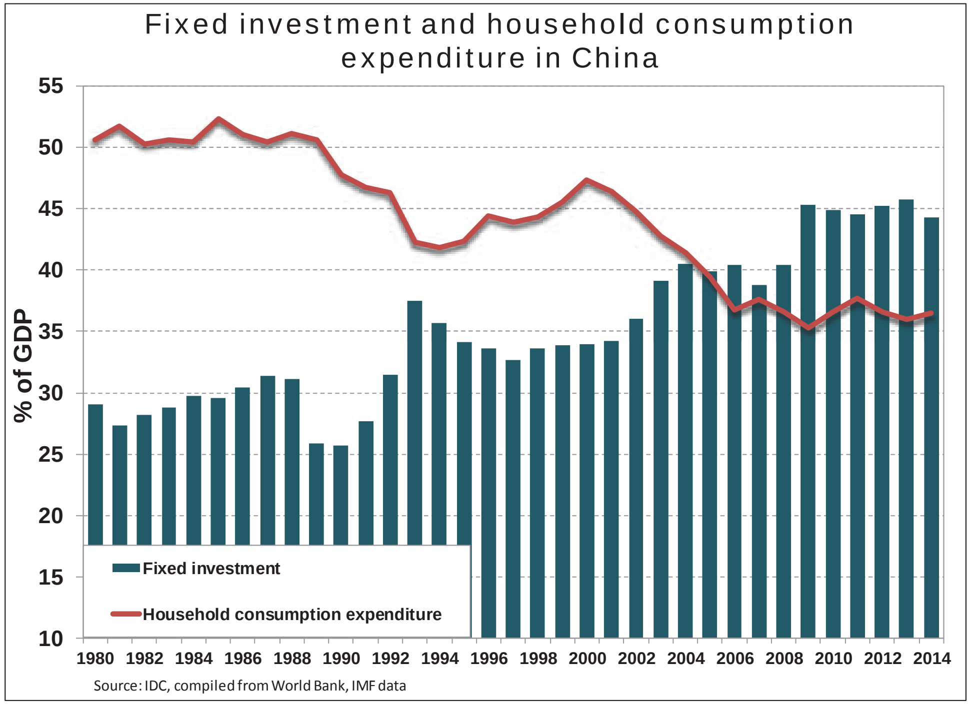


The effect of plummeting commodity prices and weaker Chinese import demand has been particularly detrimental for the domestic mining sector. The relative share of iron ore exports dropped from almost 50% in 2011 to 36% by 2015, with export values falling from R45 billion to R33 billion. The iron ore price fell by 67% in average annual terms over this period, from USD168 to USD55 per ton.

Fixed investment activity, largely infrastructure-related, has been a key driver of China's impressive growth over the past two decades. The relative contribution of fixed investment spending to overall GDP has thus risen over the years, peaking at around 45% more recently. The contribution made by household expenditure to China's GDP, on the other hand, declined from more than 50% in the 1980s to approximately 36% by 2014.

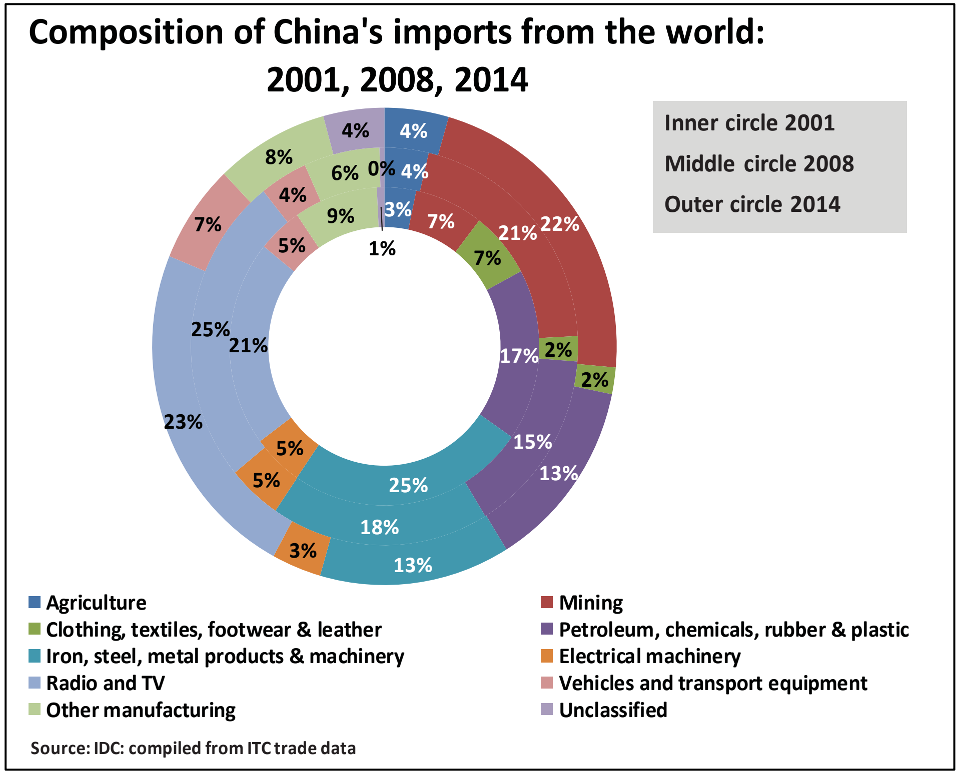
The reorientation of China's economic model towards domestic consumption is reflected in the stabilisation of the two individual trends over the past five years, as illustrated in the chart below.

Figure 20: Fixed investment and household consumption in China: 1980-2014



Despite the rising share of mining commodities within China's import basket from the world at large (refer to the chart below) since the turn of the millennium, a number of import categories recorded gradual gains. These include radio, TV and communications equipment; vehicles and transport equipment; and agricultural products. However, agricultural products and processed food represented very small shares of South Africa's export basket to China in 2015, at 3.5% and 1.3% respectively.

Figure 21: Composition of China's import basket: 2001 vs. 2008 vs. 2014



Looking ahead, China's changing growth model will radically alter its import requirements. This will provide opportunities for global producers to focus on the manufacturing of many consumer and intermediate products destined for this massive market. The quantum and composition of China's import demand for industrial commodities is also changing rapidly. Furthermore, the swift rise in production costs in China, traditionally referred to as the "workshop of the world", are opening up new opportunities for manufacturing capacity in other emerging or developing economies.

South Africa's business sector must gear itself to benefit from such developments and opportunities.

IPAP 2015 - 2016

ACHIEVEMENT HIGHLIGHTS

the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

ACHIEVEMENT HIGHLIGHTS

The highlights listed below represent a cross-section of achievements, measured against a set of key indicators – investment, productivity improvements, domestic and global competitiveness, exports and employment (retention and creation).

What these highlights affirm and underline is the following: industrial policy can succeed (and has been demonstrated to succeed in South Africa) when adequately resourced, grounded in rigorous research and programme design and implemented through close collaboration between the public and private sector. The experience and lessons learned in securing these achievements should be consolidated and used as a basis for cascading the appropriate policy levers across other sectors of the manufacturing economy.

SECTORAL HIGHLIGHTS

1. Automotive

From the inception of IPAP to date, the SA government has invested more than R25 bn in the automotive industry.

The South African automotive industry's export earnings for 2014 increased by 12.7%, to a record R115.7-bn, compared with the R102.7-bn reported in 2013.

The year 2015 was notable for a steady stream of new investments by automotive OEMs in their South African plants, often with explicit acknowledgement being given to the encouragement received under the Automotive Production and Development Programme (APDP).

Highlights of the year included the following:

- In February 2016, German motor company **Daimler** announced its decision to make South Africa the regional base for its new global truck and bus strategy. This is expected to bring significant business to **Mercedes Benz SA** and ultimately result in new investments in its East London plant. The creation of the new Southern African Region will set South Africa up as the service base for all Daimler brands in SA, Namibia, Botswana, Swaziland, Lesotho, Mozambique, Zimbabwe, Zambia and Malawi.
- **Volkswagen Group (VWSA)** indicated that it will invest more than R4.5 billion by 2017 for new models and infrastructure at its Uitenhage vehicles factory.

Volkswagen production line, Uitenhage

- **BMW Group South Africa has** announced an investment of R6 billion into its Rosslyn Plant in Pretoria, earmarked for production of the next generation of the BMW X3, which will be sold locally and exported internationally.
- **An Iveco-Larimar** joint venture has started production of trucks and buses on its R600 million production plant in Rosslyn. This plant will assemble CKD kits of Iveco trucks and buses and will employ 1,000 workers.
- In March 2015, **Toyota Motor SA** started CKD production of the Quantum minibus in its Durban facility. The project cost was R500 million, with 270 direct jobs created and a further 50 new components to be sourced locally.
- **Nissan South Africa** announced that its Rosslyn assembly plant is to become the African manufacturing base for the new Datsun Go. The re-launch of Datsun in South Africa has created about 225 new jobs.
- On April 6, 2016, **the Ford Motor Company of SA** committed to invest R2.5 bn **in** further expansion of its Silverton, Pretoria plant – *this, on the back of a R699 million incentive provided by the APDP* - which will create a further 1,200 new jobs. The investment will lead to local production of the new Everest 7-seater SUV and expansion of the Ranger pickup programme, as part of Ford's overall growth strategy for Africa and the Middle East - in the words of Ford Executive

Vice President Jim Farley, "positioning SA as a strategic export base for the entire continental region".

- **Goodyear South Africa** will invest R670-million to increase production of high-value-added (HVA) consumer tyres at its Uitenhage manufacturing plant, relocating the plant's production of medium radial truck tyres to other plants across the company's facilities in Europe, the Middle East and Africa.
- Japanese-listed company **Sumitomo Rubber Industries** announced the second and final phase of a R2 bn investment. Phase-two expansion is valued at an estimated R910 m and focuses on the manufacture of truck and bus tyres. The company received R300m through **the dti**'s Automotive Incentive Scheme (AIS). This latest tranche of investment will ensure that the Ladysmith factory retains its current 900 jobs and creates an additional 300 jobs.
- **Volvo** has invested R60 million in a regional parts and distribution centre in Benoni, Ekurhuleni. This facility will consolidate all their logistical operations in Sub-Saharan Africa.
- In December 2015, **Beijing Automobile International Corporation** announced an investment of R11 billion in a completely knocked down (CKD) vehicle manufacturing plant in South Africa. The investment will create about 2,500 direct jobs and 7,500 indirect jobs.

Since the implementation of local content regulations more than 700 bus bodies have been manufactured and buses assembled in South Africa as part of a drive to improve inner-city public transport. Beneficiaries to date includes:

- Busmark 2000: received an order to assemble 700 buses for the City of Cape Town;
- Mercedes-Benz SA: successful tender to provide 134 buses for phase 1B of Johannesburg's Rea Vaya BRT system;
- Volvo SA: successful tender to provide 40 new vehicles to the City of Cape Town for its extended MyCiti bus routes, at a cost of R180m;
- MAN: supplying 80 new commuter buses to Great North Transport, Limpopo's largest public transit operator.

2. Clothing, textiles, leather and footwear (CTLF)

the dti's support for the sector since inception of the programme amounts to R3.5 billion in incentives, with strong reciprocal conditions. 67,000 jobs have been saved and an estimated 6,000 new decent, sustainable jobs have been created. Exports in the leather and footwear sector have begun to increase.

Companies participating in **the dti**'s Production Incentive Programme (PIP) have been enabled to substantially upgrade their production processes through the introduction of state-of-the-art new technologies and have demonstrated strongly improved competitiveness in local, regional and international markets. A study conducted through the Industrial Development Corporation demonstrates that companies in the programme have achieved significantly higher levels of production, productivity and competitiveness.

The grants made available by **the dti** under The Competitiveness Improvement Programme (CIP) have supported the development of scalable national cluster organisations and collaborative (vertical, sub-national) retail clusters. These have supported growing localisation and domestic supplier development. Two national and 5 sub-national clusters have been created.

Transversal tenders managed and awarded by the National Treasury increased from a total value of R237,9 million in the 2014/5 FY to R264,4 million from the 1 April to 31 Dec 2015 period. These tenders complied with local content requirements and were of substantial value, as indicated in the table below.

Table 2: Local content requirements

	Blankets	Footwear	Fabric & Towels	Clothing	Total
	RT26	RT59	RT60	RT64	Rand
2013	27,068,998	83,843,963	61,201,125	22,646,581	194,760,666
2014	18,392,182	99,407,033	52,955,501	67,200,398	237,955,114
2015	24,531,464	129,636,049	26,935,400	83,226,073	264,328,985

Other notable positives for the year included:

- Strong growth in Leather and Leather Goods exports - up by 60% from 2011 to 2014, with substantial improvements in productivity over the period. 22 new factories were opened in this sector in the 2014/15 financial year.
- Since Oct 2015, a further four new factories have been established: Ariana Footwear, Ezakeni, Ladysmith, KZN; Prizm Footwear, Durban; Safety Boys, Chatsworth, Durban; Mystic Eyes, Chatsworth, Durban.
- Recently a well-established local brand called Soviet has taken a 51% stake by investing R18 million in the Jaraf/Kayo Shoes (a footwear manufacturer with capacity to produce moccasins and vulcanized rubber fashion shoes).
- The Foschini Group's local supply chain development and Quick Response (QR) initiative - a prime example of a South African company applying world-class manufacturing principles with the support of **the dti**. This includes important in-house training at its Maitland facility for 560 workers.
- The opening of a R150 million eco-friendly blanket manufacturing factory in Boksburg, creating 1 000 direct jobs.

Summing up:

It was not long ago that the CTFL sector was labelled a 'sunset sector' which should be left to implode in the face of the very cold winds of global competition, especially from low-cost production centres enjoying enormous economy-of-scale advantages.

Instead, the industry has survived and expanded, as a direct result of the close collaborative effort between government and the private sector, underpinned by a range of procurement and incentive measures offered by **the dti**. The rebound of the CTLF sector is an object lesson in what can and must be done to embed sustainable competitiveness improvements along the entire value chain.

3. Metal fabrication, capital and rail transport equipment

- In March 2014 Transnet awarded a R50 billion contract for the building of 1064 locomotives to four global original equipment manufacturers (OEMs). The award of this tender had stringent local content, skills development and training commitments.
  - All the locomotives except 70 are to be built at Transnet Engineering's plants in Koedoespoort, Pretoria and Durban. The tender is split between the four major OEMs. This means that SA has begun the process to develop first, second and third tier suppliers in the locomotive and rolling stock supply chain and to rebuild its strategic industrial rail capabilities.
  - For example, a recent investor IEC Holden - part of the local supply chain - assembled the first South African-made AC traction motors for the TFR23E project, demonstrating that SA has developed significant capabilities in the rail sector.
- Grindrod Rail showcased its new SA-manufactured offering, the AC diesel-electric shunting locomotive at the 2015 Africa Rail Conference and Exhibition. Grindrod is a major exporter of rail equipment to Africa.
- The Gibela Rail Transport Consortium (Gibela) commenced

Grindrod AC locomotive

building a R1 billion factory complex at Dunnottar, Ekurhuleni, during the third quarter of 2015. The factory was established to manufacture trains for the State-owned Passenger Rail Agency of South Africa (PRASA), in line with a R51 billion contract for the supply of 600 new trains over 10 years.

- The Dunnottar facility will also accommodate local component suppliers and is expected to provide employment for at least 1,500 people. 19,000 artisans will be trained as part of the Gibela programme.
- South African cables manufacturer Aberdare Cables launched its new production line at its Pietermaritzburg manufacturing plant. The new line, supported by **the dti**'s Designation Programme, will produce cables for PRASA and Transnet's combined R100 billion locomotive build programmes.

- Product development interventions at the Duvha Foundry resulted in the foundry being awarded a large rail bogie castings supply contract by Transnet Engineering, under the China South Rail (CSR) work-packages. This black-owned ferrous foundry started up in 2012 and mainly supplies the rail and valves industry.
- Product development interventions at the Guestro Foundry resulted in the foundry being awarded a major contract for the supply of castings components to Knorr-Bremse, a braking system supplier to all 4 OEMs in the TRF 1064 locomotive project.
- Helio Microfinish Foundry was assisted with tooling for patterns and design simulation interventions that enabled the casting of a hollow steel tube instead of a solid rod that required drilling. The new casting process resulted in significant reduction in both material and operational costs (down by a third), while production yield improved from 40% to 80%. This NFTN intervention averted the closure of the foundry, saving 130 jobs.
- In August 2015 cutting tools manufacturer Renlaw announced a yearly growth increase of 35%, owing to reinvestment of funds granted under the MCEP - emphasising the potential for expansion in what is known to be an import-dominated sector.
- As a result of an obligation from the Gautrain tender, Bombardier Transportation made a loan of R60 million at prime less 5% for the term of the loan to DCD Ring-rollers, a local company based in Ekurhuleni that manufactures railway tyres, flanges and seamless rings. The investment enabled DCD Ring-rollers to expand its existing heat treatment and machining facility by (i) moving the company's machine shop to a new site (ii) buying new machines and equipment and (iii) installing new normalising furnaces and heat treatment facilities in the existing building. This expansion has enabled the company to increase its output by 40% - of which 90% is for export markets.
- **the dti** launched a R100 million gold loan scheme to support large jewellery manufacturers.
- Other products designated during the financial year in the sector, pushing up aggregate demand, were: transformers and associated equipment; power pylons; line hardware; lattice towers and masts; street lighting poles and conveyance pipes.

Summing up:

Very significant progress has been registered this year in the rail sector, securing investment and scaling up industry capabilities using a range of policy measures. These include the Competitive Supplier Development Programme (CSDP) and the deployment of incentives, industrial financing and technology support through the DST.

In short, the difficult process of rebuilding SA's domestic rail production capacity is now well on the way towards putting SA in a strong position to become a regional rail production hub, with very significant benefits for the economy.

4. Agro-processing

AGRO-PROCESSING HIGHLIGHTS

Food processing: The food processing sub-sector has continued to show resilience through the hard times since the 2008 economic meltdown. It is one the largest domestic manufacturing sectors by employment, providing an estimated of 252,189 jobs in 2014 (as compared to 207,893 in 2013). This is, however, against a backdrop of job losses in some sub-sectors. In terms of value added, the sector contributes 21% of total MVA, whilst also contributing 19% of total manufacturing employment.

Highlights of the year 2015 included the following:

- *Chicory production*: The Minister of Trade and Industry, Dr Rob Davies, together with a group of Eastern Cape MECs, signed a Memorandum of Understanding with the Chief Executive Officer of Nestlé South Africa to establish self-sustainable and competitive businesses in the production of chicory in South Africa.

Nestlé has committed to help revive South Africa's chicory industry by committing to increase its local sourcing of the plant for use in its Nescafé Ricoffy (chicory-based) coffee brand, in a move that will create 870 new jobs by 2019. Nestlé has committed to buying chicory from local farmers at a competitive price and to providing them with technical support and lab-based testing services.

Through this MOU, Nestlé will work with national and provincial authorities to encourage more farmers to grow the plant, helping them to generate an income which will in turn play a part in helping to revitalise local rural economies.

- *Ice Cream*: A R600 million *Unilever* Ice Cream factory was opened in Midrand, supported by **the dti** to a value of R350 million. The factory will help to create more demand for local ingredients - and hence supplier inputs – and will open up significant new opportunities for smaller vendors to enter into the value chain.

- *Grain staples:* FABCOS was funded by **the dti** to establish and market the *Home Grown* brand. The brand (bread, mealie meal) has become well-established and has continued to be regularly stocked by leading retailers.

- *Fruit and veg:* **the dti** facilitated the sourcing of local supplies of fruit and vegetables for *Living Harvest* to process. It also assisted and continues to support Living Harvest to negotiate markets with the hospitality industry.

- *Cassava*: The Cassava Programme is a vehicle designed to improve the productivity, profitability and market access of small-scale and emerging farmers through support provided by the *Transfer of Technology Innovation Agency* (TIA). The aim is to create an enabling environment that can progressively close all the gaps in the value chain. The main government agencies involved are **the dti**, the Department of Agriculture Forestry & Fisheries (DAFF) and the Department of Rural Development & Land Reform (DRDLR).

- *Aquaculture:* **the dti** collaborated with the Limpopo Department of Agriculture and the University of Venda to provide training to 33 small-scale aquaculture producers. The initiative was launched in response to *Operation Phakisa's* call to significantly ramp up production in both marine and freshwater aquaculture. The small companies were assisted with production techniques, value chain development and marketing standards, with a particular view to upping their scale of production on a long-term-sustainable basis.

- *Small enterprise development:* Through a partnership between DAFF and EDD, MoUs have been signed with Tiger Brands, Nestlé and Massmart for enterprise development from the grass-roots upward.

- *Norms and standards:* In terms of compliance and regulatory frameworks, DAFF signed a MoA with SABS to assist food processors to comply with production norms and standards for market requirements. The project was funded to a value of R 3 million.

Other agro-processing sub-sectors:

- *Wood:* G. Bison - the wood subsidiary of listed KAP International - is set to invest R600 million in increasing capacity at its Mpumalanga operation and creating a new state-of-the-art continuous production press.

- *Furniture design:* In partnership with SABS Design Institute, the IDC and Furntech, **the dti** held its 2nd annual National Furniture Design Competition on 18 February 2016. The competition forms part of the IPAP Furniture Design Programme - which includes the development of a furniture design qualification – and is seen as an immediate measure to promote and encourage interest in the furniture industry at large. The Minister was on hand to present the award to the winning designer of 2016 and to encourage all present to take the competition to higher levels in the coming years.

5. Business process services (BPS)

South Africa’s Business Process Services (BPS) sector continues to maintain its status as a leading global outsourcing destination, whilst steadily moving up the value chain in terms of service offerings. BPS already accounts for 200,000 jobs nationally and is one of the country’s fastest growing sectors, with double digit growth over the past five years.

By the end of 2015 a further 18,000 jobs had been created as a direct result of the BPS incentive, representing a growth rate of 26% per annum.

In addition, under the *Monyetla Work-Readiness Programme* - supported by the National Skills Fund and Jobs Fund - more than 13,000 unemployed youth have been put through sector-specific training by various operators countrywide.

Highlights for the sector include:

- Investment promotion initiatives have resulted in new brands entering South Africa such as Foxtell, Coles, Vodafone, Easyjet, N Power, Quatas and Royal Mail Group. Major new investments by American multinational EXL, CCI in KwaZulu-Natal, and from Webhelp, which is providing services to UK company Vodaphone.
- A full-service call centre established in Umhlanga, KwaZulu-Natal will create more than 1,000 jobs over 18 months.
- The EXL Cape Town delivery centre, which currently employs 60 people, was officially commissioned by Trade and Industry Minister Rob Davies in the past year. The centre is expected to create up to 3,000 jobs over the next three years.
- SA was again nominated as “Offshoring Destination of the Year” at the National Outsourcing Association (NOA) awards in the UK.

6. Film

- Between April and December 2015, 87 film and TV productions were supported by **the dti**, with an estimated total investment of R887 million, supporting 81 000 jobs along the value chain. This included significant support for emerging South African filmmakers

- With **the dti**’s support, 8 productions were showcased at the 2015 Cannes Film Festival's Marche du Film (film market), which was held from 12 to 21 May 2015, including South African/Angolan action cop drama, *Dias Santana,* shot in Cape Town and Luanda.
- In conjunction with the National Film and Video Foundation, the Gauteng Film Commission and Africa Magic, **the dti** supported local feature films *Shushh* and *Ayanda* (which was screened at the 59th British Film Institute Festival in October 2015
- Other film projects funded by **the dti** were *Cuckold* (shot in Melville and supported by the South African Emerging Black Filmmakers Incentive Scheme) and *The Crash*, a 3D animation film project from Julia Smuts Louw (Sparks Flew Development Studio). This was accepted into the initial phase of the Triggerfish Story Lab, a script incubation programme launched in 2015 with the support of the Walt Disney Company and **the dti.**

Summing up:

Since **the dti’s** introduction of its first film incentive programme in 2004, the film industry has spent R15.2 billion in South Africa.

Government support for these services sectors demonstrates the recognition that services sectors can and must play a role in growing the economy, linked as these sectors are to up and downstream manufacturing. Government support for both sectors has been a major contributory factor assisting these sub-sectors to become firmly entrenched on the global map for film production and business process services at the same time as providing strong support for local production, employment creation and high-grade training.

CASE STUDY: BIG PICTURE – *OF KINGS AND PROPHETS*

Renowned British Actor Ray Winstone in "Of Kings & Prophets"

Sue Blaine reports (Business Day, 29.02.16) – acknowledged with thanks:

"These people are fire-treated so they can go up in flames, says costume supervisor Stephen O'Rawe".

There's a battle tonight and O'Rawe is in the thick of it. He's marshalling uniforms for three different tribes so that everything is ready when the 400-odd extras arrive to be dressed. The clothes of the various "soldiers" will catch alight in the midst of the fray — without the actors being crisped.

It's dusty and hot in the bleached hills outside Durbanville in the Western Cape where **the American Broadcasting Corporation Studios' (ABC's) television series *Of Kings and Prophets*** is being filmed. It's the largest ABC production yet to be filmed in SA.

Game of Thrones marked a new era in television drama: the TV spectacular. The Home Box Office (HBO) series has won 26 Primetime Emmy Awards and attracted record numbers of viewers and a broad international fan base.

Of Kings and Prophets, which traces the rise of a shepherd, David, to become the Israelites' most famous king, is ABC's answer to the rise of these superseries.

Ray Winstone stars as Saul, the battle-weary, paranoid and violent king of Israel,

The tale is told through the eyes of Samuel, a powerful and enigmatic, yet resentful, prophet who many years ago anointed Saul as king. The young, resourceful shepherd David, who has big aspirations, rounds out the trio of characters who are on a collision course with destiny, which will test their beliefs and leave Israel forever changed.

The series is being filmed at two Western Cape locations — interior scenes on sets built in an old brandy warehouse in Stellenbosch, and the city of Gibeah — the Israelites' pre-Jerusalem capital — on the Durbanville hillside.

"It's one of the biggest productions ever for SA," says production designer Johnny Breedt, a South African who worked on the film adaptation of Nelson Mandela's Long Walk to Freedom. "It's by far one of the biggest sets built in SA, and it's all built by South Africans," he says of Gibeah. "I have never seen such an enormous crew," says Chris Brancato, a Hollywood writer and producer of several films and television programmes, who is executive producer of the series. He has been floored by the "entire mix of races; camera, sound, transport".

As well as the set building — South Africans were responsible for a lot of what was created in Stellenbosch too — the costume design and most other aspects of production have been done by South Africans.

That's quite something, considering this is the first large ABC production filmed in SA — direct production spend in SA is R490m, *of which R391m is expenditure that qualifies for a 20% rebate from the South African government. This is part of the Department of Trade and Industry's plan to encourage the local film industry.*

The filming experience has wowed Hollywood professionals. "You have here a country that's gaining a reputation for production expertise," says Brancato. "The crew was a plus — their work ethic and excitement for the show, their skills levels". This is not "a common response" in the industry, he says.

ABC's French says, "We couldn't have done it without the South Africans who have come onto our show and become part of our family."

[NOTE: For various reasons, ABC pulled the plug on the series after only 3 episodes. But this is very unlikely to have any retroactive effect on the growing reputation of the local industry, spreading by word of mouth in Hollywood]

7. Green industries

South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) has proved to be the fastest growing renewable energy programme in the world and is currently the leading infrastructure development programme in South Africa.

The actual local content spend as at 30 June 2015 was R21.7 billion, and the planned local content for the first 92 projects amounts to R65 billion. 37 projects with a generating capacity of 1,827 MW were already connected to the grid by end of June 2015. In the green economy, since the 2012/13 financial year, **the dti** has facilitated investments to the value of R1.7 billion in the manufacturing of equipment and components for the renewable energy industry

The DoE announced 13 projects, amounting to R23 billion for the fourth bidding window of the REIPPPP. These would contribute 1,121 MW of installed capacity to the national grid and are expected to create over 7,000 jobs during construction, followed on by 1,000 permanent operational jobs

Over the first three bid windows, the renewable energy sector committed investment of R120 billion, of which R40 billion was committed to local content.

The Global Climate Scope report 2015 ranks South Africa 4th out of 55 countries surveyed for its attractiveness as an investment location for clean technology.

The success of SA renewables projects is illustrated by the fact that the average lead time per project is now down to 1.6 years, while the portfolio price for electricity came down from R2.36/kWh in bid window 1 of the REIPPPP to R0.77/kWh in bid window 4.

Investments in renewable energy generation include:

- The Overseas Private Investment Corporation (OPIC - the US government development finance institution – provided funding for a $400-million solar farm.
- New wind farms: Noupoort in the Northern Cape and Kouga (R2 bn), located at Oyster Bay in the Eastern Cape.
- Platinum producer Anglo American Platinum (Amplats), together with Vuselela Energy and H1 Holdings, unveiled its R150 million ($10.677m) co-generation power plant at its Waterval Smelting Complex in Rustenburg;
- **the dti** provided a R30m infrastructure grant to support the development of a 5MW clean power plant by The Eternity Power Thermal Harvesting Project.
- The 335 MW Dedisa Peaking Power project in the Coega industrial development zone. This R3.5-billion project is being developed by a consortium comprising ENGIE (formerly GDF Suez), Legend Power Solutions and Mitsui.
- Technology group Abengoa announced a $660-million investment in the 100 MW Xina Solar One project – a parabolic-trough concentrated solar power (CSP) project, with five hours of thermal energy storage capacity, being built in South Africa's Northern Cape.
- On 14 March 2016, Minister Rob Davies officially launched the R5 bn Bokpoort concentrated solar plant (CSP) in Groblershoop, Northern Cape, a major investment by ACWA Power, a Saudi Arabian company. Over R2.4 bn was spent on local content, with 1,200 jobs created during construction and 70 permanent jobs continuing into the operational phase.

Investments in renewable energy generation have created a strong associated dynamic for investment in component manufacturing and assembly, by both local and global companies. **the dti** won the Best Investment Project Award at the Annual Investment Meeting in Dubai for facilitating the Gestamp Renewables R300 m investment in a wind tower manufacturing facility in Atlantis, Western Cape, which will produce 100 wind towers per annum and create about 200 permanent jobs.

The 5.8 MW Adams and 5.8 MW Bellatrix solar projects, also in the Western Cape, have become the first projects under the programme to be locally developed, designed, funded, constructed and operated. The projects were sponsored by the Cape Town-based Aurora Power group.

in December 2014 SMA Solar Technology SA, the market leader in solar converters, launched its multimillion-rand manufacturing facility in Cape Town.

On the supply side the following important milestones have been achieved;

- The National Cleaner Production Centre, South Africa (NCPC-SA) - **the dti**'s programme for Resource Efficiency and Cleaner Production - is aimed at promoting the greening of existing industry. In the past five years, the NCPC-SA has conducted assessments in 530 plants, identifying annualised potential savings of R615 million which could be realised by these companies whilst also contributing significantly to SA's carbon-mitigation requirements.
- During the same period (2011-2015), one of the projects of the NCPC-SA, the Industrial Energy Efficiency (IEE) Project, implemented a partnership with the United Nations Industrial Development Organisation (UNIDO) to assist 153 industrial plants to implement energy efficiency measures.

  This has resulted in 1,800 GWh of energy saved (enough to electrify 250,000 mid-income homes for a year); R1.54 billion saved in energy costs; and a reduction in carbon emissions of 1.7 million tonnes of CO_2 eq. In addition, an estimated 5,700 jobs have been created and preserved from energy cost savings.
- Through other skills development programmes, the NCPC-SA has trained over 2,400 professionals in resource and energy efficiency since 2010. To date, 114 of these have gone on to complete expert level training. Whereas five years ago international experts were being used to train local professionals, 43 local trainers have thus far been developed, allowing replication of these skills in industry and independent training institutions.
- A Thermal Test Chamber (TTC) for refrigerated vehicles was established at the SABS in order to improve energy efficiency and reduce greenhouse gas emissions in the refrigerated transport sector. Project scope covers integrity testing capability for 100 existing vehicle types and 50 new vehicle types per annum

  Summing up:

  Although much more needs to be done to further develop a dynamic new technology-intensive sector, 'green industries' have clearly begun to take root in South Africa. Much has also been achieved with respect to cleaner production, again with significant room to move towards much less energy- and carbon-intensive production processes. On the back of what has already been achieved, much higher levels of local content are now required to push local green technology investment and production to higher levels.

8. Beneficiation

Fuel cell technology

- Working in conjunction with key industry stakeholders, government has made significant progress in accelerating the development of the fuel cell industry. Particularly worth noting are the following:
  - Support for the launch in March 2015 of a 100kW static fuel cell demonstration at the Chamber of Mines. This is currently operating at excellent utilisation rates.
  - Further plans for developing a 1.8MW hydrogen fuel cell project are at an advanced stage involving a collaborative project between **the dti**, IDC and Impala Platinum. This is expected to be the biggest such installation in the southern hemisphere.
  - An Anglo-American fuel cell project is powering the Naledi Trust Community in Kroonstad, supplying 34 households through a 60kVA peak power fuel cell system delivered via a mini grid.
  - A demonstration fuel cell forklift with on-board metal hydride storage was developed by the DST's HySA initiative for Impala Platinum Refineries. The forklift has been operating since October 2015 at very good utilisation rates (on average 2 shifts before refuelling) with zero emissions and a reduced noise level compared with standard diesel units. The systems were integrated and sub-assembled in SA by local engineering companies.
  - Isondo Precious Metals (IPM) has acquired the rights to manufacture, use, market and sell licensed fuel cell components worldwide, using a portfolio of membrane-electrode assembly and membrane design, formulation and manufacturing technology. The project will identify particular components that can be manufactured and assembled locally for fuel cell units. **the dti** has provided R15 million towards the feasibility phase of the project.
  - Plans are well under way for the development of an industrial park for fuel cell and battery production, linked to the current OR Tambo Gauteng Industrial Development Zone. Land and facilities have been secured from Impala for manufacturing around the PGM refineries in Springs. The location provides infrastructure, transport, logistics and other advantages.

Summing up:

All these ground-breaking initiatives place SA at the forefront of the technology development and pilot implementation of static and mobile fuel cell generation, placing the country in an optimal 'first mover' position to ensure that clean energy production with associated industrial benefits is secured.

Naledi Trust community fuel cell

9. Upstream oil and gas

- **the dti** supported the opening of the R660 million Burgan Terminals fuel storage project in Cape Town. This entails private sector investment of R660 million and will create 350 new jobs during the construction phase. The investment was supported by a total tax allowance of R234 million from government.
- Further significant investments include: Hunting PLC, a UK company established a new R300 million facility in Brackenfell in the Western Cape to supply the African oil and gas market;

- R650 million has been invested in Coega and Saldanha Bay for refining of used oil and/or recycling facilities. The investment is set to create 100-150 jobs.
- Construction work has commenced on Transnet National Ports Authority's new Off-Shore Supply Base (OSSB) at the Port of Saldanha to build a specialist hub for the oil and gas sector. It will consist of an OSSB and rig repair facility at berth 205, with a length of 380 metres and a depth of 21 metres, allowing it to accommodate two rigs at a time.
- Chevron South Africa invested a further R450 million in the construction of a multipoint ground flare in its 110,000 bl/d crude oil refinery in Milnerton, Cape Town. Allseas was awarded a contract by PetroSA – as part of Project Ikhwezi – which carried with it a NIP obligation. As part of fulfilling this obligations, it invested R7 million in a start-up company, One-Eighty Degrees, to establish a Materials Testing Laboratory in Cape Town.

These and other investments – together with the significant planning work already undertaken – place SA in a strong position to enable the incremental creation of a gas market in SA, ultimately leading to the implementation of a gas-based industrialisation strategy which is seen as becoming a central pillar of SA's efforts to reindustrialise.

10. Aerospace and defence

- South African defence, civil security and telecommunications company Saab Grintek has secured orders to the value of almost R1 bn for the installation of its integrated, defensive suite on the Dhruv advanced light helicopter of the Indian Army and Air Force.
- Denel Group has secured an order book of R35 billion, the state-owned entity's largest, which will be executed over the next five to 10 years.
- A ten-year multibillion-rand Armscor contract, which would see State-owned Denel produce over 200 armoured vehicles for the South African National Defence Force (SANDF) is expected to "significantly and permanently" change the South African defence industry. The production of the Badger is expected to create about 2,000 jobs during its production period.

11. Ship/boatbuilding and associated services industry

- TNPA had identified projects valued at R16.8-billion to facilitate the growth of the local ship repair, ship building and oil and gas sectors. These include new capacity creation at the ports of Saldanha Bay, Richards Bay and East London and a R30 million repair to its badly corroded outer caisson at Durban's ageing dry dock.
- Since the designation of working vessels for local procurement (60% local content) and the issuance of the instruction note by National Treasury, achievements have included the following:
    - Southern African Shipyards is currently in the process of building 9 tugboats as part of the tender of R1.4 billion awarded by TNPA in 2014. The contract to date has created approximately 200 additional jobs. More than 60 apprentice artisans are in training as well as three marine engineers. More than R700-million has been earmarked for the Supplier Development Plan entered into between Southern African Shipyards and Transnet's local suppliers, employees and graduates.
    - Southey Holdings and Nautic Africa have invested R289.9 million and R63.4 million respectively; both investments having been approved under the 12i tax incentive. It is expected that some 355 direct jobs will be created.
    - Vee Craft was awarded a tender worth nearly R23 million to build workboat ferries for the Navy.
    - Smit Amandla Marine partnered with Damen Shipyards Cape Town to build two new vessels valued at R150 million which will carry out supply and support work for the De Beers Group's offshore diamond mining activities in Port Nolloth. The vessels are part of Smit Amandla Marine's National Industrial Participation Programme (NIPP) obligations. Smit Amandla Marine was awarded a contract by PetroSA as part of Project Ikhwezi.

Smit Amandla support vessel

    - In anticipation of a NIP obligation arising out of this contract, it then signed a strategic partnership agreement with **the dti** and started identifying projects towards meeting its obligation. Smit Amandla won a contract from De Beers to provide it with services requiring two Shoal Buster Vessels for its offshore diamond operations.
    - Smit Amandla had previously imported all its vessels, but in line with its NIP commitments it decided to contract a local shipbuilding company, Damen Shipyards, to build the vessels. This amounted to an investment of R150m in the local economy.

Efforts to rebuild SA's capabilities in this sector are recent, but demonstrate what can be achieved in a short time-span with the deployment of appropriate levers. These achievements and platforms place the sector in a strong position for future growth, including with respect to export potential.

12. Chemicals, pharmaceuticals, plastic, and cosmetics

- A multi-million rand Unilever Khanyisa household care factory was launched in Boksburg. **the dti** supported the investment in the Khanyisa plant under the 12i Tax Allowance Incentive scheme, with a qualifying investment value of R1.2 billion, an investment allowance of R350 million and a training allowance of R7 million. In total, Unilever had invested about R40 billion in manufacturing plants in South Africa and has received nearly R1. 98 billion in **the dti's** incentives.
- Cipla will invest R800 million into a new facility for the cost-effective manufacture of biosimilars for supply into both public and private sector markets. The facility will implement state-of-the-art technology and will recruit approximately 300 high-skilled personnel in the fields of engineering, biotechnology, biochemistry and molecular biology.
- J&J Consumer have upgraded their manufacturing facility in Cape Town and have confirmed further upgrades over the next 3 years, with the intent to repatriate manufacturing back to SA. A substantial portion of what is manufactured in this facility is destined for export markets in Africa, Australia etc.
- Localisation by government – through Designation of specified product categories in health procurement - has led, amongst other things, to the award of a R2.7 billion Oral Solid Dosage (OSD) tender, with SA companies winning 61.1% of the total tender value (R1.6 billion). The 2015-2018 Anti-Tuberculosis Tender awarded to local companies was worth more than R940 million.

Oral solids dosage

- European API manufacturer Sterling has confirmed an investment of €25 million (Euros) in the manufacture of low-volume, high-margin, niche APIs for the local and international markets. The project will be located in KZN at the Dube Trade Port.

TRANSVERSAL HIGHLIGHTS

1. Black Industrialists Development Programme

In 2012, the financial services sector committed itself to spending R80 bn on various forms of black economic empowerment (BEE) over a period of five years (2012-2017). This has recently been amplified by a R42 bn commitment from the long-term insurance sector – giving a total of R122 bn - as well as initial funding specifically earmarked for the Black Industrialists Programme.

The Programme has received initial pledges in excess of R30 billion from development finance institutions, with R23 billion already set aside by the Industrial Development Corporation over the coming five years.

The Black Industrialists Programme provides key measures aimed at supporting majority black-owned manufacturing companies. These include access to finance, access to markets, skills development and standards/quality/productivity improvement. The scheme targets entities that have extensive experience and a strong operations track record in their respective or envisaged industrial sectors and value chains - seeking to develop them into serious players in domestic and/or global markets within 10 years.

In 2015, emerging black industrial enterprises of note included the following:

- Zig Enterprise, a black-owned incubator, won the tender for Ford's new vehicle personalisation centre located adjacent to the plant.
- Lawrence Global Manufacturing (LGM), the first 100% black-owned manufacturing and engineering company in Nelson Mandela Bay was launched, focused on providing design and precision engineering components to companies like VW and Mercedes-Benz.

  It received financial support worth about R5 million from the Small Enterprise Finance Agency.
- Jonas Gutu, a Kwa-Zulu Natal-born engineer, will become the first manufacturer of hypodermic disposable syringes and needles in Southern Africa when his plant opens later this year. Gutu secured R75 million in funding to build a plant in Coega, Eastern Cape, where he plans to employ 300 people once the plant is operational.

2. Special economic zones and industrial development

SEZs

The designation of certain areas as Special Economic Zones (SEZs) is one of **the dti**'s key strategies to stimulate economic growth and economic and industrial decentralization'. They include an ICT hub planned for Nasrec in Johannesburg, a renewable energy and clean technology park in Atlantis near Cape Town, a platinum group metals (PGMs) beneficiation hub in Rustenburg and a farming/mining centre in Musina for which R37 billion in pipeline investment has already been identified.

Two industrial development zones, namely the Dube Tradeport IDZ and Maluti-a-Phofung IDZ have been designated. Maluti-a-Phofung is aimed at bolstering logistics efficiency along the key trade routes such as the Gauteng-Durban port corridor and Bloemfontein–Cape Town corridor. The main industries it will serve include agriculture, agro-processing, automotive and logistics.

The 'location' mix of the IDZs and SEZs demonstrates an effort to leverage private sector investment into SEZs, which provide different and complementary competitive advantages according to their location. In most instances the SEZs are located in or near coastal ports, land ports or - in the case of Maluti-a-Phofung - at the intersection of key logistics corridors. In other cases, their location provides proximity to mining and agricultural supply chains and/or support for industrial decentralisation.

IDZs

- Government has increased the number of operating IDZs to five with Saldanha Bay and Dube Trade Port added over the last few years, in addition to IDZs in Coega, East London and Richards Bay.
- To date 73,000 jobs has been created in the IDZs, of which 6,896 (9.6%) were direct and 65,637 (90.4%) indirect. Future operational investments are expected to result in the creation of over 2,194 direct jobs in the zones. These are illustrated in the diagram below, indicating the contributions of the 4 designated IDZs.
- Coega IDZ has attracted 28 operational investors who have invested more than R151 billion since its inception.
- Ngqura Port, operated by transport and logistics SOC Transnet, officially unveiled two new berths and port operating equipment costing R2 billion, an investment that has scaled up the port's cargo handling capacity to 1.5 million TEUs from 800,000 TEUs.
- A R267 million Jewellery Manufacturing Precinct (JMP) was announced in 2015 and will be built within the OR Tambo International Airport industrial development zone (IDZ). This greenfield project aims to attract investors through a range of incentives, including dedicated customs support services, duty-free importation of production-related raw materials and inputs, reduced tax and exemptions for certain beneficiation activities. The sod-turning ceremony for the construction took place in September 2015.

3. Port charges

After considering the National Ports Authority's Tariff Application, together with submissions made by all stakeholders during the consultation period, the Ports Regulator declined the National Ports Authority's proposed average 5.9% tariff increase. After considering all the relevant information at its disposal, the Ports Regulator decided that an average tariff increase of 0%, for the tariff year 2016/17 is applicable - as follows:

- All cargo dues for 2016/17 will increase by 0%, except marine services and related tariffs (Sections 1-8 of the Tariff Book, excluding Section 7 that deals with cargo dues) which are to increase by 3.0%.
- In support of the SA manufacturing sector as a whole, full container export dues will *decrease* by 10%.
- Automotive volume discounts will be equalised for all users at the maximum 60% level discount; thus substantially levelling the playing field and significantly reducing the cost of doing business in the sector.

In a move to mitigate the negative impacts of the current regional drought (in particular staple food price inflation related to the shortfall in maize production) maize will receive a 50% discount on cargo dues, capped at 5 million tonnes, for the 2016/17 tariff year.

4. Infrastructure and industrial financing

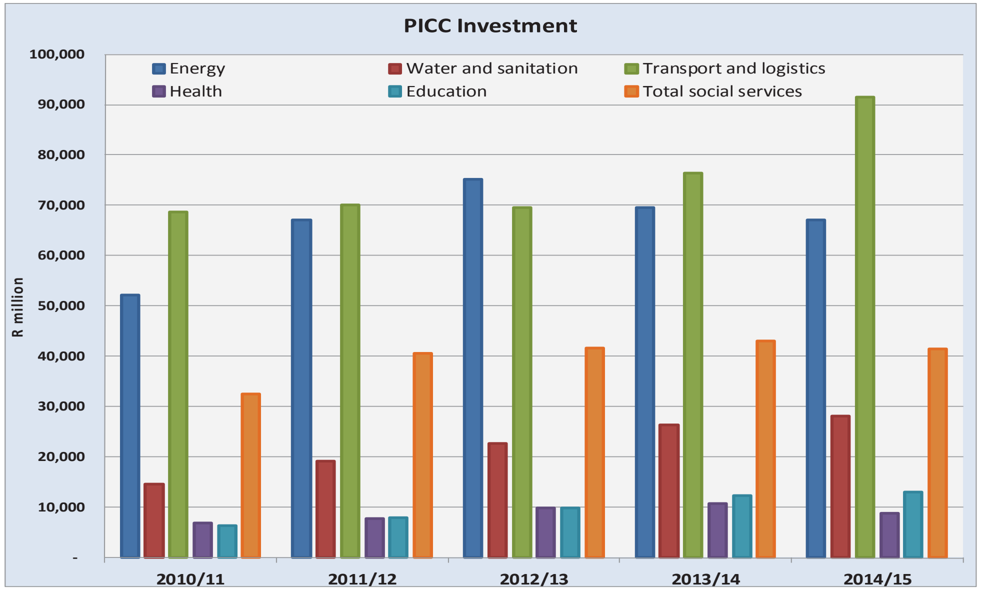
Infrastructure

Government invested R290 bn in the Public Infrastructure programme. Projects supported included installation of power transmission lines; rail fleet renewal and transport logistics; ten renewable energy plants, installation of solar water heaters; water pipelines; new fibre-optic cables etc.

These investments supported more than 200,000 workers now employed on the public infrastructure programme, as engineers, metal workers, plumbers, electricians, bricklayers, road-builders and construction workers.

The main sectoral investments – managed through the Presidential Infrastructure Coordinating Commission (PICC) - are shown in Figure 1 below. (The columns should be read as indicating R billions, ranging from about R6 billion to R91 billion for different sectors).

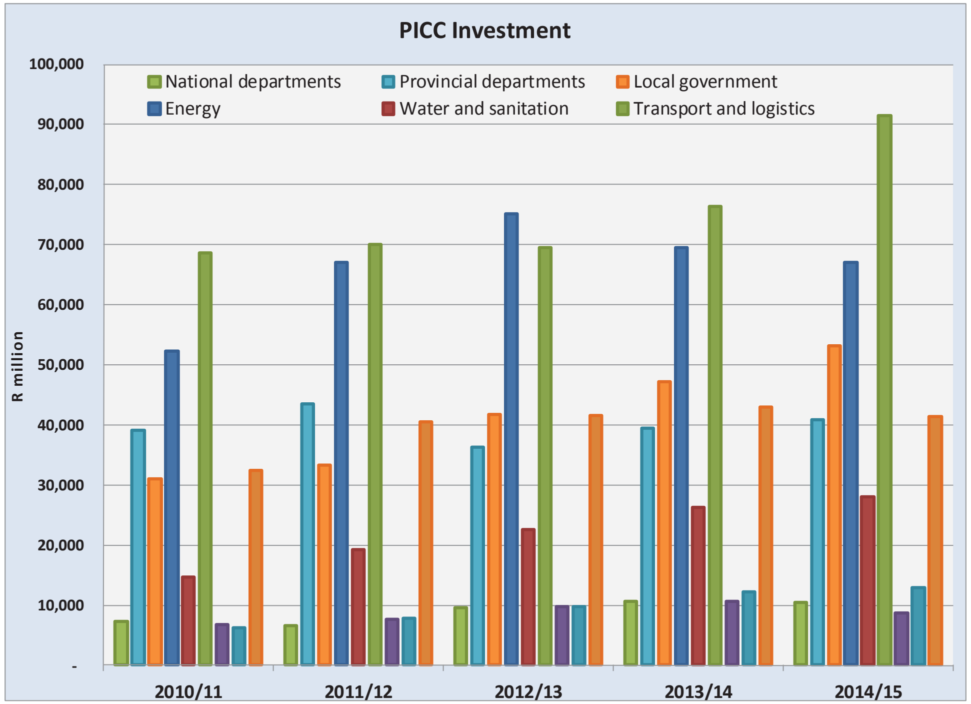
Figure 1: PICC Sectoral Investments: 2010-2015



Source: PICC

The sub-national breakdown of PICC infrastructure investments for the past five financial years was as follows:

Figure 2: PICC Sub-National Infrastructure Investments: 2010-2015



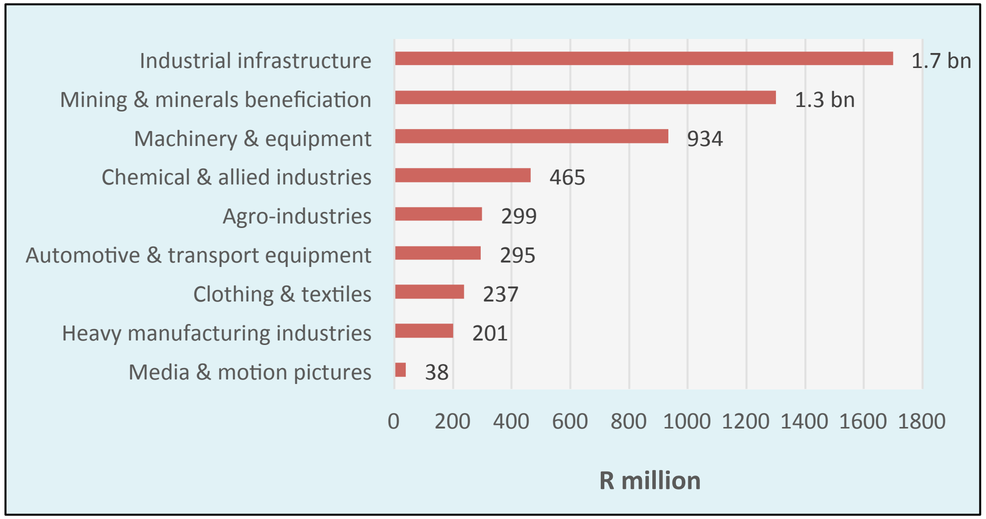
Source: PICC

Industrial financing

Industrial financing interventions have significantly contributed to rescue, revival and growth in a number of sectors.

The major source of dedicated industrial financing is the Industrial Development Corporation (IDC). Between April 2015 and November 2015 it disbursed R6 billion, with the following IPAP sectors benefiting from these disbursements:

Figure 3: IDC Industrial Funding Disbursements: Apr-Nov 2015



Source: IDC

In addition, the Development Bank of South Africa (DBSA) committed R21.4 billion to government's regional development programme and in support for municipalities, with R13.4 billion already disbursed and R6.4 billion prepared, mainly for renewable energy programmes.

5. Incentive schemes

5.1. Manufacturing Competitiveness Enhancement Programme (MCEP)

To date, **the dti** has supported more than 900 competitiveness-enhancement projects under MCEP.

In the period April to December 2015, MCEP approved funding for 232 entities, with R1.7 billion already committed in support of new manufacturing investments totalling R8.8 billion and helping to sustain 52,466 jobs.

Agro-processing received grants totalling R602 million; metals R300 million; plastics R226 million; chemicals R156 million; print R75 million and wood R47 million.

5.2. Automotive Investment Scheme (AIS)

In 2014 **the dti** amended the Automotive Investment Scheme (AIS) to enable component manufacturers to earn an additional 5% on all investments as part of deepening and strengthening local component manufacturing.

For the period April to December 2015, the AIS approved 39 projects with total incentives of R978 million and an estimated investment value of R3.7 billion. The support was provided to passenger and heavy vehicle manufacturers such as BMW, Hyundai, FAW; large tyre manufacturers such as Sumitomo and Bridgestone; and various foundry companies.

5.3. Enterprise Development Programme

the dti launched a R22 million two-year pilot programme aimed at upgrading South Africa's Industrial parks, establishing pilot specialised industrial facilities (SIFs) and supporting the integration of local economic development (LED) to bolster small business enterprises. This programme also helped to increase SMME access to technology.

the dti will spend more than R44 million during the first phase of the revitalisation and refurbishment of two state-owned industrial parks in the Eastern Cape. The revitalisation of the Vulindlela Heights Industrial Park and the Queenindustria Industrial Park form part of the department's Revitalisation of Industrial Parks Programme.

5.4. 12i Tax Allowance Incentive Scheme

Between April 2015 and January 2016, 26 projects with an investment value of R9.5 billion were approved. The support was extended to companies in a wide range of sectors such as steel, agro-processing, oil and gas, boatbuilding, chemicals, cement, paper, plastics and food and beverages.

5.5. Aquaculture Development and Enhancement Programme (ADEP)

Established to support and scale up production in the aquaculture sector, ADEP has supported 11 projects, with an incentive value of R49 million, for the period April 2015 to December 2015. Investment leveraged was R206 million, with the projects expected to create 291 new jobs. The majority of these investments are based in the Western Cape, closely followed by Limpopo Province.

Overall, **the dti**'s current support in 2015/16 shows the value of approved projects to be R7.3 billion, with a projected investment of R30.6 billion and 132,130 projected jobs.

5.6. National Empowerment Fund

Since inception, the NEF has recorded the following achievements:

- Approvals: benefitted black entrepreneurs in 700 transactions worth more than R6.9 billion.
- Disbursement: approximately R4.8 billion has already been disbursed to these companies since inception.
- Employment effect: supporting in excess of 84,000 jobs.
- Industrialisation: 23 strategic industrial projects supported, worth R27 billion.

6. Foreign investment

2015 saw investment promotion becoming a critical area of focus for **the dti**, culminating in the creation of a dedicated division within the Department. The new division provides a service focused on investment promotion, facilitation and aftercare to all interested investors. As at 31 December 2015 a pipeline of R 60 billion of potential investment (domestic and foreign) had been achieved.

A number of multinationals have affirmed South Africa's growing status as a regional manufacturing hub, investing in new plant, machinery and technology and/or upgrading existing plant.[1] As noted elsewhere in this document, major new MNC investments have been forthcoming from, amongst others, Unilever, Nestlé, Kimberley Clark, 3M, Johnson & Johnson, Samsung and Hisense. The Hisense plant in Atlantis, Western Cape, is already exporting into Africa and is ranked as the company's second most productive plant outside of China.

Also gearing up for the African and wider global markets are domestic companies like Nampak, Mpact and Tiger Brands which have been aggressively investing in expanded production capacity.

7. Technology and innovation

The DST implemented the Technology Localisation Programme (TLP) in support of government's drive to increase the level of local production related to public procurement.

The TLP provides technological support to firms and sector, in order to improve their competitiveness and ability to qualify and secure contracts linked to public procurement – either directly with State Owned Companies (SOEs) or through contracting to the multinational firms who secured contracts with SOEs. The programme, implemented by the Technology Localisation Implementation Unit (TLIU) hosted by the CSIR, has achieved substantial success and is increasingly being recognised as the national nodal point for supplier development and technology assistance.

[1] These relatively strong FDI inflows stand in contrast to the bleak picture painted by some analysts; particularly those who look at 'Net FDI'. This results in their taking off inflows from outflows and then concluding that SA has been receiving no investment. The fact of the matter, however, is that (aside from the inflows noted above) significant outflows are (i) going into other African countries, thus contributing to growth in both SA and the region; and (ii) are part of the process of SA firms becoming global players.

The success to date and the need to scale up the programme has resulted in the programme being expanded to support increased local production, for example in the mining equipment manufacturing industry.

The TLP is based on a number of instruments:

- Firm-level Technology Assistance Packages (FTAPs) ensure that a third party (e.g. university or science council) provides technology assistance (skills, equipment, designs, manufacturing systems, etc.) to an approved firm to increase its competitiveness (new or improved processes, product, and skills).
- Sector-Wide Technology Assistance Package (SWTAP) provides technology assistance for a number of firms in a sector. As an example, a foundry casting simulation network was established at the Vaal University of Technology's Technology Station, with a number of related 'spokes' at the University of Stellenbosch, Durban University of Technology, NMMU and the University of Johannesburg.
- Technology Development Grants provide funding to mature local technologies that might be used in local procurement. The technology maturation of the Ultrasonic Broken Rail Detection System (UBRDS) was funded under this programme.
- Work-Integrated Learning Programme enables predominantly P1 and P2 students to complete their practical training, thereby enabling them to complete their qualifications.
- Firm Benchmarking assesses a firm's management and technological capability in order to define development areas, but also to transfer knowledge. There are currently in excess of 3,200 South African manufacturing firms in the database which is maintained and expanded with the aim of facilitating new supply chain relationships.

The TLP has been very successful in enabling firms to secure (or retain) contracts with SOCs, to develop new intellectual property (e.g. patents, technology demonstrators, manufacturing processes) and thereby either secure export orders or increase the level of components that are now manufactured in South Africa rather than imported.

A summary overview of the outputs and impact (since the inception of the programme in 2012) is provided in the table below.

Table 1: Outputs and impacts of the TLP: 2012-2016

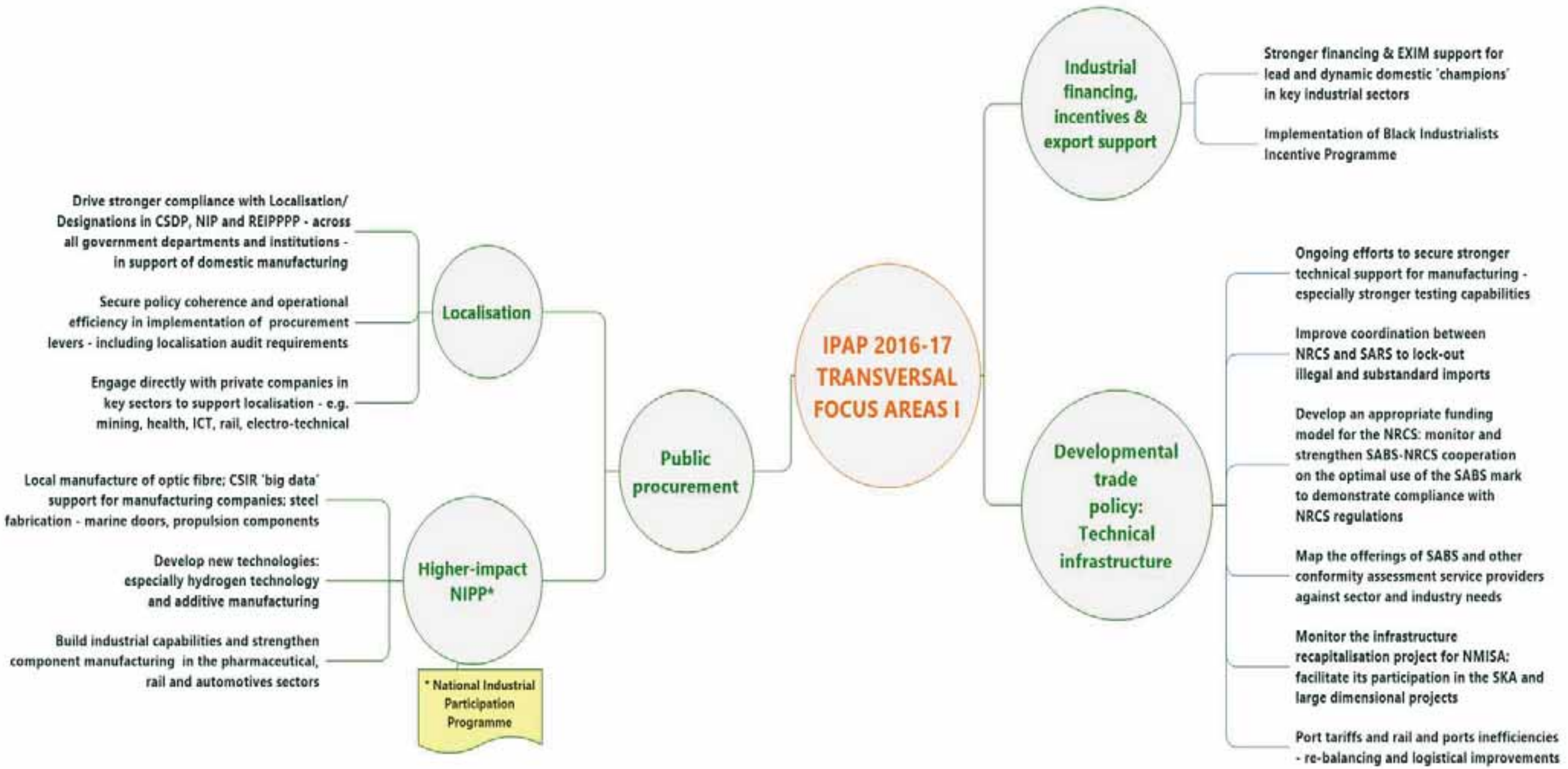
Number of companies supported towards the development of new products	14
Total direct jobs created due to the implementation of FTAPs	187
Number of companies where export capability was developed	20
Number of companies supported where import substitution was achieved	20
Number of companies that have gained work with SOCs	35
Percentage of SMEs supported through the FTAP programme	78%
Number of companies where there has been an improvement in manufacturing performance	60
Number of companies that have reported an increase in revenue due to the FTAP implementation	36
Percentage of companies supported that are black owned	60%
Percentage of companies supported that are black women owned	40%

KEY ACTION PROGRAMMES

IPAP TRANSVERSAL FOCUS

the dti
Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

IPAP 2016/17 – 2018/19: TRANSVERSAL FOCUS



1. Public procurement

Public procurement can be a powerful industrial policy instruments for promoting economic growth, industrial development and innovation. Using public procurement to develop and disperse new technologies has direct bearing on industry development. The industrial sector is a major driver of economic growth, exercising strong backward and forward linkages.

Public procurement is also, of course, a subset of the country's public sector expenditure, including both current outlays for day-to-day operations and capital investments for the future. Governments everywhere are significant procurers of goods and services in their own right; but the emphasis we have been developing in South Africa on *domestic production and local content in the public procurement system* is specifically aimed at stimulating manufacturing productivity and competitiveness for sustainable and inclusive economic growth.

Public procurement in South Africa is focused on a number of key industrial sectors: e.g. rail rolling stock, bus fleets, transport infrastructure, automotives, clothing, textiles, leather and footwear, local pharmaceutical production and renewable energy. It can also play a critical role in the promotion of strategic industry sectors such as advanced manufacturing, aerospace, defence and the information and communication technology sectors.

Government seeks specific contributions from particular sectors to achieve its economic policy goals. For example, infrastructure investment targets the government has set in the Medium Term Expenditure Framework (MTEF) cannot be delivered without a major contribution from the construction industry – whilst the sourcing of locally manufactured building and construction materials is equally important.

Using public procurement policy can spur industrialisation by increasing market size, fostering economies of scale and reducing unit costs over time. However, diffusing public procurement for industrial development requires policy coherence and high levels of implementation capacity across all spheres of government.

Despite its potential strengths, the public procurement system in South Africa has a number of weaknesses – chiefly non-compliance on local content requirements as required by the amended regulations of the Preferential Procurement Policy Framework Act (PPPFA) of 2011 – but also lack of institutional alignment and widespread instances of malpractice and unethical conduct.

Localisation: Challenges

It must also be noted that the government has set itself a target of 75% for local procurement in the Medium Term Strategic Framework (MTSF). Regulation 9.3 of the PPPFA regulations enables local procurement of non-designated and/or yet to be designated products/commodities. In the meantime - and whilst waiting for the circulation of the specific directives for implementation of Regulation 9.3 - **the dti** is closely engaging with procuring entities in all three spheres of government, including state owned companies and public entities listed in the Public Finance Management Act (PFMA) and the Municipal Finance Management Act (MFMA). Regulation 9.3 has been used successfully in the procurement of transformers (before they were designated), pipes and antennae; the specific directives of Regulation 9.3 will go a long way towards facilitating achievement of the 75% local procurement target.

Another major challenge within the public procurement system is that individual procuring entities currently tend to procure for similar goods and services independently. Transversal contracts would assist if the purchases of goods and services could be aggregated. This would result in economies of scale, price discounts and better coordinated Supplier Development Programmes. Current practice does not sufficiently assist in realising government objectives if, for example, smaller municipalities are expected to purchase some of the designated commodities on their own (e.g. valves, transformers, cables).

In implementing transversal contracts, there needs to be agreement on the standardisation of specifications and the coordination of joint contracting wherever appropriate and beneficial to the parties involved. Economies of scale will encourage domestic manufacturers to invest in plant and equipment; and government can then use its buying power to drive other key procurement objectives like black economic empowerment and supplier development.

In summary:

Research shows that public procurement strongly fosters industrial development, provided that compliance on local content is stringently enforced, public procurement levers are fully aligned and a cadre of well-trained supply chain practitioners is built up – professionals who can navigate the complex space of tender specifications and contractual obligations in a transparent, fair, and efficient manner.

Key action programmes

1. Monitoring expenditure and implementation of local content

Nature and purpose of the intervention

Compliance with local content regulations and requirements is a major challenge, requiring focused attention. Non-compliance happens on the procuring entities' and suppliers' sides. The following areas have been identified as particularly problematic:

- The advertising phase: tenders being advertised without local content requirements;
- Tender evaluation and award phase: inadequate consideration given to minimum thresholds for local production;
- Execution of the contract: compliance with local content requirements, monitoring and remedial action for non-compliance.

Failure to comply with the local content requirement is a violation of the PPPFA and its regulations, and should have serious consequences. If there is non-compliance, there must be tough remedies, including penalties through conditions of contracts, non-admissibility of bids, cancellation of contracts, recouping of monies spent and black-listing of suppliers in the public sector procurement system. Procurement compliance audits and other local content-related monitoring systems will assist in strengthening the effective implementation of local content requirements.

the dti will therefore be ramping up this area of work by working closely with the National Treasury, Auditor-General's Office, the South African Bureau of Standards, Industry Associations and procuring entities to ensure compliance in terms of advertising, evaluation and awarding of tenders designated for local production.

The Compliance Programme will consist of (at least) the following initiatives:

- Working with the National Treasury on procurement regulations aimed at tightening areas dealing with compliance. Institutional powers and remedies to deal with non-compliance will have to be clearly specified in the PPPFA regulations.
- Working closely with the National Leader of Audit Services in the Auditor-General's office on prioritised tenders for auditing, as well as referring non-compliant tenders for further scrutiny.
- Continuous training of supply-chain practitioners on the implementation of local content across all three spheres of government, with a particular focus on local government.

Targeted outcomes

Improved compliance through better coordination and enhanced capabilities for procurement leverage.

Key milestones

2016/17 Q1:	Work closely with National Leader of Audit Services in the Auditor-General's office to scope and agree on designated tenders and products to be prioritised for auditing.
2016/17 Q2:	Submit proposals to the National Treasury on regulations aimed at tightening areas dealing with compliance on local content.
2016/17 Q1-Q4:	Conduct spot checks on local companies awarded tenders designated for local production to verify that local production does take place.
2016/17 Q1-Q4:	Work closely with the SABS on (i) review of the technical specifications for the calculation and measurement of local content; (ii) the funding model for local content verification; and (iii) periodic reports and interventions on local content.
2016/17 Q1-Q4:	Develop an import monitoring system based on trade import data to assist with establishing whether designations in particular sectors are being complied with.
2016/17 Q1-Q4:	Finalise work on harnessing government's buying power: measuring the extent to which local versus non-local purchasing still make sense.

Lead departments/agencies: the dti and SABS

Supporting departments/agencies: NT, EDD, National, Provincial and local Departments, ITAC, SARS and AG

2. Increasing aggregate demand through 'Buy Local' campaigns

Buy Local campaigns can help to increase demand in ways that allow local businesses to plan better for potential growth and future opportunities. An increase in both public and private spending on local goods and services can increase overall economic demand. The purchasing decisions made by major players like government departments, institutions of higher learning and public and private sector hospitals have the potential to make a significant impact on local economies. Transversal and term contracts for locally manufactured clothing and textiles, furniture and pharmaceutical products can have an incremental effect in promoting local economic development.

Key milestones

2016/17 Q1-Q4: Support the Economic Development Department (EDD) to promote measures to support local procurement in the private sector. Priority commodities are furniture, uniforms, other apparel and pharmaceutical products.

2016/17 Q1-Q4: Support *Proudly SA* on aligning its work to ensure that its logo becomes the first 'mark' of local manufacturing. For off-the-shelf purchases there needs to be a promotion of bar codes of all locally manufactured and packaged consumer goods.

Lead departments/agencies: the dti, Proudly SA, EDD

Supporting departments /agencies:

3. Designation of further sectors for local procurement

Further 'waves' of designation will follow, in keeping with the priorities of the IPAP:

- Work with the Presidential Infrastructure Coordinating Commission (PICC) and Industry Associations to identify localisation opportunities in big ticket items defined in government's strategic infrastructure projects at all levels of government.
- Finalise the review of the canned and processed food instruction note to include the entire food sector.
- Continue to scan for opportunities for further designation in the metal fabrication, capital and rail transport equipment sector.
- Create scope for further localisation of manufacturing in the green industries brought about by investments in the renewable energy generation build programme.

Key milestones

2016/17 Q1-Q4: Review of research work done by Sector Desks for further designation of sectors/sub-sectors for local procurement.

2016/17 Q1-Q4: Issue procurement instruction notes for designated sectors.

2016/17-2017/18: Work with the PICC and Industry Associations to identify opportunities for further designation.

2016/17 Q1-Q4: Deepen localisation by utilising Regulation 9.3 of the PPPFA for the procurement of non-designated products / commodities. This will be done in consultation with other government departments and state owned companies. This will go a long way towards meeting the local procurement target of 75% set by government in the Medium Term Strategic Framework.

2016/17 Q1 – Q4: Provide training on local content to supply-chain practitioners in all spheres of government and state owned companies.

Lead departments/agencies: **the dti**

Supporting departments/agencies: NT, DPE, EDD, SABS, PALAMA, SASTAC

1.1. National Industrial Participation Programme (NIPP)

The Industrial Participation Secretariat of **the dti** is currently managing outstanding obligations estimated at R15.3 billion, as at the end of January 2016. These consist of obligations signed between 2003 and 2012 amounting to R8.6bn and those signed between 2013 and 2016, amounting to R6.7 bn.

The unit is currently in the process of negotiating obligation agreements estimated at R9.2 billion emanating mainly from backlogs in the ICT, pharmaceuticals and oil and gas procurements. The obligation values equate to the aggregate value of economic activities that must be undertaken by the obligors and not just the investment required. These economic activities include investment, research and development (R&D), technology transfer, sales (both export and local), outsourcing to SMMEs, BEE shareholding and training.

The outstanding obligations arise from purchases spread across the various sectors, mainly consisting of energy (22%), automotive (26%), rail (17%) and oil and gas (13%) – with the remainder coming from defence, aerospace and ICT.

A total of 50 companies are participating in the NIP programme; with a further potential 39 companies currently in discussions with the unit to sign obligation agreements. The main participant companies have since 2013 also been supporting 30 smaller local companies in a number of ways – ranging from investment to market access to joint work on programme development and to technology transfer – as well as on manufacturing of components developed by obligors under licence.

The NIP guidelines place emphasis on companies with obligations to focus and direct their NIP activities on their core areas of business, or on areas within the value-chains of their businesses, thus providing for more sustainable projects and greater cooperation between international and South African companies. Typical areas of cooperation between international and South African companies include:

- Investment into projects initiated by local companies. This translates into transfer of skills, providing market access and positioning local companies within the global-value supply chains of international companies
- Partnerships in Research and Development (R&D) activities as well as transfers of innovation and technology to local companies
- Providing support to local companies to help them position themselves in global value supply chains. The support could be in the form of assisting them to meet international quality standards and certification and accreditation thresholds.

The Direct NIP approach enables NIP projects to identify partnerships between local and international companies in areas like innovation and technology, research and development and identifying international market opportunities for local companies not only with obligors and their sister companies but also with suppliers and partners of the obligors.

This approach has been explored successfully between South African aerospace and defence companies and Original Equipment Manufacturers (OEM's) in the aerospace and defence industries. The current implementation of Direct NIP has relied on obligors bringing projects for consideration for approval as NIP projects as well as through informal approaches by the Industrial Participation Secretariat (IPS) unit, referring proposals to obligors for consideration. This methodology needs to be further strengthened by proactively identifying areas within the various industries/sectors where there are opportunities for involvement of obligors to support further economic growth.

A number of local companies have products that have export market potential, but have not so far been able to exploit this potential. Partnering with international companies that have obligors can open up these opportunities. In some cases, the inability to exploit potential markets is due to the fact that in a number of cases the products or production processes do not meet the stringent standards of either the OEMs or the relevant regulatory bodies in markets such as aerospace, oil and gas, rail equipment, pharmaceuticals etc. The NIP programme needs to play a more supportive role in getting local companies geared up to meet international standards in order to increase the export potential of their products.

In terms of the NIP policy, products or components that are designated for a minimum local content level are exempt from NIP. In this regard, there is a need for better alignment of NIP with the designation regime and better support for the work of the sectors in getting obligors committed to meet the local content requirements in designated products. The NIP programme, by working closely with the sector desks and the industrial procurement unit can play a proactive role in helping companies to meet designation requirements rather than them applying for exemptions.

Key opportunities

With the exception of pharmaceuticals and information and communication technologies, the most opportunities lie in getting the obligors to support local companies to establish themselves within the global supply value chains of OEM's by (1) providing support to meet international standards in terms of processes, accreditation, certification etc. in situations where companies are struggling to acquire these and (2) technology transfer to help manufacture products that they would not have been able to manufacture or they would not have manufactured within the required standards.

Key constraints

- Limited opportunities for large contracts.
- Information about tenders sometimes available only after the tender has been awarded.

Progress highlights

A number of successful projects have been implemented in the past two years in a number of sectors including aerospace, rail, information and communication technologies (ICT), energy and automotive. More recently, there have been successful projects in software development, oil and gas as well as shipbuilding. The following are some of the projects.

Key action programmes

1.1.1 Marine component manufacturing support programme

Nature and purpose of the intervention

The purpose of this intervention is to (i) ensure that the local ship building industry increase local value addition in the ship building industry, (ii) Secondly, where certification and accreditation of locally produced vessel components are hindrances in securing international contracts for production and supply of vessel components to international ship building houses, the IPS will identify local component manufacturers and, (iii) together, with NIP obligors, tailor-made support measures to address specific constraints and challenges that inhibit higher local content in the boat building sector, with specific emphasis on component manufacturing. Where necessary, local component manufacturers will be offered support in obtaining the necessary accreditation and certification to meet international standards. The complete intervention to achieve the targeted outcome is a multi-year programme

Targeted outcomes

- Increased local capacity and local content in the marine industry
- Export Promotion
- Job creation

Key milestones

2016/17: Q1- Q2	Develop a programme to provide support for local component manufacturers to meet accreditation and certification standards that are required to supply international OEM's.
2016/17: Q3	Negotiate with potential NIP obligors and other relevant stakeholders on possible support measures for the local component manufacturers.
2016/17: Q4	Start the implementation of the support measures.

Lead departments: the dti

Supporting departments/Agencies: Department of Defence, Armscor, Environmental Affairs, Transnet

1.1.2. Support programme for local design and development of mobile applications

Nature and purpose of the intervention

Mobile application is one of the fastest developing sub-sectors of the software development sector in the world. These software solutions range from applications for mobile commerce to applications for social, health, education etc. South Africa is no exception due to the high growth of internet usage and mobile communication, especially data communication.

This trend presents an opportunity for the local industry to grow the sector through development of mobile applications that address the country's unique challenges as well as positioning South Africa in the global market. Through discussions with obligors in the Information and Communication Technology Sector, it emerged that there is an interest in the use of NIP obligations to develop mobile applications in South Africa. This is essentially suited for the creation and growth of small and medium sized enterprises (SMMEs), as it provides an opportunity for skills development and transfer of technology to the local industry.

It is for these reasons that the IPS adopted this particular intervention; with an eye also to its future potential to penetrate export markets,

Targeted outcomes

Capacity building; technology transfer; introduction of new and innovative applications; export potential; job creation

Key milestones

2016/17 Q1-Q2	Develop a support programme to enable companies participating in the sector to link with obligors with the aim of joint development of certain applications or to develop certain modules for some of the applications.
2016/17 Q3	Negotiate and agree with NIP obligors the nature and scope of interventions to be implemented.
2016/17 Q4	Implement the agreed interventions.

Lead department: the dti

Supporting departments: SITA, SOCs, Provincial Departments

1.1.3 Defence component manufacturing support programme

Nature and purpose of the intervention

The Department of Defence (DoD) has identified a need for the renewal of much of its existing arms, ammunitions and defence equipment. This process needs to include the acquisition of additional necessary state-of-the-art defence equipment to ensure that the country's defence forces at all levels are adequately resourced to perform their duties. It is important that the componentry needs identified be locally sourced wherever possible, in order to help develop and strengthen key local industrial sectors, reduce dependence on foreign suppliers and create new job opportunities.

The IPS is aiming to work closely with defence stakeholders, local component manufacturers and original equipment manufacturers (OEMs) to explore the possibility of using obligations arising out of various defence procurement programmes to support local manufacturers in acquiring the technology and equipment that are necessary to enable them to supply to the major OEMs.

Targeted outcomes

- Increase local capacity and develop higher value-added products
- Increase exports
- Contribute to job creation

Key milestones

2016/17 Q1-Q2	Assessment of the current obligors' supplier requirements, future programmes they will be participating in and the potential for local suppliers.
2016/17 Q3-Q4	Negotiate and agree with obligors on the nature and scope of intervention.

Lead departments: the dti

Supporting departments: Department of Defence, Armscor

1.1.4 Rail Sector Components Manufacturing Support Programme

Nature and purpose of the intervention

Through Transnet's locomotive contracts, the Competitive Supplier Development Programme has developed certain capabilities for local manufacturers in the rail sector. These have been specifically developed to help them participate effectively in the supply of key sub-components of the locomotives purchased by Transnet. In order to sustainably increase growth beyond reliance on Transnet, the NIP program can help to support the integration of local components into OEM supply chains, in the context of strategic partnership agreements. This also carries with it significant potential for the development of value-added exports in the rail sector.

A recent analysis of constraints within the rail sector recognised that integrating into global supply chains requires meeting international quality standards for certification that most South African producers in this sector have not yet achieved. This intervention seeks to identify particular components and suppliers in the rail sector that can most readily be integrated into global OEM supply chains; especially those of the OEMs which are already supplying the Transnet and PRASA expansion programmes. Once local suppliers and components have been clearly identified, quality and process challenges that have so far inhibited their integration will be need to be speedily addressed. The initial step will be to provide intensified support for the certification of SA suppliers.

Targeted outcomes

Integrate local manufacturers into global OEM value supply chains; build up sustainable local suppliers; Increase job creation.

Key milestones

2016/17 Q1 – Q2	Develop a programme to provide support for component manufacturers to acquire accreditation and certification standards that are required to supply international OEMs.
2016/17 Q3	Negotiate with potential NIP obligors and other stakeholders on possible support measures for the local component manufacturers.
2016/17 Q4	Start implementation of the support measures.

Lead department: the dti

Supporting departments: DPE, DoT, PRASA, Transnet

1.1.5. Aerospace Development Programme by supporting the integration into the global supply chains

Nature and purpose of intervention

The aerospace industry has been reasonably successful in supplying the global aerospace industry with structural components, although the volumes are still low by international standards. These components are, however, mostly low-value-added components and suffer from exchange rate volatility (in particular the current Rand depreciation) since most of the input materials are imported.

With the exception of satellite antennae supplied to both Boeing and Airbus aircraft *(see Case Study below)* there have only been low levels of penetration into international markets with high-value added manufactured products and services - e.g. maintenance, repair and overhaul (MRO) services. One of the key challenges in this area is (once again) the need to put in place the necessary process to satisfy the standards required by regulatory agencies in aviation and hence begin to break into high-value added export markets.

An important secondary goal is to support local companies providing MRO services to provide more high value added services *locally* rather than sending products for repairs to international companies.

Targeted outcomes

Increased exports; technology transfer; job creation

Key milestones

2016/17 Q1	Assessment of processes required to supply international markets with high value-added products for both MRO services and aircraft component manufacturing.
2016/17 Q2–Q3	Develop a support programme to enable local companies to meet standards required to supply international markets.
2016/17 Q4	Start implementation of the programme.

Lead department: the dti

Supporting departments/agencies: DST, CSIR, DPE

CASE STUDY: SATELLITE COMMUNICATIONS ANTENNAE

In today's globalised aerospace industry, the Original Equipment Manufacturers (OEMs) as the prime contractors, take the strategic decisions regarding the composition and organisation of their value supply chains when embarking on new aircraft programmes or improved methods for producing current aircraft.

In making these decisions, OEMs consider, on one hand, the risk, capability and capacity of potential suppliers and work-share partners and, on the other, the potential and real strategic value that relationships with them would offer.

South African Airways fleet renewal, which was launched in 2002, resulted in the NIP programme's utilisation to enhance the South African aerospace industry's effective penetration into various value chains. This included the nation's expertise and capability in developing sophisticated, robust, state-of-the-art and unique communications technology, including world-class satellite-communications (satcoms) equipment.

In 2005 a South African company called **Omnipless** was identified by **the dti** and Airbus (the OEM selected by SAA to equip it with a modern, competitive aircraft fleet), as a possible partner for manufacturing and supplying satcoms antennae. At that time, although Omnipless was able to produce the equipment, it was largely unknown beyond a small, limited niche market. **The dti** registered the development of this business as a possible NIP project. Airbus worked closely with Omnipless, assisting and guiding it to its full aerospace certification and recognition of its quality systems and processes, which were achieved in 2006.

As a result of these efforts Omnipless successfully bid for and secured contracts to provide satcoms equipment across the entire range of Airbus civil aircraft and flagship military aircraft programmes, i.e.:

- A320 Family (a series of 124-200 seater, twin-engined airliners)
- A330 (twin-engined, wide-body long range jetliners)
- A350XWB (extra-wide-body, twin-engined ultra-long range airliners)
- A380 (four-engined superjumbo airliners)
- A400M (military transport aircraft)

Omnipless's successes attracted foreign direct investment in the form of Cobham, which also resulted in more business coming into South Africa. Omnipless was subsequently re-branded as **Cobham South Africa**.

To date, the company has realised exports to the value of $20.55 billion (approx. ZAR328 billion at January 2015 exchange rates). This economic contribution continues to increase as Airbus steadily raises the tempo of its output (with similar impact on its suppliers) to meet the increased demand for its range of modern, fuel-efficient, environmentally friendly and passenger-appealing aircraft. By the end of 2015, Airbus had an industry-record backlog for almost 6,800 new aircraft, representing 10 years of sustained production at current output, which currently runs to over 60 aircraft a month.

Cobham South Africa's satcom operation employs about 230 people including 50 engineers.

In October 2015 Cobham South Africa was named as **Airbus's best in class supplier**, an award in recognition of outstanding contribution by selected partners in the areas of aerostructures & material systems, cabin equipment, propulsion and general procurement.

This fruitful industrial relationship is a prime example of the NIP at work in identifying and enabling sustainable, high-tech manufacturing and new export revenue streams for South Africa as a result of the leveraging power of public procurement.

2. Industrial financing

The shortage of medium to long term funding for the manufacturing sector has long been a problem in South Africa, as noted in previous IPAP iterations. Briefly stated, SA requires a system of industrial financing, incentives and export support which is better able to support the manufacturing sector to raise competitiveness, output and exports.

In this year's IPAP we address a number of the issues head-on:

1. Working with private sector financiers to create and deliver new financial packages appropriate to manufacturers' needs.
2. Developing new sector-specific packages and tailoring existing sector-specific support measures, especially in support of labour intensive sectors and sub-sectors.
3. Providing decisive support measures to emerging majority black-owned companies with a proven and demonstrable track record to become major players in the SA manufacturing sector, capable of competing effectively in global export markets.
4. Continuously monitoring and evaluating the performance of all existing (and forthcoming) incentive packages to ensure that they are indeed fulfilling the purposes for which they were designed.

In addition to these actions, **the dti** will be working in ever-closer collaboration with the Department of Science and Technology (DST) on financial and non-financial support measures for technology acquisition and diffusion that spurs innovation in the most dynamic (often still emergent and fragile) sub-sectors of manufacturing.

Key action programmes

1. Working with private sector financiers on a win-win basis to make available appropriate financial products for the manufacturing sector

Nature and purpose of the intervention

This will involve dialogue with private sector financing institutions to develop appropriate products with the right combination between grants, loans and rebates that will benefit the manufacturing sector and achieve the objectives of the state in supporting enhanced investment and growth in manufacturing.

The manufacturing sector is faced with the challenges of high cost of capital, scarcity of readily available working capital and short average terms of financing. This acts as a brake on the operational performance of many firms, particularly in the start-up, new technology commercialisation and systems-building phases. An approach is needed to achieve a better mix of public and private sector funding to continue supporting the growth and diversification of the manufacturing sector in the light of the continuing global recession.

Targeted outcomes

Syndicated financing between **the dti** and private sector financing institutions, leading to enhanced levels of firm competitiveness – built on much better access to appropriate funding – particularly with regard to terms of interest rates and loan repayment periods.

Key milestones

2016/17 Q2: Initiate engagements between **the dti** and private sector financiers to explore syndicated financing options to support the manufacturing sector.

2016/17 Q3: Proposed syndicated funding product to support the manufacturing sector with a better mix of public and private sector funding and improved conditionalities.

Lead department: the dti

Supporting departments/agencies: National Treasury, EDD

2. Developing new sector-specific packages and tailoring existing sector-specific support measures

Nature and purpose of the intervention

Given the demonstrable successes of sector-based incentives – e.g. in Clothing and Textiles, Automotive, Business Process Services and Film – a number of existing incentives will be repackaged into new sector-specific programmes. The focus will be on the labour intensive sectors with an emphasis on components in the rail and mining capital goods and agro-processing sectors.

(i) The mining, transport and rail component sub-sectors are both labour intensive and play a critical role in developing local supply chains for OEMs and domestic assembly and productions companies.

(ii) Agro-processing provides critical value-adding support to agricultural production. It is also characterised by high labour-intensity, while at the same time playing an important role in sustaining food security.

Targeted outcomes

Appropriate support measures and/or sector specific incentives to encourage manufacturers to invest in new production facilities – and/or upgrade existing facilities - in a manner that promotes employment and maximises value addition.

Key milestones

2016/17 Q2-3: Scoping appropriate support which will include securing funding from the fiscus and cross departmental technical partnerships.

2016/17 Q4: Draft funding guidelines developed in consultation with Industry and potential funders to support investments in labour intensive sectors.

Lead department: **the dti**

Supporting departments/agencies: NT, EDD and DAFF

3. Roll-out of the Black Industrialist Programme

Nature and purpose of the intervention

Within the larger manufacturing and related services focus of **the dti's** current incentive offering, the Black Industrialist Incentive Programme is specifically dedicated to supporting the growth and building the global competitiveness of majority black- owned and managed businesses in the manufacturing sector. The intention is to contribute towards shifting the demographic composition of South Africa's industrial sector by engaging with and nurturing emerging black industrialists to tap into a currently massively under-utilised reservoir of potential jobs, revenue, taxes and innovation.

The Black Industrialists Policy is a key part of government's broad industrialisation initiatives to expand the industrial base and inject new entrepreneurial dynamism into the economy, based on clear recognition of the fact that more equal societies tend to grow faster than those that are unequal.

Targeted outcomes

Accelerated growth in the number of Black Industrialists actively participating in the national economy, selected industrial sectors and value chains, as reflected by their contribution to growth, investment, exports and employment.

Key milestones

2016/17 Q1: Roll out of the incentive programme in collaboration with Development Finance Institutions.

Lead department: the dti

Supporting departments/agencies: NT, DFIs, EDD

4. Evaluation of selected Incentive programmes

Monitoring and Evaluation (M&E) is critical to ensuring that incentive programmes achieve the objectives for which they were created. Hence the importance of the thorough and comprehensive review process that **the dti** is engaged with.

Key milestones

2016/17 Q2: MCEP review - Final report.

2016/17 Q2: Annual Incentive report finalised.

2016/17 Q3: ADEP Rapid Appraisal – Final Report.

2016/17 Q4: Film and TV Implementation Evaluation – Final Report.

2016/17 Q3: Progress report on Black Industrialist programme produced.

Lead department: the dti

Supporting departments/agencies: DPME

3. Developmental trade policy